Harmonised health indicators in the European Union: A brief introduction

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Abstract

To improve the public's health, policymakers have to know what the problems are and where changes need to happen. Here, health indicators can help by monitoring and describing health statuses and determinants. Therefore, health indicators are an important tool for effective policy making and health actions. Countries had established their own indicators, which introduces difficulties in comparing the data within the European Union (EU).
A narrative literature review was conducted to gain an overview of the development of harmonised health indicators in the EU countries over the past decades. The development of harmonised health indicators in the EU started over two decades ago. Since then, different health programmes and projects regarding European Community Health Indicators (ECHI) have been developed, introducing 88 core indicators, but not all indicators have been established yet. Effort is needed to implement and improve ECHI further. The main work is done by projects instead of long-term approaches. The implementation of harmonised indicators took a long road and did not achieve its goal yet. Formulating the right indicators for an overview of the health status and health determinants is a dynamic process and thus, effort is needed, to keep ECHI updated.

Keywords: ECHI, European Union, harmonisation, health indicators.

Introduction

Health is of great importance in the daily life. Whether people can enjoy their life depends on the health status, fulfil their duties and manage their work-life (1). Thus, the objective of public health policies is not only to maintain, but to improve the health of citizens (2). To develop effective health policies and other measures for health, and to assess their impact, reliable information about the public's health status are needed, which can be drawn from indicators (2,3). A health indicator is a measurement of a certain health aspect in a group or country, ranging from measures of life-expectancy, mortality and rates of certain diseases to determinants of health, such as smoking (4). Verschuuren et al. (2) state that information for health measures can only be reliably drawn, if "health indicators [are] based on representative population-based health data and [are] comparable between points in time, countries and areas". Such comparable data across the European regions exist for non-communicable diseases since the late 1970s, when the World Health Organisation (WHO) started the *Health for All Programme* and collected data in the HFA database (5). Additionally, health data of European countries was also collected by the Organisation for Economic Co-operation and Development (OECD), as well as from Eurostat, which is the most decisive health statistics collection of EU Member States (MS). However, these organisations implemented different methods of collecting and calculating data and thus, those are not generally comparable (6). Furthermore, harmonised and comparable health data, which aimed not only to be descriptive, but to make improvements of public health measures possible, were seldom (5).

Therefore, the establishment of harmonised health indicators in the Member States is creating a fundamental basis for health monitoring and reporting within the European Union (EU) and EU-wide public health policies (2,5). Because relevant health indicators, which are comparable between the EU Member States, play a huge role in identifying and overcoming health challenges (7) and resulting improving the overall health of the EU citizen, this paper aims to describe how the EU established comparable health indicators, why they should be comparable, and where there is still a need for improvement.

Methods

A narrative literature review was conducted to gain an overview over the development of harmonised health indicators in the EU over the past decades. The aim was to follow the actions taken of the EU over the past and thus, to understand where the impact, but also possible shortcomings lie and to investigate what has been achieved and where still some needs exist.

Databases such as PubMed, Science Direct, but also Google Scholar were searched for different keywords, using the Boolean operators «AND» and «OR». Key terms that were searched for included "health indicators", "health statistics", "ECHI (M)","health data", "health measures", "data needs", "health status", "European regions" and "evidenced-based actions/policies". Furthermore, the suggested MeSH terms were revised to include also controlled key terms.

Additionally, suggestions of the journals and databases were considered, as well as reference lists were scanned to complement the research. Journal articles, book chapters, reports, published papers of the European Commission, as well as the websites of the WHO and the EC were included as reference material. To acquire insight into the history of harmonised indicators in the European Union, articles from 1990 until 2015 were included. Reference material published in languages other than English has been excluded. After the titles and abstracts were scanned to investigate whether the identified articles matched with the research questions, the full articles were reviewed and a final selection was made.

Results

The foundation for harmonised health indicators and EU wide health monitoring was established in the 1990s (2). The European Parliament asked for steps towards this goal and the European Commission initiated the first Health Monitoring Programme in 1993 (2). Included in this Programme were also projects for developing joint health indicators. Nevertheless, the more extensive work on harmonised health indicators started with the basis of the Amsterdam Treaty (8) and thus, a commission working group was created which led to the presentation of a report on health monitoring and indicators in 1998 (5). Because the need of comparable health indicators received increased awareness, the European Community Health Indicators have been introduced to provide a frame for uniform data collection and to fill information gaps (9). The work on ECHI proceeded with different Health Programmes' of the European Commission (9), of which currently the third health programme - running from 2014 until 2020 - is in place (10).

The first version of the ECHI shortlist and long-list with core indicators was introduced in 2005 and two updated versions of the shortlist followed in 2008 and 2012 (11). Even though other data collections exist, ECHI is established especially as tool for policy support (2). ECHIM followed the first two versions of the ECHI projects and further tried to identified which health indicators should be included at EU level, what kind of data is needed to establish these health indicators and how these can be implemented by different actions (6). Moreover, ECHIM tries to build a bridge between the developed core indicators (ECHI) and a way of implementation in the Member States (6). The current shortlist of 2012 consists of 88 indicators (11), which aim to describe the overall health in its different facets and are clustered in five main areas, including demographic and socioeconomic factors, the health status, the determinants of health, and health interventions which are clustered in health services and health promotion (5,12). In 2013, ECHI was renamed the European Core Health Indicator (12).

For implementing ECHI in the Member States, two main activities are of great importance. On the one hand, the MS have to map and improve the data availability for their countries, which are provided for the ECHI indicators. On the other hand, these ECHI indicators should also be used in the nations themselves for monitoring and reporting the national status (6). The Joint Action for ECHIM has a big share in the implementation and in the improvement of comparability of the health indicators within the EU. Data that are comparable between Member States and are collected according to the ECHI shortlist are provided at the HEIDI Data Tool, which is to a great extent based on collected data of Eurostat and other databases. Moreover, there is an increased cooperation between the WHO, OECD and the EC with regard to health data and statistics (2). All the effort taken for comparable health data between the MS aims at evidenced-based policy making, as comparable data draws a comprehensive picture about current situations and allows identifying best practices (6). Nonetheless, unified data collection and comparability also adds value within a national context between regions and helps to improve the national health policies and not only the EU-wide policies (8).

Even though the history of unified health indicators in the EU reaches back for over two decades, the work on harmonised health indicators keeps going. While, for instance, data on mortality is routinely collected and mostly available in all countries, data for ECHI indicators on health care quality were only available in half of the Member States (13). In 2012, no country had reached to implement all ECHI indicators and Denmark and Finland performed best with 84% of indicators implemented. The average data availability in the EU-27 was 76% with every MS scoring more than half of all ECHI indicators. However, a gap between the availability in Eastern and Southern Europe compared with the availability in Northern and Central Europe exists. In general there is a significant difference between availability

of data in Member States, as well as a crucial difference between availability of the different types of indicators (6). However, Aromaa (5) suggested that the complete indicator system should have been adapted in most countries by 2014.

Discussion

In the following part two different sides of this paper are addressed. On the one hand, it analyses ECHI and the effort it will take further. On the other hand, it examines the reference material used for this overview.

The ongoing effort of ECHI

In the past two decades much has happened regarding harmonised health indicators and unified health monitoring in the EU. It became clear that comparable health indicators add value in different ways to the development of evidenced-based policy and thus, the improvement of the overall health. Many different stakeholders identify the importance of comparable indicators, which resulted in increased cooperation between different stakeholders, including the European Commission, the WHO, OECD, as well as the Member States. This increased cooperation leads to better and more comprehensive outcomes (2). The European Core Health Indicators have been developed over the past years and different funded projects and working groups tried to support the implementation and constantly improved them. However, even though it has been worked on ECHI for years, efforts with regard to maintaining a sustainable base with high quality data for policy makers are constantly needed (2). This concerns the European Commission and the EU level as well as the national level. Moreover, it can be criticised that the main effort for harmonised health indicators is taken by projects, which only last for a couple of years and no sustainable ad horizontal approach regarding health indicators has been taken yet. Thus, the constant improvement and development of ECHI depends on the established projects for that period of time (2).

A different aspect about the impact of comparable data, which was not addressed in the literature, is the chance of achieving improvements only due to 'peer pressure' instead of regulations and policies. When countries are compared in different health areas, to see how they are doing, it is more satisfying to be one of the top countries, than a subordinated country. This can lead to increased action on a field by the certain country, to improve the performance and to become as good as other countries. Thus, comparable indicators and health statistics have the ability to point on weaknesses and to make countries improving them without regulating it by hard law.

Furthermore, in 2012, there was still a substantial lack of the national implementation of ECHI. Tuomi-Nikula et al. (6) reason the slowed-down progress on the one hand with problems on the part of the EU with a lack of leadership. On the other hand, also a lack of commitment and funding personal at the national level hindered a quick implementation process (6). In addition, more work needs to be done, as by far not all core health indicators have been implemented yet.

Flaws of reference material

While studying the literature, it became clear that most documents have been published between 2008 and 2013 with regard to the implementation of ECHI, so before the third health programme came into place, which is why it is difficult to make a statement on how far ECHI is implemented in the MS in 2015. Therefore, the estimation of Aromaa (5) that most indicator systems are implemented by 2014 cannot be checked. More comprehensive reports on the overall implementation would be useful. However, some country focused articles exist, such as about the implementation status of the Netherlands, which indicates that in general, there is sufficient data availability (14).

A different point of interest would have been to investigate what was expected 20 years ago from the introduction of health indicators and what has been realised by now of these expectations.

Nonetheless, there was no general article found regarding this issue, despite the different objectives that have been named in different papers and developed over the past years. Therefore, future research should investigate what harmonised health indicators have been expected to change and in how far this change occurred 20 years later and what would still be missing.

Moreover, it stood out that, with regard to ECHI and the topic of health indicators, especially in the European context, it is mainly a concern of the same author groups. However, this is mainly because those authors belong to the joint action for ECHIM professionals.

Conclusion

This paper aimed at giving a brief overview over the ECHI development, what has been done and what is still needed. The implementation of harmonised indicators has come a long way and did not achieve the goal yet. However, it became clear that the health indicators should be improved constantly, because formulating the right indicators for an overview of the health status and health determinants is a dynamic process and thus effort is needed, to keep ECHI updated. Furthermore, the whole process of ECHI is a much more complex approach, with more different measurement tools and working groups than described in this paper, as it was the aim to simplify the understanding of the core indicators' objective.

Moreover, health indicators are an important tool for evidenced-based health policy, as well as for achieving improvement in the public's health. Even though there are implementation gaps and no country has established the full ECHI indicator set yet, all Member States achieved to implement more than half of the indicators. Hence, it can be stated that the EU is on its way to harmonised health indicators. Additionally, the importance of cooperation between the different stakeholders in this topic was shown.

Conflicts of interest: None declared.

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