HEALTH STATUS OF THE SYRIAN PEOPLE DURING 1990 - 2008 – COMPARISON TO ROMANIA

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Keywords: health status, primary prevention

Abstract: The present paper is part of a more extensive approach of assessment of the effectiveness of the health systems in Romania and Syria. A descriptive analysis of the health status of the two populations was done based on information available in international databases for the period of 1990 – 2008. Syria is facing a constant growth of the population and a very low percent of people over 65 years old (3%). Romania has a decreasing population which is also in a continuous ageing process. However, the burden of non-communicable diseases in Syria is similar to that in Romania, considering the disability adjusted life years (DALY) per 100000 inhabitants and the mortality rates by cause. These facts indicate the need for primary prevention strategies targeted on young adults and children that should control the determinants of non-communicable diseases. These strategies of primary prevention are also necessary in Romania, but they have to be completed with strategies for secondary and tertiary prevention, according to the real need of health services of the population.

Cuvinte cheie: starea de sănătate, prevenție primară

Rezumat: Studiul de față este parte dintr-un demers mai amplu de evaluare a eficacității sistemelor de sănătate din România și Siria. S-a realizat o analiză descriptivă a stării de sănătate a celor două populații, utilizând informații disponibile în baze de date internaționale, pentru anii 1990 – 2008. Siria se confruntă cu o creştere populațională constantă și un procent foarte redus al populației de peste 65 de ani (3%), iar România are o populație în scădere și în proces de îmbătrânire continuă. Totuși bolile netransmisibile au în Siria o povară similară cu a României din punct de vedere al anilor de viață ajustați după incapacitate la 100000 locuitori și al ratei de mortalitate pe cauze, ceea ce ridică încă de acum necesitatea inițierii unor strategii de prevenție primară direcționate către adulții tineri și copii, care să vizeze determinanții bolilor cronice. În România, strategiile de prevenție primară a bolilor netransmisibile rămân la fel de necesare, dar ele trebuie completate și cu strategii de prevenție secundară și terțiară, care să corespundă nevoilor de servicii de sănătate ale populației.

INTRODUCTION

The health status of a people represents a dimension of the health system effectiveness and the maintaining or improvement of the health status consists in the key mission of the health systems, being a premise for the social and economical development of that nation. Any analysis of a health system cannot ignore or exclude the evolution of the health status indicators.

AIM OF STUDY

The present paper is part of a more extensive approach of assessment of the effectiveness of the health systems in Romania and Syria.

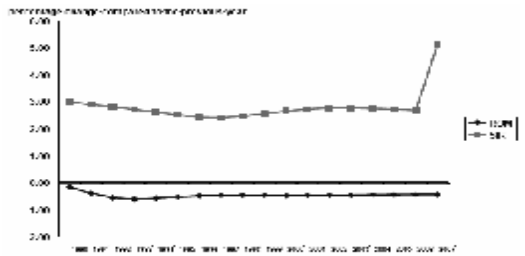
MATHERIAL AND METHOD

The present paper is part of a more extensive approach of assessment of the effectiveness of the health systems in Romania and Syria. It is based on a descriptive analysis of the main health status indicators of the two populations, using information available in international databases. Demographic indicators (e.g. number and structure of the population, births rates, fertility and infant mortality rates, life expectancy at birth and health - adjusted life expectancy) and morbidity indicators (e.g. death rates by main non-communicable diseases, incidence of TB and malaria and Prevalence of HIV) have been analyzed, as trends where possible. The reference period of study was from 1990 to 2008.

RESULTS

From the demographic point of view, Romania and Syria are experiencing different stages of transition. Thus, Syria had in 1990 about a half of Romania's population (12.7 million inhabitants compared to 23.2 millions). The Romanian population has been characterized by a continuous decrease during the two decades, while the Syrian population has increased yearly with an average of 2.5% (fig 1).

Figure no. 1. Annual percentage change in absolut number of population



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The population's structure by age group makes another difference between the two states. Romania is confronting with a continuous growth of the percentage of elderly people (65+). Meanwhile, in Syria young ages (0 – 14 and 15 – 64 years) are predominant, simultaneously with a very low percentage of elderly people (fig 2, 3)

Figure no. 2. The structure of Romanian population by age-groups

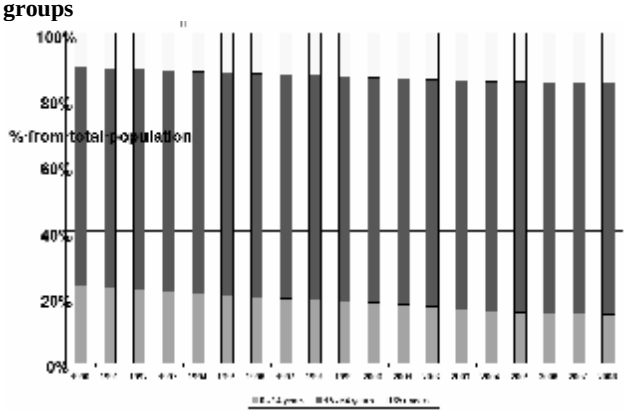
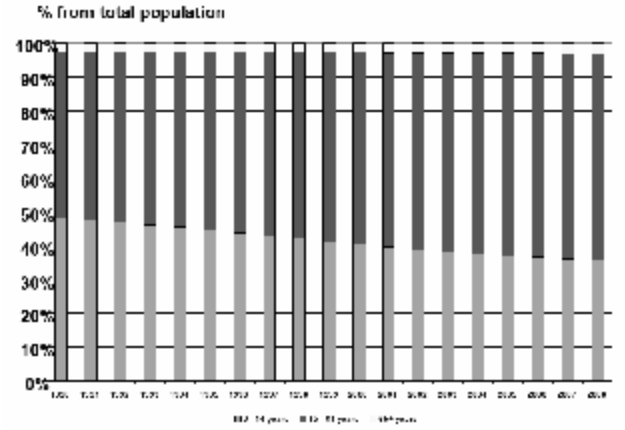


Figure no. 3. The structure of Syrian population by age-groups



The birth rate in Syria if three times higher than in Romania (having however a relatively accelerate tendency of decreasing) and the mortality if three times lower than in Romania. In this context, the natural growth of Syrian population will remain positive even after 2050, based on the current trends.

Figure no. 4. Birth rate and mortality rate

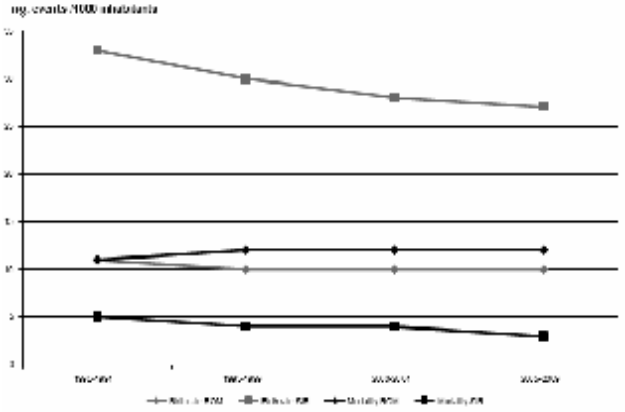


Figure no. 5. Total fertility rate, 1990 - 2009

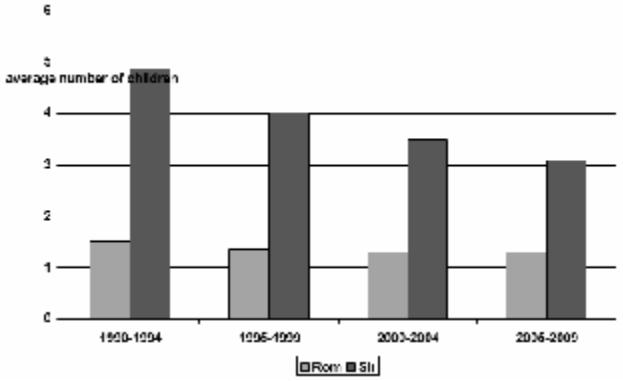


Figure no. 6. Life expectancy at birth

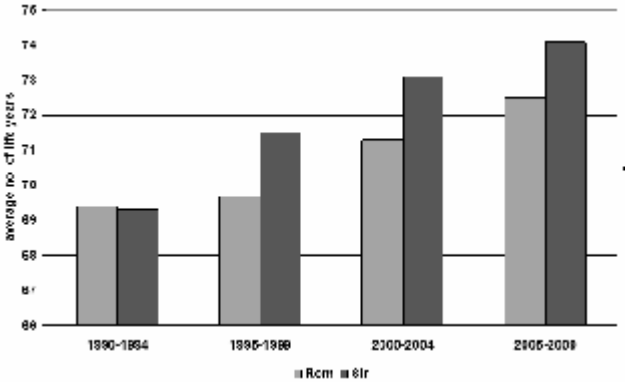


Figure no. 7. Life expectancy at birth, males

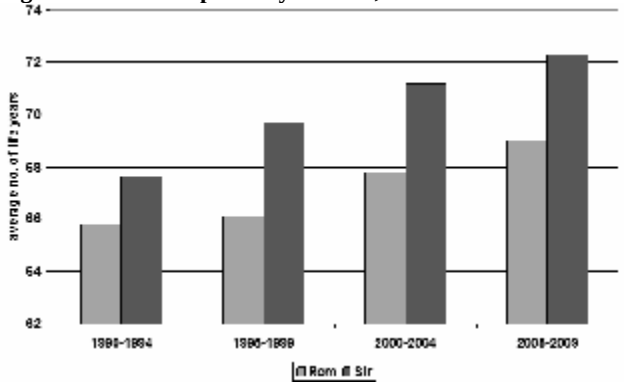
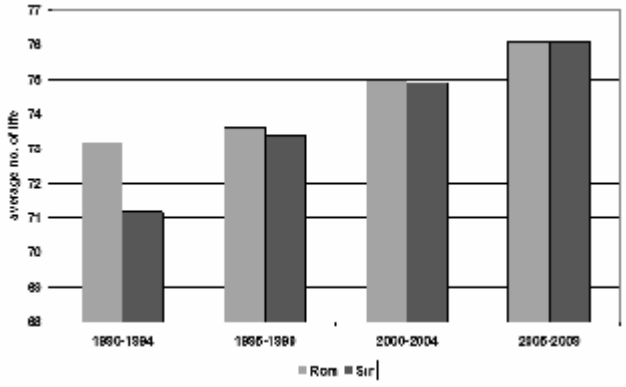


Figure no. 8. Life expectancy at birth, females

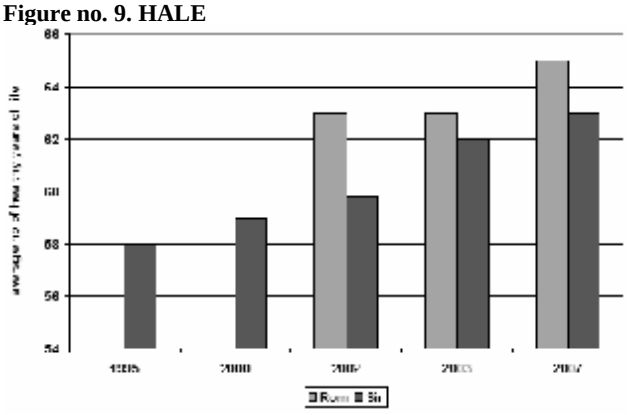


The analysis of life expectancy by genders (Fig. 7, 8) shows a gain of 2.9 years in females and 3.2 years in males in Romania, meanwhile Syria gained 4.9 and 4.7 years in females

and males respectively for the whole period of the study. These differences means a percentage change compared to 1990 of 4% in females and 4.9 % in males for Romania and of 6.9% in females and 7% in males for Syria.

Health - Adjusted Life Expectancy (HALE) – indicator that measures the number of years a person can be expected to live in good health, based on current rates of mortality and on current health status of the population – is bigger in Romania although available data are only for 2002. HALE has a ascendant trend in Syria (fig 9).

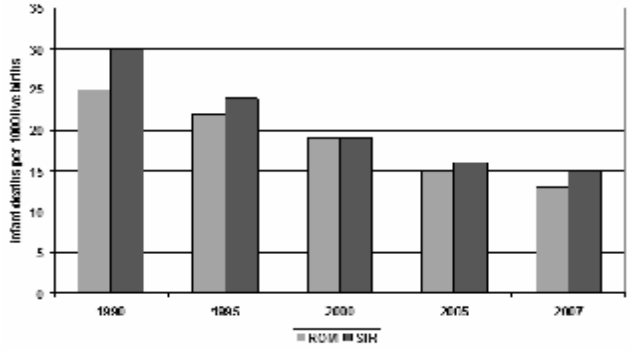
Figure no. 9. HALE



Source: WHO, World Health Statistics, 2009

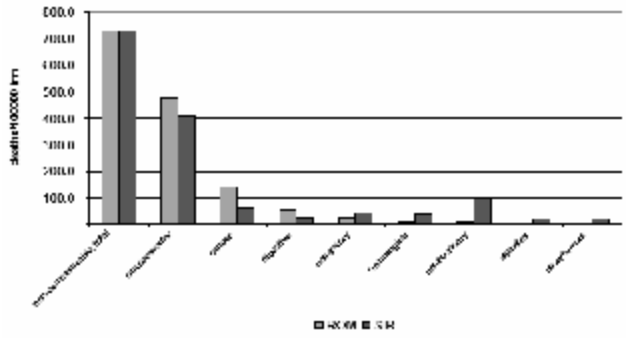
Infant mortality has similar characteristics in both states, although Syria had by tradition much higher rates than Romania (Fig. 10). Romania has the highest infant mortality rate in EU.

Figure no. 10. Infant Mortality



Source: WHO, World Health Statistics, 2009

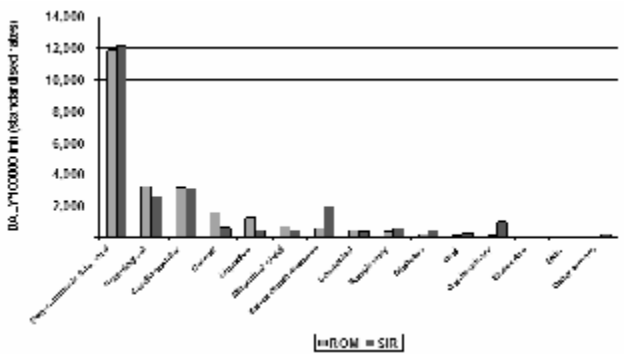
Figure no. 11. Standardised mortality by non-communicable diseases, 2002



Source: WHO, Deaths and DALY estimates by cause, 2002

Depending on availability of data, morbidity analysis included incidence, prevalence or mortality rates by communicable and non/communicable diseases. The standardized mortality by non-communicable diseases is similar in both countries (showing comparable models of mortality), with slightly higher values of cardiovascular deaths and higher values for cancer and digestive diseases in Romania. Much higher values of standardized mortality rates are registered in Syria for genitourinary, neurological and respiratory diseases (fig. 11).

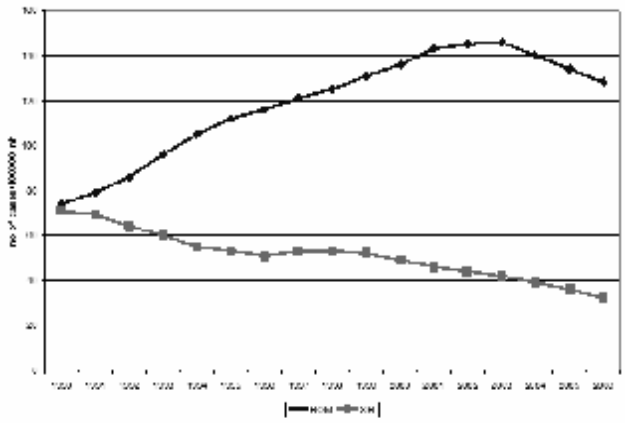
Figure no. 12. Burden of non-communicable diseases, 2002



Source: OMS, Deaths and DALY estimates by cause, 2002

The burden of non-communicable diseases (expressed by DALY per 100000 inhabitants – direct standardized rates) is 2% higher in Syria compared to Romania. The rate of DALY per 100000 inhabitants is higher in Romania for neurological diseases, cancer and digestive diseases and respectively higher in Syria for genitourinary and respiratory diseases (fig 12). From the group of communicable diseases, TB is a health problem in Romania and Syria equally. In 1990 both countries have had comparable incidences. In Syria the TB incidence has decreased continuously. In the meantime in Romania the TB incidence has increased constantly till 2002 since when a slight decreasing trend occurred (fig 13).

Figure no. 13. TB Incidence



Source: WHOSIS

Romania has a big numbers of persons living with AIDS (more than 10000 in 2007). 80% from them receive free antiretroviral therapy. Syria reports very few cases of HIV/AIDS. Syria has also few cases of malaria (decreasing trend, from 107 cases in 1990 to 7 cases in 2007 (1)), while Romania doesn't face malaria as a public health problem.

In 2002, Romania lost 77% of potential years of life (PYLL) by non-communicable diseases and 11% by communicable diseases. In the same year, 56% from PYLL in Syria were due to non-communicable diseases and 30% to communicable diseases (4).

CONCLUSIONS

The analysis of the main demographic and morbidity indicators available in international databases showed that Syria faces a constant growth of the population and a very low percent of people over 65 years old (3%). Despite the decreasing fertility rate, the natural growth will remain positive in the next decades. In this context, the planning of the health services has to focus on children and young people specific health problems. However, the burden of non-communicable diseases in Syria is similar to that in Romania, considering the disability adjusted life years (DALY) per 100000 inhabitants and the mortality rates by cause. These facts indicate the need for primary prevention strategies targeted on young adults and children that should control the determinants of non-communicable diseases. These strategies would limit the increase of NCD burden that induces the increase in health services consumption on medium term. Romania has a decreasing population which is also in a continuous ageing process. The strategies for primary prevention of NCD remain necessary as well in Romania, but they have to be completed with strategies for secondary and tertiary prevention, according to the real need of health services of the population. New mechanism for rationalizing the provision of health services have to be identified in order to assure an appropriate access to health care for the people that have the biggest needs. A attention focus should be paid for TB control.

The analysis of health indicators in the two countries provides scientific evidence for the evaluation of health services need and for the decision making process related to further development of both health systems. However, the information available in international databases is not sufficient. So it's strongly recommended to improve the informational systems and the access to information in order to monitor and evaluate the performance of the health systems and to adapt their functioning to the health needs of the population.

REFERENCES

1. http://earthtrends.wri.org/
2. Regional Health Systems Observatory EMRO. Health System Profile Syria, 2006, disponibil la http://gis.emro.who.int/HealthSystemObservatory/PDF/Syria/Full%20Profile.pdf
3. European Observatory of Health Care Systems. Health care systems in transition, Romania, 2008, disponibilă la: http://www.euro.who.int/document/e71423.pdf
4. WHOSIS disponibil la http://www.who.int/whosis/en/
5. OMS. World Health Statistics 2009, disponibil la http://www.who.int/whosis/whostat/EN_WHS09_Full.pdf
6. OMS. World Health Statistics 2008, disponibil la http://www.who.int/whosis/whostat/EN_WHS08_Full.pdf
7. OMS. World Health Statistics 2007, disponibil la http://www.who.int/whosis/whostat2007.pdf
8. OMS. Death and DALY estimates by cause, 2002, disponibil la http://www.who.int/entity/healthinfo/statistics/bodgbddeathdalyestimates.xls
9. www.insse.ro
10. www.ms.ro
11. http://www.moh.gov.sy/en/