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The Osservasalute Health Report 2010: the contribution of a wide and independent Italian research network to decision making in healthcare

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Abstract

Background: The Italian Observatory Healthcare Report (IOHR - 8th edition) [1] aims to help policy makers in the process of decision making through a set of validated indicators resulting from the multidisciplinary activity of several public health experts. Its main task is to gather comparable data on the health status and the quality of health care services throughout the Italian regions.

Methods: The report adopts a European approach in order to build a benchmarking activity and the selection criteria of indicators include: meaning, feasibility and quality, comparability and reliability. Each indicator is analyzed by experts in terms of meaning, pattern, validity and limits, graphic representation; recommendations are included for decision makers. A peer reviewing is performed for quality assessment.

Results: The IOHR 2010 included 96 indicators, analysed by 203 authors. Through comparable regional data coming from different sources, an overview of the Italian Health System, and a gauging of the impact that different regional organizational and institutional arrangements have on the quality of health services, have been provided. Though data analysis showed a North-South gradient in the quality and the organization of health care services, nevertheless, the overall health status of Italian population is good. Risk factors, lifestyles and prevention together with geographical and social differences in health status and service access are the main priorities.

Conclusions: The IOHR helps monitoring the health status in the Italian regions through specific indicators characterized by scientific strictness. It contributes to identifying the situations of excellence and disseminating public health care control tools in order to facilitate the decision making process.

Key words: Italian healthcare, health report, federalism, public health

Introduction

Health care system stakeholders, and policy makers in particular, should be aware of important sources of data in order to recognize and gauge the effects that changes have on the health status and the health care services provided. Thus, in a world of information overload, they should be able to select the most relevant information inside frameworks and relative systems of indicators like World Health Organization (WHO), European Community Health Indicators (ECHI), and Organization for Economic and Cooperation Development (OECD).

The Italian Observatory on Health Status in the Italian Regions (Osservasalute) results from a cooperation between the Institute of Hygiene and Preventive Medicine of the Catholic University of Rome, the Public Health and Preventive Medicine Departments of other Italian Universities and several national, regional and corporate-public health institutions. This cooperation has led to a multidisciplinary activity involving around 230 public health experts such as clinicians, demographers, epidemiologists, mathematicians and economists, and has become the widest independent research network on health issues in Italy.

The principal aim of the Observatory is to gather comparable data on the health status of the population and monitor how the health care services throughout the Italian regions are used. The information, derived from different sources, is useful to provide public health care policymakers valuable decision-making tools and covers the following areas:

- Health status (e.g. incidence and ways to monitor chronic and infective diseases).
- Environmental and health-related behaviors (e.g. data on lifestyles and other health determinants, data on prevention, injuries, etc.).

- Some groups of vulnerable populations (people with disability, women, migrants, children, elderly).
- Characteristics of regional delivery health systems (e.g.: access to care, quality of care provided, human resources and financial viability of health care systems, primary and secondary health care and pharmaceutics).

The main outcome of Osservasalute is the Report on health status and quality of the health care in the Italian regions. The 2010 Report (IOHR 2010) [1], at its eighth edition since 2003, makes a comparative methodological analysis of selected indicators recognized at the international level and has been developed starting from the European health indicators of the ECHI-1, ECHIM-2, ECHIM projects [2].

This activity represents a pilot initiative, with the intention of creating a methodological base on which to compare different regions of the country through the use of rigorous indicators, and with the aim of collecting useful experiences in order to identify the best practices and understand the underlying mechanisms.

The scope of the present contribution is to provide an updated glance of the Italian Health System, to provide useful information to policy makers and other health care system stakeholders responsible for taking important decisions and making changes with regard to the organization of health services.

Methods

The IOHR 2010 focuses on the health status and the quality of health care systems of the 21 Italian regions. It aims to:

1. give continuity to the initiative by developing a comparison over-time and with other surveys concerning topics of interest;
2. adopt a European approach in order to build a benchmarking activity in the European regions.

The Report uses data collection instruments which are in line with the European Observatory on Health care, so based on the following sources:

- European Institute of Statistics (Eurostat: European Health Survey System and the Hospital Activity and Resources Information System);
- Directorate-General for Research (DG Research) network systems and databases in the field of Rare Diseases);
- Organization for Economic and Cooperation Development (OECD) Health Accounts System;
- World Health Organization (WHO) European Community Environment and Health Information System;
- Directorate-General for Health and Consumer Affairs (DG SANCO) Resources and partners (e.g. Accidents and Injuries Surveillance System, information and knowledge system on major chronic diseases, sources and inventories on health information, etc.).

Since 2010, the IOHR has been a national leading institution for the European Observatory on Health Systems and Policies.

Many indicators are taken from WHO-Euro (HFA database) [3,4], from OECD (OECD health data)[5] or Eurostat database [6]. The criteria for the selection of indicators are:

1. Meaning: precise definitions of meanings, such as its purpose, measurable objectives, numerators and denominators, validity, limits and benchmarks.
2. Feasibility and Quality: data required for the indicators are readily available for the areas and time periods indicated, there should be no unreasonable obstacles or constraints on access to the information collected, nor restrictions on its use. Indicators have to be evidence based (eg, rigorous in rationale and methods, as sustained by scientific literature and pass through a critical evaluation process).
3. Comparability: possibility to obtain regional comparable data for the measurement (e.g. standardization).
4. Reliability: the indicator produces consistent results in repeated measurements of the same condition or event [7].

Each indicator is analyzed by experts in terms of meaning, pattern, validity and limits, and graphic representation (tables, graphics and cartograms), and recommendations are included for decision makers. A peer review committee is responsible for quality assurance from the scientific point of view [1].

Results

The IOHR 2010 reports the results of 96 indicators, analysed by 203 Authors [1] . The data analysis concerning population dynamics shows an increasing trend during the period 2008-2009, which is mainly due to migration. With regard to the total fertility rate (TFR), a slight increase is found, although the value of 1.42 children per woman in 2008 is still below the generational replacement ratio (about 2.1 children per woman). The increase can be explained by a rise in fertility of older women (over 30 years) and a growth of births from foreign immigrant women (an increase of 1.3% compared to 2007), especially in the Central-Northern regions of the country.

Generational replacement is difficult partly because the Italian population has a strong tendency towards ageing: life expectancy still increases; between the years 1998-2000 and 2007, male life expectancy has risen by 2.2 years (from 76.5 to 78.7) and females' life expectancy has increased by 1.5 years (from 82.5 to 84.0). Thus, women could expect to live longer on average, although the gap between genders is shrinking.

The analysis of the mortality rates by age for the different groups of mortality causes, shows that in 2006-2007 there was an overall reduction especially in the age groups 55+, for both genders. In all provinces, a significant reduction of mortality rates for cardiovascular diseases is recorded, although the intensity of this reduction differs per region.

Nowadays, diseases of the circulatory system are one of the major causes of mortality in Italy, contributing to around the 39% of the total mortality rate. A great improvement has been achieved with respect to 2009 when the total mortality rate for circulatory system diseases accounted for 43% and the mortality for cardiovascular diseases was 25%.

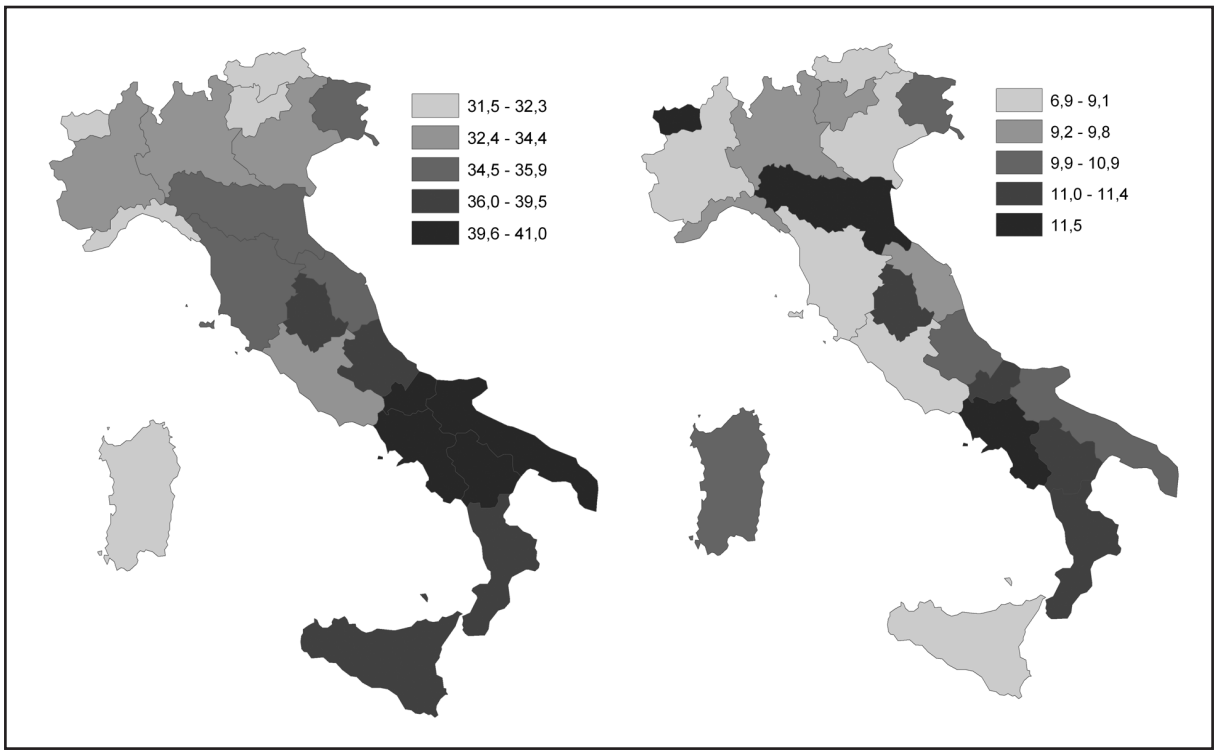
As for malignant tumours, the national mortality rates have slightly decreased due to the increasing mortality rates in several provinces. The prevalence of tumours, according to the analysis of AIRTUM in 2006, has not changed since 1992. The survival rate 5 year from diagnosis has not changed, remaining stable at 42% of the population both in 1992 and 2006. In addition, the prevalence of survivors after 2 years has remained stable over time (22% in 1992 and 21% in 2006).

The analysis of risk factors and lifestyles shows that, although prevention activities have achieved some positive results, inappropriate behaviours with regard to alcohol, smoking and food intake should be reduced. The percentage of active smokers has remained substantially stable (from 28.3% in 2005 to 28.6% in 2008 for men, and from 16.2% in 2005 to 16.3% in 2008 for women) as well as the rate of alcohol consumers (that has slightly decreased from 68.2 % in 2007 to 68.0% in 2008).

Cancer mortality has substantially changed over the last few years both for women and men. It has been constantly decreasing thanks to the introduction of effective therapeutic measures and the improved diagnostic attention when the disease is found.

Given the existing North-South economic imbalance, regional differences in cancer mortality are also marked, but they have been significantly reduced if compared to the past. In the last decade, a reduction in the incidence rates for men in the North and the Center of Italy was observed, while an increase in some regions of the South was found. In comparison, rates for women are estimated to increase in all regions. In the recent years, mortality data have been constantly decreasing both for men and

Figure 1. Prevalence of over-weight (left) and obesity (right) among people over 18 years old in 2008 (%) [1].



women – a trend which can be seen more so in the North and the Centre of the country than in the South.

Regarding obesity and overweight people, a progressive increase over time has been evident. The percentage of obese people has risen from 8.5% in 2001 to 9.9% in 2008, and a similar increase has been seen for overweight people too, a segment which has risen from 33.9% in 2001 to 35.5% in 2008 (see Figure 1, reported as an example of how data are presented in the Osservasalute).

With regard to the production of waste, air pollution and safe drinking water, data show that many efforts still need to be undertaken, especially to recover regional differences. Nevertheless, 2008 data, regarding both the daily average concentrations and the average number of days exceeding the particulate matter threshold (PM10), showed a moderate improvement respect to previous years. As for the water supplied of the total water pumped into the local distribution networks, the current percentage is equal to 67.95%. The regional data show a North-South gradient particularly due to climate, topography and water supply management.

Caesarean section indicator also shows a remarkable interregional variability, with higher rates in the South than in the North, although the data for Italy presents a slight decrease (-0.25%) from 39.29% in 2007 compared to 39.19% in 2008.

As for the health of immigrants, the analysis has become harder every year, since it is difficult to find and identify reliable data and numbers. For several years, Italy did not have any specific regulations related to health care for foreign people. A clear legislation for immigrants was not available until 1998. Today, the incidence of regular foreigners varies across regions, with higher rates, compared to the national average (6.5%), in Northern and Central regions (Emilia-Romagna 9.7%, Umbria 9.6%, Lombardia and Veneto 9.3% for both) and lower rates in the South of Italy (Puglia and Sardegna) where less than 2 out of a hundred people have a citizenship different from the Italian one. Regular immigrants are now registered in the National Health Service (SSN) in the same way as Italian citizens. They have access to all health care institutions.

With regard to the financial and organizational issues, at the national level, the current public health expenditure as percentage of GDP has increased, from 6.22% in 2001 to 7.21% in 2009. Differences in regional expenditure are mainly due to socioeconomic factors, such as differences in GDP and in the supply of health care.

Nationally, hospital expenditure takes up a considerable proportion of health care spending, accounting for 46% of the total in 2005. A reduction in the number of beds, together with policies aimed at promoting the appropriate use of hospital care during the 1990s and after 2000, has resulted in a sharp decrease of hospital admissions.

Finally, the Italian population's satisfaction with the Italian National Healthcare System (SSN) remains under the EU average, but satisfaction levels also differ between the North–South showing yet another division, with the Northern and Central regions obtaining above-average results, and Southern regions scoring under the European average. If one considers these aspects, a major challenge for the future of the Italian National Health System will be to reduce these differences between the regions.

Discussion

Overall, the data of the IOHR 2010 show that the health status of the Italian population can be considered quite good, thus confirming previous analysis [8]. Nevertheless, there is still a North-South gradient in the quality and the organization of the health care services. In particular, the priorities recognized in this latest edition are:

1. Risk factors, lifestyles and prevention: there is a growing concern about the diffusion of unhealthy lifestyles especially among young people: e.g. cigarette smoking, binge drinking and excess weight. Besides this issue, there is also a lack of institutional communication that should provide clear information on the negative effects of these behaviors on health status.
2. Geographical differences and social differences in health status and access: despite appreciable improvements in health status and life expectancy, the most important mortality and morbidity indicators show areas of social inequalities. The indicators analyzed point out that social and geographical differences are growing, resulting in a major disadvantage for the Southern regions. These differences can be explained by a higher concentration of people with socio-economic problems in the South, a condition that is related to the occurrence of health problems and less responsiveness of the health care services [9]. As for migration and health, it is still hard to identify reliable data flow although specific regulations are in place and Northern regions seem to be more affected by foreigner's access to healthcare, since they are subject to higher rates of regular immigrants.

Thus, the provision of comparable data between different regions is a distinctive characteristic of the IHOR that becomes particularly relevant for a country, like Italy, undergoing a process of transition towards a federal state [10].

Health reforms have been put in place in recent years, centered on cost containment and decentralization of financial responsibility towards a the regional management, and thus the IOHR was developed in recognition of the necessity for an instrument capable of describing the Italian health situation adopting a comparable methodology.

From this perspective the IOHR provides a clear picture of the impact that different regional organizational and institutional arrangements have on the quality of the health services, by stressing the underlying weaknesses and strengthens. In the changing context, in fact, it is important to monitor how regional autonomy and federalism affect the level of resources allocated to health care and the underlying mechanisms of distribution [10,11].

Through the IOHR it is possible to provide an overview of the Italian Health System every year, which is helpful for those who are responsible for taking important political decisions regarding the way in which health services are organized at the regional level [12].

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