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Challenges for psychiatric health care for adults in Lower Silesia

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Summary

The authors, in their study, refer to the changes taking place in Polish psychiatry under the National Mental Health Program (NMHP). They present their thoughts on the restructuring of psychiatric health care for adults in Lower Silesia. They refer to the European experiences described in the book *Better Mental Health Care* by G. Thornicroft and M. Tansella, and in the practical and scientific dimension – to the substantive premises, derived from demographic analyzes, epidemiological indicators obtained in the EZOP study, from Maps of Health Needs and other official statistics.

Lower Silesia is the fifth voivodeship in Poland in terms of population, with four psychiatric hospitals in need of restructuring, a lower than the national rate of beds per 100,000 population and a relatively high rate of the so-called common mental disorders should be included in a targeted pilot project under the NMHP. In conclusion, the authors strongly support the fastest possible implementation of the community model of psychiatric services in Lower Silesia, indicating the methodology that should accompany the transformation process, the risks that may occur, but most of all, making people aware of the benefits that society should achieve in a human and economic sense.

Key words: community psychiatry, Lower Silesia

Our study refers to the book *Better Mental Health Care* by Graham Thornicroft and Michele Tansella, in which authors, based on the best available practices according to ethical assumptions, evidence and experience – as Benedetto Saraceno from WHO writes in the preface – want to create better psychiatric health care. The Polish edition – entitled *W stronę lepszej psychiatrycznej opieki* – was published in 2010 in connection with the announcement of the National Mental Health Program (NMHP) [1].

After the failures of the first stage of NMHP (2011–2015) [2], its second "edition" covering the years 2017–2022 [3] is slowly approaching the final stage, and it is worth referring to the implementation of its goals from the position of Lower Silesia. Undoubtedly, an essential achievement of the past three years at the national level was the establishment (by the Minister of Health) of the Bureau for NMHP pilotage and the function of the plenipotentiary of the Minister of Health for the reform of psychiatry. The objective was to stimulate work on the reform, in particular in the field of establishing the so-called pilot Mental Health Centers (MHCs) [4]. Has it happened? We leave this issue open. According to the scientific approach, during the pilot period, MHCs should provide evidence-based knowledge to create new facilities that are to constitute the organizational structure for community psychiatry, as the dominant – already in the next few years – model of psychiatric treatment in Poland. Therefore, it is very important that the selection of territorial areas for the MHC pilotage is based on substantive criteria, covering the entire country, with their even distribution in all provinces. The pilot program should last for a closed period of time, the same for all entities participating in it. For research purposes, it is extremely important to use scientific tools recommended in the literature on the subject, which would assess the effectiveness of the MHCs, by comparing indicators relevant to the process between the input phase, the process phase and the result phase [1]. Finally, different transformation scenarios would need to be considered within the existing psychiatric healthcare resources and their options so that the needs of the mentally ill can be covered by a socially equitable and most effective system of benefits.

Among the already established 33 MHCs [5], so far, only one facility was launched (October 1, 2018) in Lower Silesia (LS) – in Boleslawiec, in the location of a large psychiatric hospital. From August 1, 2018, the center expanded its territorial scope to the second county (Lwowek Slaski County) and covers a total of 111,962 people, which is 4.66% of the population of LS >18 years of age. This indicator is more than twice lower than that for the population that already includes open centers throughout the country – 12% [5]. This means that a smaller percentage of the LS population uses financing *per capita* of psychiatric services than in the rest of the country (4.66% vs.12%), and this disproportion is even more visible compared to Warsaw (25%).[1]

This drastically contradicts the principle of equal access of citizens to systemic solutions, which, as part of the psychiatry reform, are to help integrate the entire treatment process, in its various forms, including social support and participation in social and professional life. This is a very important direction of the entire reform process, as it could "stop" the extremely unfavorable trend of systematic increase in economic and social costs related to the effects of mental health disorders, which the SARS-CoV-2 pandemic may exacerbate. According to the Social Insurance Institution (SII) data, mental disorders and behavioral disorders (category F in ICD-10) were the highest-earning disease group in Poland in 2018, accounting for 15.8% of all expenses. On the

[1] Calculated on the basis of data from the Statistical Yearbook of the Republic of Poland 2018 [6] and data obtained from the Bureau for MHCs pilotage.

other hand, the highest expenditure on benefits related to incapacity for work in men was associated with diagnosis of schizophrenia (F20) – 3.6%. [7].

International studies show that, mental and behavioral disorders have a severe negative impact on life expectancy and on personal and social life of patients. It is estimated that 12% of DALYs (Disability Adjusted Life Years), representing the sum of life years lost due to premature mortality, plus disability-adjusted life years, are lost to these disorders worldwide. The highest percentage of DALYs is associated with depression, and its average value in the European Union in 2017 was 2.23% of the total number of DALYs, and for Poland, 1.23% of DALYs [1, 8]. It should also be remembered that mental disorders can also have significant consequences for family members of ill people who struggle with an increased burden of care and decreased economic productivity, which is not always included in the calculations (non-countable costs) [9, 10].

When assessing the changes in psychiatric treatment from the perspective of the Lower Silesian Voivodeship, it is necessary to pay attention to whether they meet the needs of the inhabitants of LS and whether they are consistent with the assumptions of the NMHP, whose primary goal is to develop integrated community care as an alternative form to the prevailing hospital model, especially in relation to people requiring long-term therapy. The Lower Silesian Voivodeship is inhabited by about 2.9 million inhabitants (including approx. 2.4 million >18 years of age), which constitutes 7.6% of the country's population and is the fourth-most densely populated region in Poland (after Silesia, Lesser Poland and Masovia). It is the fifth voivodeship in terms of population in Poland, where almost 69% of the population lives in cities [11].

According to the EZOP study, the prevalence of mental disorders in relation to voivodships (point estimation and 95% confidence intervals) places the Lower Silesian Voivodeship in fourth place, after the Lodz Voivodeship, Świętokrzyskie Voivodeship and Lublin Voivodeship with the rate of 25.8% (21.3 – 30.8), with the total value for Poland being 23.4% (22.2–24.7). Considering the chronic nature of most of these disorders, known as common mental disorders (CMD), potentially about 520,000 visits to mental health facilities in Lower Silesia could be expected if all those suffering from these disorders came to them. Among the assessed disorders in the adult population (18–64 years), the most common – during lifetime – were: substance use disorders – 12.8% (11.8–13.8); neurotic (anxiety) disorders – 9.6% (8.9–10.3); mood disorders 3.5% (3.2–3.8); and impulsive disorders – 3.5% (3.1–4.0). It was also found that 0.7% of the working-age population of Poland had an event that could qualify as a suicide attempt, which is approximately 16,800 people in the Lower Silesian Voivodeship [12]. Comparing the suicide rates in Poland and in the Lower Silesian Voivodeship (in police reports) in 2014–2018, a decrease in deaths from 16.0 to 13.5 per 100,000 is noticeable (a difference of 15.6%) throughout the country and to a slightly greater extent in the voivodship – from 19.0 to 14.8 (less by 22.1%), but in the following years a surplus of deaths is still observed in the Lower Silesian Voivodeship. LS is also the fourth province in terms of the order (after the Katowice Voivodeship, Lesser Poland Voivodeship and Lodz Voivodeship) with the highest number of suicide deaths [13]. Therefore, one of the activities in the field of suicide prevention is a research project

concerning the prevention of suicides among adults, residents of the Lower Silesia, submitted to the competition under the Regional Health Program.

Detailed statistics on the psychiatric services provided in Poland are presented in the Maps of Health Needs (MHN). These are precise analyzes carried out on the basis of the data of the National Health Fund (NHF), also taking into account the division into individual voivodeships [11]. The total number of people with psychiatric disorders included in the NHF register in 2019 was 104,760 in the Lower Silesia (in Poland 1,505,730). This is only 1/5 of all cases in which the EZOP study diagnosed at least one mental disorder (CMD) (25.8% – after extrapolation to the Lower Silesia population it is 520,000 people). This means that a significant number of people with psychiatric disorders (CMDs) do not receive publicly funded mental health care. What percentage of these people use care in the private sector – it is not known. In the statistics of the Ministry of Health, the number of people with particular categories of disorders in the Lower Silesia was as follows: 1) anxiety disorders – 37,810; 2) organic disorders – 19,750; 3) addiction – 19,200; 4) mood disorders – 17,740; and 5) schizophrenia – 12,050 [11]. Compared to the data for Poland, the vast majority of disorders had similar rates per 100,000 people. However, in four of the five main categories mentioned above, the indicators per 100,000 population for Lower Silesia were lower: anxiety disorders – 1680.13 vs. 1572.7; addictions 841.83 vs. 798.81; mood disorders 972.83 vs. 737.79; schizophrenia 520.23 vs. 501.31.

It should be noted that in Poland mood disorders rank second position and it is the highest difference compared to the index for Lower Silesia. On the other hand, schizophrenia – with a prevalence of 0.5% in Poland and an annual incidence rate of 11.03 cases per 100,000 population (in 2017 it was slightly lower than the average for the European Union – 12.43) – despite its relatively low prevalence, it is a disorder that generates very high individual and social costs [11]. The least include state expenses related to the use of health care, drug reimbursement and expenses of the social security system (allowances and pensions). The DALY index for schizophrenia in Poland in 2019 was 0.71% of all DALYs relating to the entire pool of health problems [14]. Over the years 2014–2018, the morbidity in schizophrenia in LS decreased by 3.91%, while the incidence by as much as 21.4% (from 1,120 new cases to 880 in a year). The particularly high reduction of new schizophrenia cases over a 5-year period is an interesting fact, and perhaps it is related to the change in the practice of diagnosis at the first episode of the disorder (e.g., instead of schizophrenia F20, acute polymorphic psychotic disorder without symptoms of schizophrenia F23.0 is diagnosed).

Another important factor influencing the DALY index is mortality, which is converted into years of life lost due to premature death. In 2014–2018, the number of deaths of people diagnosed with schizophrenia increased significantly in Poland – from 4,631 to 6,124 (an increase by 24%) and, respectively, in Lower Silesia from 383 to 494 (an increase by 22.5%). This is a very worrying result, which was observed in the first year after the opening of MHCs in Poland [15].

The establishment of MHC in Lower Silesia (in Boleslawiec) formally initiated the transformation process set out by the NMHP. Its relatively positive effect (not confirmed by any studies) is the diversification of psychiatric beds. Out of 156 general

psychiatric beds, 62 beds (ratio 55.37/100,000) were allocated for the needs of the MHC, and the remaining 94 beds for the service of the area. Additionally, some beds have been allocated for the purposes of long-term care, for court purposes and for the somatically ill. Now you can closely observe what the other benefits of this process will be. First of all, one should expect an answer whether, in addition to the improvement in accessibility most often reported by all MHCs in Poland (this is not enough for the financial resources allocated for this purpose), other essential indicators will also change, such as: a decrease in mortality and homelessness (in Poland, 2.6%) [16] among the mentally ill, shortening the average length of stay in a hospital, reducing the number of hospitalizations within one to two years after discharge from the hospital, satisfaction with treatment, or return to the labor market after a psychiatric episode. These questions should be directed to the Reform Office because territorially 'small' MHCs (for example in Boleslawiec) are not suitable for conducting in-depth epidemiological and economic analyzes. On the other hand, the assessment should include "the ability of a large, traditional psychiatric hospital to adapt to new challenges" related to the conditions set out in the NMHP. These challenges come down to the assessment of the possibilities of satisfying the needs of service users in the new system realities, adequacy of financing along with a cost-effectiveness analysis, increased requirements for employee competences, and changes in the image of psychiatric institutions in the public perception. Similar solutions with a positive effect in terms of the feasibility study were implemented, among others, in the hospital in Ansdorf, in Saxony, neighboring the Lower Silesia. In this hospital, established in a similar period (the turn of the 19th and 20th century), the traditional infrastructure was reorganized into modern psychiatric wards with a specialized profile, following the clinical needs, taking into account the epidemiology of disorders in this administrative area [17]. Looking from the position of new functionalities created in the Boleslawiec hospital after its reorganization, the opening of a "covid ward" for the mentally ill with a positive SARS-CoV-2 test can also be given as a significant example.

However, it should be emphasized that the process of hospital transformation has various limitations. To be effective, it should be undertaken when community care is already widely available and properly developed. Thanks to this, it is possible to carry out many tasks in the field of prevention, early diagnosis of serious mental disorders, and their proper treatment, thus limiting the admission to hospital of people for whom 'support' in social and professional roles may contribute to the reduction of the DALY index. On the other hand, hospital units – the most expensive for the health care system – should provide primarily highly specialized services and/or related to unique diagnostics and treat people in acute and life-threatening conditions. Therefore, in the Lower Silesian Voivodeship, where four psychiatric hospitals are located (the highest number after the Masovian and Silesian Voivodeships), integrated mental health centers (MHCs) should be established as soon as possible so that the transformation process of a hospital or hospitals can begin, which takes a long time and may last for several years or even decades. Pragmatically speaking, this means that in a transitional period, as a rule, beds in psychiatric hospitals should not be significantly reduced until all elements of the community care system are 'working.' An important factor

that should be taken into account is the ratio of general psychiatric beds per 100,000 people, which in the case of the Lower Silesian Voivodeship is not high and, excluding the MHC in Boleslawiec (55.37 – this is a paradox in relation to the assumptions of the NMHP), it amounts to 31.82 vs. 62.23 for Poland, and in the city of Wroclaw – 41.97/100,000 [18][2]. This process should also account for the cultural aspect, as the 'release' of patients from psychiatric hospitals, especially those with a long stay, may be accompanied by social ostracism. It should also be remembered that sustainable psychiatric care cannot function without acute hospital wards and beds in 24-hour hospital care facilities (forensic beds, long-term beds, hostels). Where there is a shortage, there may be unintended effects, such as homelessness or admission of mentally ill people to penitentiary institutions [19].

It is also important to know patients' and their families' opinions regarding the choice of the form of treatment, which should be respected under the resolution of the WHO Executive Committee of January 17, 2002 [20]. Some forms of community services must also undergo a significant evolution. For example, day wards, which are generally rehabilitative in Poland, should become therapeutic wards, admitting patients with acute psychotic symptoms [21]. This would undoubtedly allow to ease the stationary wards, but also reduce the effect of the so-called social deprivation experienced by patients in psychiatric hospitals and would probably also lower the rate of admission without consent, which is one of the highest in Poland (15–30%) in inpatient departments in Lower Silesia [23]. Although this indicator is lower by a half in psychiatric departments of general hospitals (admitting patients on a 24-hour basis) [24], it still has a stigmatizing dimension, discouraging psychiatric treatment.

A significant – in recent years – reduction of beds in psychiatric hospitals in Lower Silesia (up to 419, excluding the MHC) with a simultaneous increase in beds in psychiatric departments of general hospitals (up to 310) ensured adequate access to inpatient treatment in the Lower Silesian Voivodeship, but with a clear shortage of highly specialized departments. In particular, psychogeriatric beds are lacking, as well as beds for patients with a dual diagnosis (psychotic disorder and addiction), severe depression, and patients with the first episode of schizophrenia. Such functionalities can be successfully fulfilled by the Lower Silesian Mental Health Center (LSMHC) – as the largest service provider in the field of psychiatry for adults in LS, with highly qualified medical and psychological staff, with over 50 psychiatric residents and trainee psychologists. The LSMHC provides stationary psychiatric services for adults residents of Wroclaw (533,700) and neighboring towns with an NHF contract for 177 general psychiatric beds. In 2014–2018, the average use of these beds by the inhabitants of Wroclaw was 71.6%, i.e., (127 beds), while the remaining 28.4% (50 beds) were used by people from outside Wroclaw (the place of residence does not limit admissions to the hospital). The average five-year contract performance rate was 94.4%.[3]

[2] Bed availability rates were calculated in accordance with the EUROSTAT definition [18] based on data obtained from the Lower Silesian Voivodship Department of the National Health Fund.

[3] Calculated on the basis of data obtained from the Lower Silesian Voivodeship Department of the National Health Fund.

The presented data show the possibility of a quick reduction of 50 beds in the case of obtaining financing *per capita* for integrated psychiatric services under MHC for the city of Wroclaw. At a later stage, it would be possible to implement within the year a further reduction of 25 hospital beds in the LSMHC if two wards in Wroclaw multidisciplinary hospitals (47 beds) were included to handle the admissions of patients in acute psychotic conditions and with somatic problems, on a 24-hour basis (so far they only receive agreed admissions). In such a simple model, it is possible to demonstrate a quick reduction of the relative excess of beds in a psychiatric hospital without threatening the health security of the inhabitants of Wroclaw and with the so-called specialist beds, severely lacking so far. In the next stage, after gathering experiences from the first two, it would be advisable to establish teams: for early interventions in psychosis and also, known from the British model, the so-called Assertive Outreach Teams (AOT). They are teams specialized in helping adults with a mental illness or personality disorder who have refused to cooperate in treatment in the past and have been repeatedly admitted to hospital for violence, self-harm, homelessness, or substance use. AOT is designed to offer intensive and long-term help, mainly to build therapeutic relationships [25]. It is imperative that all forms of treatment established within the MHC meet the criteria based on evidence (evidence-based community services).

Considering that a significant proportion of hospital beds are used by patients diagnosed with schizophrenia, which involves nearly one third of the total budget of psychiatric hospitals [26], it is worth devoting as much attention as possible to improve guidelines for treatment (not only pharmacological one) and providing care in this group of patients (it is the role of a national consultant in the field of psychiatry with the participation of provincial consultants). The needs of the health care system users should be widely taken into account here, emphasizing empowerment, which creates hope for a return to social roles and professional activity. For these purposes, first of all, clinical psychologists, whose availability on the labor market is higher than that of professionals with medical education, should be involved, as is the case in other countries.

The rate *per capita*, which is the basis for the financing of MHCs, if used in accordance with a carefully prepared feasibility study, gives hope for better systemic solutions for the entire psychiatric care at costs approximately equal to those previously incurred by the state [27].

References

1. Thornicroft G, Tansella M. *W stronę lepszej psychiatrycznej opieki zdrowotnej*. Warsaw: Institute of Psychiatry and Neurology; 2010.
2. Regulation of the Council of Ministers of 8 Febuary 2017 on the National Mental Health Program – Dz.U. (Journal of Laws) of 2017, item 458.
3. https://www.nik.gov.pl/plik/id,12692,vp,15090.pdf (retrieved: 3.02.2021).

4. https://sip.lex.pl/akty-prawne/dzienniki-resortowe/ustanowienie-pelnomocnika-ministra-zdrowia-do-spraw-reformy-w-35682168 (retrieved: 3.02.2021).
5. https://www.prawo.pl/zdrowie/zmiany-w-psychiatrii-wg-marka-balickiego-rewolucja-jest,505179.html (retrieved: 5.02.2021).
6. Central Statistical Office. *Rocznik statystyczny Rzeczypospolitej Polskiej 2018.* Warsaw: Central Statistical Office of Poland; 2018.
7. https://www.google.com/search?q=zus+%C5%9Bwiadczenia+z+tytu%C5%82u+chor%C3%B3b+psychicznych&oq=zus+%C5%9Bwiadczenia+z+tytu%C5%82u+chor%C3%B3b+psychicznych&aqs=chrome..69i57.12082j0j15&sourceid=chrome&ie=UTF-8 (retrieved: 14.02.2021).
8. IHME, 2020. *Global health data exchange*. http://ghdx.healthdata.org/ gbd-results-tool (retrieved: 5.02.2021).
9. Borowiecka-Kluza JE, Miernik-Jaeschke M, Jaeschke R, Siwek M, Dudek D. *The affective disorder-related burden imposed on the family environment – an overview*. Psychiatr. Pol. 2013; 47(4): 635–644.
10. Ciałkowska-Kuźmińska M, Kiejna A. *Obciążenie opiekunów pacjentów z zaburzeniami psychicznymi*. Post. Psychiatr. Neurol. 2012; 21(3): 175–182.
11. http://mpz.mz.gov.pl/ (retrieved: 21.02.2021).
12. Moskalewicz J, Kiejna A, Wojtyniak B, editors. *Raport z badań „Epidemiologia zaburzeń psychiatrycznych i dostęp do psychiatrycznej opieki zdrowotnej – EZOP Polska"*. Warsaw: Institute of Psychiatry and Neurology; 2012.
13. www.statystyka.policja.pl (retrieved: 17.02.2021).
14. https://vizhub.healthdata.org (retrieved: 17.02.2021).
15. https://basiw.mz.gov.pl/index.html#/visualization?id=3157 (retrieved: 18.02.2021).
16. Bird V, Miglietta E, Giacco D, Bauer M, Greenberg L, Lorant V et al. *Factors associated with satisfaction of inpatient psychiatric care: A cross country comparison*. Psychol. Med. 2020; 50(2): 284–292. doi: 10.1017/S0033291719000011.
17. arnsdorf.sachsen.de/aktuelles/artikel/neubau_der_erwachsenenpsychiatrie_eroeffnet/ (retrieved: 18.02.2021).
18. https://ec.europa.eu/eurostat/databrowser/view/tps00047/default/table?lang=en (retrieved: 23.02.2021).
19. Torrey EF, Entsminger K, Geller J, Stanley J, Jaffe DJ. *The shortage of public hospital beds for mentally ill persons*. Arlington, VA: The Treatment Advocacy Center; 2008. http://www.treatmentadvocacycenter.org/storage/documents/the_shortage_of_publichospital_beds.pdf (retrieved: 15.01. 2021).
20. *Strengthening mental Health*. Resolution of the Executive Board of the WHO; 2002. https://apps.who.int/gb/ebwha/pdf_files/EB109/eeb109r8.pdf (retrieved: 15.01. 2021).
21. Adamowski T, Hadryś T, Kiejna A. *Efektywność leczenia na psychiatrycznym oddziale dziennym, w porównaniu z oddziałem stacjonarnym, na podstawie analizy objawów psychopatologicznych, subiektywnej oceny jakości życia oraz częstości rehospitalizacji po zakończeniu leczenia*. Psychiatr. Pol. 2008; 42(4): 571–581.
22. Kiejna A, Jakubczyk M, Chładzińska-Kiejna S, Baranowski P, Gondek TM. *Przyjęcia bez zgody oraz stosowanie przymusu bezpośredniego na przykładzie szpitala psychiatrycznego we Wrocławiu*. Adv. Psychiatry Neurol. 2017; 26(3): 127–139.
23. Kuna A. *Przyjęcia bez zgody w oddziale psychiatrycznym w szpitalu wielospecjalistycznym w Miliczu w latach 2013–2018*. Dissertation. DSW. 2019 – manuskrypt.

24. file:///D:/Dysk%20Google/Synchronizacja/Zawarto%C5%9B%C4%87%20folderu%20Pulpit%20-%20Dell%20Vostro%20(stary)/R%C3%B3%C5%BCne/Assertive%20-Outreach-Factsheet.pdf (dostęp: 20.02.2021).
25. Bijl R, Smit P, Arends L, Donker M, Roijen van L. *Costs of mental disorders*. London: AEP Congress; 1996.
26. Carling PJ, Miller S, Daniels LV, Randolph FL. *A state mental health system with no state hospital: The Vermont feasibility study*. H&CP. 1987; 38(6): 617–623. https://doi.org/10.1176/ps.38.6.617..

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