HISTORY AND METHOD OF MONITORING THE HEALTH OF THE POPULATION IN HUNGARY

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Keywords: healthcare policy, health monitoring, health survey methodology, public health reporting **Abstract:** World Health Organization (WHO) recommend nations to set up healthcare policies on the basis of epidemiological data related to the general health status of the population acquired through up to date and sustainable permanent health status monitoring, including people in good health who are not dealing with the healthcare system. In the last 50 years, in Hungary, several studies were accomplished with regard to the health status of the population, acquiring knowledge leading to a specific and sustainable system, appropriate with the EU's aquis communautaire and other international recommendations on monitoring the health status. Linking these data to the official statistics of the institutions working on healthcare and social assistance regarding the reports on morbidity, every three years, a short national report on the health status of Hungary is issued for policy makers and a detailed one for the experts of all health fields.

Cuvintecheie:evaluareasănătății,monitorizareastării desănătete,politicisanitare,sănătatepublică

Rezumat: Organizația Mondială a Sănătății (OMS) recomandă națiunilor fundamentarea politicilor de sănătate pe date epidemiologice obținute despre starea de sănătate a populației generale prin sisteme moderne și sustenabile de monitorizare continuă a sănătății populației, inclusiv a populației sănătoase care nu se adresează sistemului sanitar. În Ungaria în ultimii 50 de ani s-au derulat mai multe studii asupra stării de sănătate a populației și s-a ajuns la acumularea unei experiențe în domeniu și elaborarea unui sistem propriu, sustenabil, conform normelor europene și recomandărilor internaționale de urmărire a stării de sănătate. Coroborînd datele acestor studii cu datele de statistică sanitară din raportările de morbiditate oficiale ale instituțiilor din sistemul sanitar și social se întocmește la fiecare 3 ani un raport național al stării de sănătate al populației în varianta scurtă pentru factorii de decizie ai politicii sanitare și varianta detailată pentru uzul specialiștilor interesați din toate domeniile sistemului sanitar.

The attention for the public health goes back millenniums, and reports over the health of different population groups have been since centuries, with the goal to prevent the evolution or extension of some diseases and to identify the determinants of health.

The World Health Organization (WHO) recommends the member nations to reevaluate and to update the vision over the concept of health and to consider healthcare not only as a personal good, but as a collective good of the population or of the collectivity.(1)

Initiated by the well-developed countries and taken over by all countries of the European Community, the preoccupation to gather, analyze, store and to interpret the population's health data is being intensified, and also the determinants of health in order to create a scientific and economic background for decisions regarding the necessity and opportunity of taking measures and interventions in public health.

Romania has to comply too, and has to elaborate its own health monitoring system, like other European countries.

The primary goal of the research is to assess the utility of the methods used in a neighbouring country, whose economic indicators are comparable to Romania.

This general essay is intended to make a meta-analysis of the methodology of the epidemiological descriptive transversal studies performed in Hungary regarding the health status of the population, in order to find an applicable model for Romania.

Since the '80s the definition of health as a personal and community good, its identification as a basic social and economic resource is outlined in the international literature, having a determinant role in the wealth and development of any nation.

A sustained system that monitors health status means the collection, analysis, interpretation, permanent and systematic transmition of data regarding the population's health condition and the determinants of health.

Monitoring and assessing the general health of the population is a method which has the advantage of allowing to obtain information about the whole population, including those who do not address health care services for various reasons (the person is indeed or declared healthy, he/she is not wellinformed, does not want to seek medical advice or is hampered by certain conditions and circumstances). This part of the population is missing from the data obtained from the patient records and from the classical retrospective epidemiological surveys (also performed in Romania) based on the reports of sanitary institutions and authorities, and other health care providers. Those providers are in almost exclusive relation with the population having health problems, and with certain small sized population groups, exposed to some mandatory examinations, performed in some special cases (at hiring, when

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getting admitted to various posts, periodic examinations performed by the occupational medicine for some professional groups etc.). Data collected this way are biased and not representative for the entire population.

Through the regulation of the European Parliament and the European Commission No 1338/2008, a second actionplan was created regarding healthcare between 2008 and 2013, which stipulates that the data on public health and the national health system has to be collected and processed based on a standard model, interconnectable at a community level, thus to value the experience of the states which have already elaborated and implemented functional sustainable models. The strong recommendation is that the process of health monitoring to comprise the whole population, including the healthy persons, polling by representative samples based on themes predefined at a community level.(2)

"The available data show that a child born in Romania in 2007 is 6 times more likely to die before his/her first birthday than a child born in the same period in Sweden, and almost 3 times more likely that one born in Hungary".(3) This disadvantage is unfortunately maintained in the year 2011, too.(4)

Let's not compare ourselves to Sweden, because the distance to go can have discouraging effects, but let's analyze how the evaluation of health condition is performed in Hungary, a state with an organization and development of health services comparable to that of Romania, with no wealthier resources than our country, with a population estimated in July 2011 to be of 9.967.000 inhabitants.(4)

1979 That year, the activity of monitoring the population's health condition was launched with the study named KOMOV (Complex National Study of Morbidity in Hungary). Multiple studies followed, with different and various methodologies. We will briefly present only those with the most important national interest.(5)

1984 a so-called micro-census of health in which were included 2% of Hungary's population (a standardized sample of 200.000 persons older than 6 years).(5)

1986 The study named "Health condition 1986" was done, which assessed the subjective perception about the health condition of the respondents.

1994 A study was made on a representative group of people, with a much more complex batch of questions about the perception of their own health condition, lifestyle, addictions, individual risk factors and the opinion about the alarming health conditions in Hungary.

1997 "The Empiric Study regarding the Population's Health Condition" was done and during the next years, many other thematic studies were performed, focusing on various health determinants that have negative impact and can give rise to social charges (nutrition, mental health, addictions, social iniquities, access to medical services, health education etc.).(5)

The intensive concern of the Hungarian authorities towards monitoring the population's health condition was motivated by the fact that this country had serious problems in this area: the highest mortality from cardiovascular disease, mental illnesses (suicidal behaviour), the shortest life expectancy in Europe. The experience gained from these studies led to the conclusion that it would be useful to develop a standardized method, comparable with the European ones, which could be repeated periodically with a consumption of resources as low as possible, to serve the health policy makers and the experts in this field with regularly updated information. This way, the more complex and carefully planned studies in the years 2000, 2003, 2007 and 2009 were performed. name of the study, translated into English: National Assessment of Population Health Status in 2000), was conducted with the methodological and financial support of the World Bank cofinancing. The project was performed by the Research Institute for Health Promotion in 1999-2001.(6)

The target population comprised the whole adult population of Hungary, by a quantitatively and qualitatively representative sample selected from the electoral lists of 7000 people from 440 cities, each town being included in the sample. Data collection took place from October to December 2000 and was conducted by the quaestors of the Gallup Institute from Hungary, which was selected through a public procurement procedure. 5503 people were contacted, 80% of the sample, of which only 11 were unwilling to respond. This ensured the representativeness across the whole population, allowing the extrapolation to the entire population. The questionnaire was designed based on the model proposed by WHO. The National Centre of Epidemiology processed and analyzed the questionnaires.

OLEF 2003 (National Assessment of Population Health Status in 2003), was fulfilled based on the algorithm used in 2000, taking into account the recommendations of WHO and EC, and using only budgetary resources, without any external support. It was organized by the Hungarian National Centre of Epidemiology between October and November 2003, each town and county being included in the sample. Data colection was conducted by a polling company selected through a public procurement procedure. 72% of the people included in the sample answered, the rate of respondents being very high, ensuring representation at national level (regarding age, sex, county of residence, area of origin) and the obtained results could be extrapolated to the entire population. The final form of the OLEF 2003 questionnaire was similar to that of OLEF 2000, aiming at the comparison between the two results.(7)

MIKROLEF 2007 For financial reasons in the year 2007, the strategic monitoring plan was modified on a proposal from a group of specialists and only a regional project was implemented (whence the acronym "mikro"), representative for the regions. It was conducted between September 1 and December 31, 2007, ensuring continuity of the periodic health evaluation. The analysis of the cost-efficiency showed even in the previous studies to be more expensive and to have a high efficiency. The questionnaires were designed by the experts who had processed the previous studies, based on the European Community Health Indicators (ECHI). The anonymous questionnaires were composed of 80 closed-ended and half-open questions with systematized answers, double value validation, some of them binary and ternary, which were grouped into exhaustive fields about personal data, determinants of health, perception of own health, disease, disability, mobility, habits, behaviour, health expenses, special care needs etc.

Corroborating the results of these studies with the statistical data from the institutions of the health and social system, a national report of the Hungarian population's health is prepared every 3 years in two ways: a short report for the health policy decision makers and a more detailed version, to be used by the interested specialists. These reports form the basis of national healthcare programs, and the conclusions are widely promoted in order to inform and educate the large public.(8,9)

ELEF 2009 (The "E" initial means European) Although economic and political crisis hit Hungary, financial and professional efforts were made not to interrupt the health monitoring process. This procedure has received full harmonization with the EU requirements, which was one of the initiators of the study. The method, very similar to previous ones, used standard questionnaires developed by Eurostat. Data

OLEF 2000 (the acronym stands for the Hungarian

collections was conducted between September and October 2009 by the specialists from KSH (Hungarian Central Institute of Statistics). The sample consisted of 7000 people from 449 cities, based on the record lists of population with the same criteria of representativeness, of which 5051 were successfully interviewed.(10,11)

The infant population was not included in these studies, because the children's health is evaluated regularly by the health network from schools, through special programs for monitoring the psychosomatic evolution.

Hungary has a well designed and durable system for continuing public health monitoring. Thus, the groundwork to correct health policy decisions were laid and a feed-back is obtained for evaluating the effectiveness and the appropriateness of healthcare programs, a better healthcare planning and prevention, with much lower costs than curative medicine, leading to an increasing long-term quality of life.

This cost-effective model could be adapted in Romania too, where there is no public health monitoring system according to European recommendations.

REFERENCES

- 1. The World Health Report 2000. Health systems: Improving performance, WHO; 2000.
- 2. Regulation (Ec) No 1338/2008 of the European Parliament And Of The Council of 16 December 2008 on Community statistics on public health and health and safety at work (Text with EEA relevance), The European Parliament and the Council of the European Union, Official Journal of the European Union, 31.12.2008; L354(70)En.
- Vlădescu C, Pascu O, Astărăstoaie V, Verboncu I. Anghel R, Stănescu A, Molnar G, Olsavszky V, Irimia C. Raportul Comisiei Prezidențiale pentru analiza şi elaborarea politicilor din domeniul sănătății publice din România. Un sistem sanitar centrat pe nevoile cetățeanului. [Online]. 2008; [Accesat 2012 Mar 29]; Available from URL:http://www.presidency.ro/static/ordine/Comisiasanata te/un_sistem_sanitar_centrat_pe_nevoile_cetateanului.pdf
- Hungarian Central Statistical Office. Population, vital events. [Online]. 2011 Aug 22; [cited 29.03.2012]; Available from URL: http://portal.ksh.hu/docs/ hun/xstadat/xstadat_evkozi/e_wdsd001a.html#
- Vitrai J, Kaposvari Cs, Bakacs M, Kiss B, Vizi J: The hungarian health information system. Europe: WHO Mapping Health Information Systems; 2004.
- Boros J, Németh R, Vitrai J. Országos Lakossági Egészségfelmérés OLEF 2000 Kutatási jelentés, Országos Epidemiológiai Központ. [Online]. 2002 jul; [cited 2012 Jul 1]; Availablenfrom URL: http://dl.dropbox.com/u/18751062/Dokumentumok/kutatasi _jelentes_OLEF2000.pdf.
- Bakacs M, Vitrai J (szerk.). Népegészségügyi Jelentés 2004. Budapest: Johan Béla Országos Epidemiológiai Központ; 2004.
- Bényi M,Vámos M, Kéki Zs, Rákos-Zichy P. Noncommunicable diseases in 8 small regions, based on the MikroLEF 2007 survey. Hungarian Epidemiology, ISSN 1786-1489, 2008; 5(Suppl 2):128-129.
- Bényi M, Kéki Zs, Rákos-Zichy P, Vámos M, Csáky-Szunyogh M, Fekécs É, et al. Népegészségügyi jelentés 2008. Budapest: ÁNTSZ Országos Szakfelügyeleti Módszertani Központ. [CD-ROM]; 2008. Nov 11.
- Egészségfelmérés (ELEF) 2009. Központi Statisztikai Hivatal, Statisztikai Tükör, 2010 Apr 27; 4(50).
- 11. Vitrai J. The sick man of Europe?. Public Service Review: Science and Technology 2010;8:220-221

- 12. The Evidence of Health Promotion Effectiveness (Shaping Public Health in a New Europe) A Report for the European Commission by the International Union for Health Promotion and Education; 2000.
- The World Health Report 2004, 2005, 2006, 2007, 2008. http://www.who.int/whr/2004, 2005, 2006, 2007, 2008, 2010/en.pdf.
- 14. http://www.who.int/whr/2010/whr10_en.pdf.