The analysis of the Romanian public health system. Case study: The importance of education in preventing cancer

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Abstract: *Healthcare marketing is one of the modern tools that can analyse and provide medical information, as well as information on public health systems. The public health system must take into account the trends of the modern world, it needs to adapt and improve its policies and strategies, in order to meet the targeted market requirements. Statistics reveal the reality on the Romanian public health system and its main problems, compared with countries from the European Union. Taking into consideration the importance of health education, many diseases can be detected in early stages, when treatments have visible effects.*

Key-words: *public health system, education, cancer, mortality rates, healthcare*

1. Introduction

One of the first definitions of social marketing belongs to Philip Kotler and Gerald Zaltman, in 1971. They believed that "social marketing is the design, implementation and control of marketing programs concerning acceptance of social ideas".

Therefore, social marketing represents the planning, organization, implementation and control strategies and marketing activities of non-profit organizations, which are addressed directly or indirectly to solving social problems. It is used by social organizations (schools, colleges, universities, hospitals, religious organizations, sports clubs, charities or the protection of certain categories of people, animals etc.), which have provided and adapted concepts, tools and marketing techniques successfully used by companies (Neiger, 2003).

Considering the mentioned aspects, according to Brătucu et al (2013, p.12), it appears that social marketing is based on three important features:

    1. The targeted public
    2. The behaviour that is desired to be induced
    3. The strategy that helps changing behaviour.

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In the social field, there is talk about social marketing, which considers changing the behaviour of individuals for their own good and protection. Social marketing purposes, behaviour change respectively, are the differentiation key from other social initiatives. The aim of the latter is to raise awareness of a cause or a brand, fundraise or raise good intentions among lobbyists.

Brătucu and Ispas (1998), both considered that healthcare marketing aimed at both the healthy and the sick individual, which implicitly involves the use of differentiated strategies, but also sometimes causes the emergence of anti-marketing strategies. The toughest strategies related to the prevention of serious diseases, almost incurable until now, like cancer and AIDS, where strategies focused on maintaining and preserving health.

There is a link between social marketing and public health. Public health helps develop methods of healthcare marketing research and advises the public on matters of health, and social marketing helps to identify areas where the implementation could be conducted successfully.

The development of health marketing programs always starts from identifying a problem in the target population and, in order to respond better to this problem, it is necessary to identify barriers regarding the behaviour change of the targeted individuals. Part of the program's success depends on the consumer's ability to apply what they learn; therefore, their education is essential, developing the skills they need in order to change behaviour, but it is also essential for the subsequent maintenance of change.

Specialists in healthcare are constantly working to develop curricula, to build healthcare systems, to support nonprofit organizations that have a mission related to human health (from prevention to treatment) and, not least, to interpret the research in the areas covered above (Glanz and Primer, 2008, pp.4-5).

2. Objectives and methods used for the study

The specific objectives are: to present the current levl of knowledge in healthcare; to highlight the importance of quality in the Romanian health system; to analyse available health statistics in Romania and in the European Union; to highlight the importance of health education for the whole society; to present general information on cancer statistics in Romania, especially taking into account breast cancer.

The analysis has been performed using a set of data collection methods. Research methods and tools were: the consultation of conceptual and methodological issues in bibliographical sources, a study on the health system in Romania and a presentation of the statistics on cancer in Romania and the European Union.

3. The current state of the health care field in Romania and the European Union

To condition the decrease in the number of chronic diseases deaths, and not only, it is absolutely necessary to change the individual's health behaviour. This may have consequences for both the individual and the society to which he/ she belongs. The same reasoning should be applied in cancer, which is a widespread disease of our century and which can be avoided only by regular medical checks.

The concept of health culture is part of the general culture and includes a number of components represented by: knowledge, opinions, interests, attitudes; skills, habits, behaviour and consciousness; habits and traditions; prejudices and superstitions, concepts and practices of public health. Enăchescu and Marcu (1998, p.5) have shown that health education is a way to improve the quality of life, being at the same time an alternative to population health which is provided for the adoption of a certain type of behaviour that influences lifestyle and therefore, improves health.

Due to the increasingly rapid population growth, health problems have diversified in recent decades. The medical services market in Romania and around the world is constantly changing due to the development of technologies that help prevent and cure various diseases and, as Berkowitz (2011, pp.31-33) shows, it is always ready to anticipate problems and behaviours.

Kotler and Lee (2007) have shown that generally, communication strategies used in health services have appealed to social marketing campaigns and raised public awareness on the effects of various vices, behaviours and lifestyles (most often negative), but also to campaigns for the adoption of new behaviours by changing the existing ones. This is possible through sports, concern for diet, reduced exposure to stress, sun and pollution. Consumers' participation to achieve some services determines them to feel a greater responsibility for the quality of the services received, and more easily accept the gap between the expected service and the perceived one (Douglas, 2016, pp. 195-196). The relationship between the consumer of medical services and the provider of such services should be one based on trust and professionalism, and a collaboration between the two must result in order to get the best result under certain conditions of time and space.

Studies conducted in Romania on the perception of the public health system (Georgescu et al, 2015, pp. 4-6) have showed that population confidence is very low. This is due to the impression created and the political implications which are more noticeable compared to the changes that may be reflected in a better state of the population's health.

Therefore, the most accessed media spreading messages about health are: radio, TV and online sources like websites, blogs and social networks. The population is not actively involved in this area, and those who are turn to volunteering. This problem apparently comes from the lack of information and civic education.
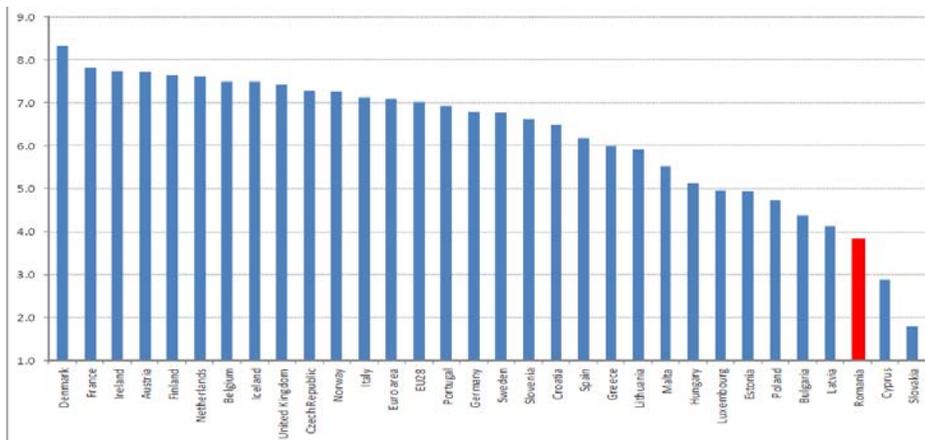
Fig.1. *Public health expenditure made by Romania, viewed as a percentage of GDP averaged over the period 2006-2014*

Source: *http://cursdeguvernare.ro/cheltuielile-publice-ale-romaniei-si-eficienta-lor-in-ultimii-10-ani-structura-si-domeniile-deficitare.html*

Figure 1 shows the average public health expenditure made between 2006-2014. It is calculated as a percentage of GDP and is below 4%. Only Cyprus and Slovenia feature lower expenses. The top position is Denmark, which recorded a rate of over 8% of GDP. This is not visible in the work of the Ministry of Health, if we look for example on the average healthcare expenditure in the EU, which is growing, and the average expenditure in Romania, which has been declining in recent years.
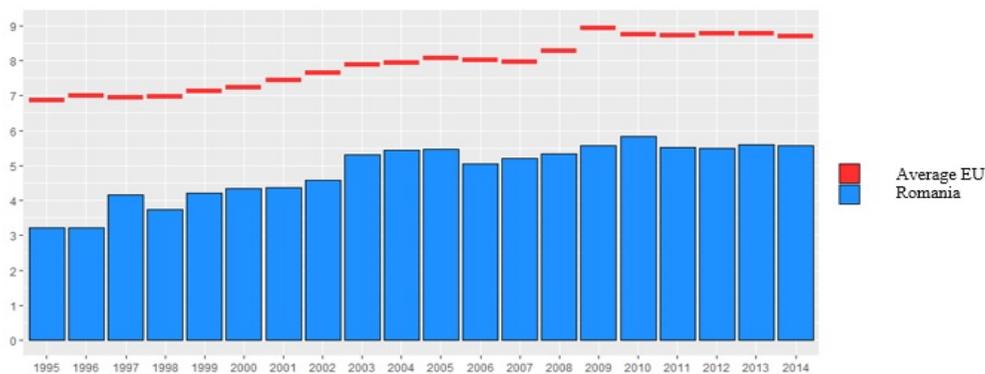

Fig.2. *Public expenditure on health calculated as% of GDP in Romania between 1995 and 2014*

Source: *http://www.openpolitics.ro/subiect/alegeri-2016/sanatate-2/*

Figure 2 presents the difference between the average expenditure of the 28- EU states and the public expenditure of Romania. Legislative influences were also felt on the evolution of public spending on health as a percentage of GDP; even if in the medium and long term there is a growing trend of evolution rates, the gap to the EU is significant for Romania.

The problems of the Romanian public health system may have as a cause the lack of political stability and the continuing changes produced in the Romanian politics since 1989. The system is covered by public health problems and gaps such as: medical staff, medical equipment, funds etc.), while the private health system has gained ground in recent years in terms of quality and lack of corruption. The main issue of the public health system that Romania has faced in recent years has been Government Decision no. 345/2011, which involved the closure of a number of 67 hospitals in the country. This decision was followed by the decision approving the National Beds Plan for 2014-2016. In Romania of 2014, there were 6.7 beds per 1000 inhabitants according to the data present in the Statistical Yearbook of 2014.
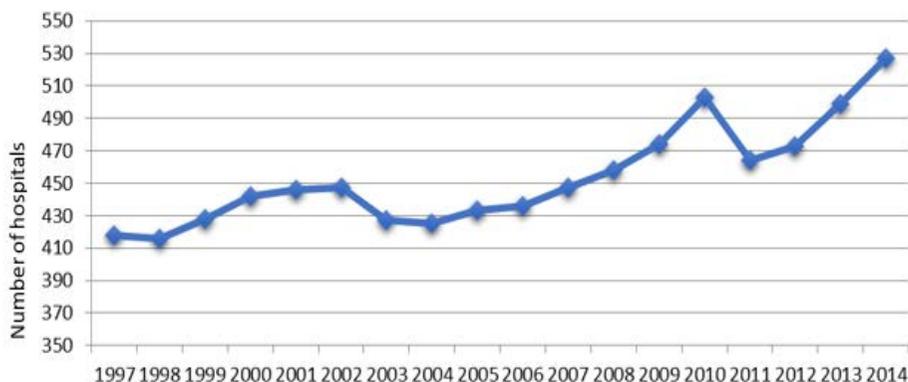

Fig. 3. *The evolution of the number of hospitals in Romania between 1997 and 2014*

As shown in Figure 3, the number of hospitals in Romania increased continuously from 1997 to 2010. This increase was followed by a decrease in the number of hospitals in 2011. The strategy published by the Ministry of Health, valid for the period 2017-2020, is focuses on projecting actions to gradually reduce hospital beds and develop community aid and family medicine. This was proven by developed countries, which aimed at lowering costs and facilitating access to health services.

A European Commission study from 2013 revealed that 73% of the Romanians believe that health services were of poor quality, while the average of those dissatisfied with the quality of medical services in the European Union was 27%. The study was conducted on 27 919 individuals at the level of 28 EU member states, and 1013 people in Romania. The same study shows that, in the Romanian respondents' opinion, the three most important criteria that define a quality medical

service are: healthcare providers need to be well prepared, effectiveness of the treatment received and respect for patient dignity.

Statistics on causes of death, which is among the oldest medical statistics available, provide information on developments over time and differences in causes of death in the Member States of the European Union. The latest information estimated for the EU-28 on the causes of death are available for the reference period 2013. Statistics show that circulatory diseases and cancer (malignant neoplasms) were by far the leading cause of death in the EU.

These statistics play an essential role in the system of general information on health in the European Union. They can be used to determine the preventive and curative health measures or investments in the areas of research that could lead to the population's increased life expectancy.
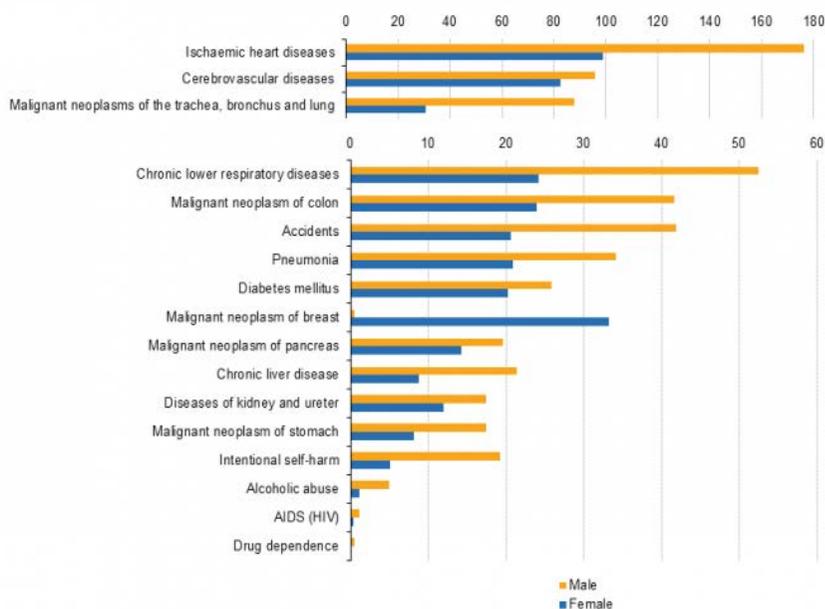
(') The figure is ranked on the average of male and female. Note the difference in the scales employed between the two parts of the figure. For the age standardisation, among older
Source: Eurostat (online data code: hlth_cd_asdr2)

Fig.4. *Causes of death - standardized death rate (Per 100,000 inhabitants), EU-28, 2013*
Source: *European   Commission: http://ec.europa.eu/eurostat/statistics-explained/index.php/*
      File:Causes_of_death_%E2%80%94_standardised_death_rate,_EU-
      28,_2013_(per_100_000_inhabitants)_V2.png

Figure 4 clearly shows that for women, the most common cause of death is malignant breast neoplasm. Since there is no overall comprehensive European morbidity statistics, the data on causes of death are often used as a tool for

evaluating health systems in the EU and can be also used for evidence-based health policy.

4. The description of the analysed issue – statistical data in Romania

Cancer is a major worldwide public health problem, and there are considerable variations in incidence, mortality, survival, environmental determinants, joint programs of prevention, detection, treatment, palliative care. The goal of the awareness-raising actions carried out by the public or the private sector is to detect cancer through population screening programs in the early stages, precancerous stages, which are curable by means of specific treatments. These methods could reduce cancer mortality, provided they are part of a comprehensive strategy, including effective surveillance and treatment procedures.

Over 78,000 new cases of cancer occur annually in Romania and 50,000 people die from oncological diseases. The data are listed in the latest report by the International Agency for Research on Cancer - Globocan 2012, and reveal that lung cancer is the most common type of cancer in Romania, followed by colorectal, breast, prostate and cervical cancer (Figure 5).
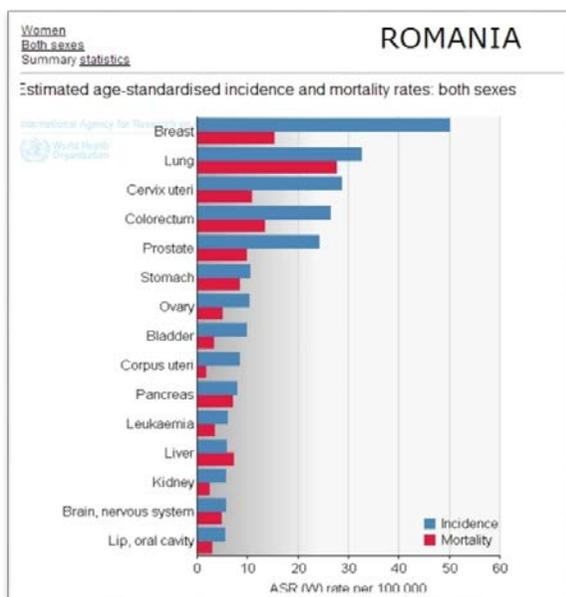

Fig. 5. *The incidence of mortality cancers in Romania*
Source: *International Agency for Research on Cancer – GLOBOCAN – 2012*
http://globocan.iarc.fr/Pages/fact_sheets_population.aspx

Annually, in Romania over 9,000 women are diagnosed with breast cancer, most of them are detected in an advanced stage when treatment options are minimal. Breast cancer is Romania's oncological disease with most victims among women. Romania is completely missing a prevention and screening program and it is the last country in Europe to finance national programs for cancer. In Romania, cancer is discovered in advanced stages, which increases treatment costs and shortens life.

In conclusion, we can say that the most important resource available to detect breast cancer is mammography. This is a process that must be done by every woman, once a year after the age of 35 years.
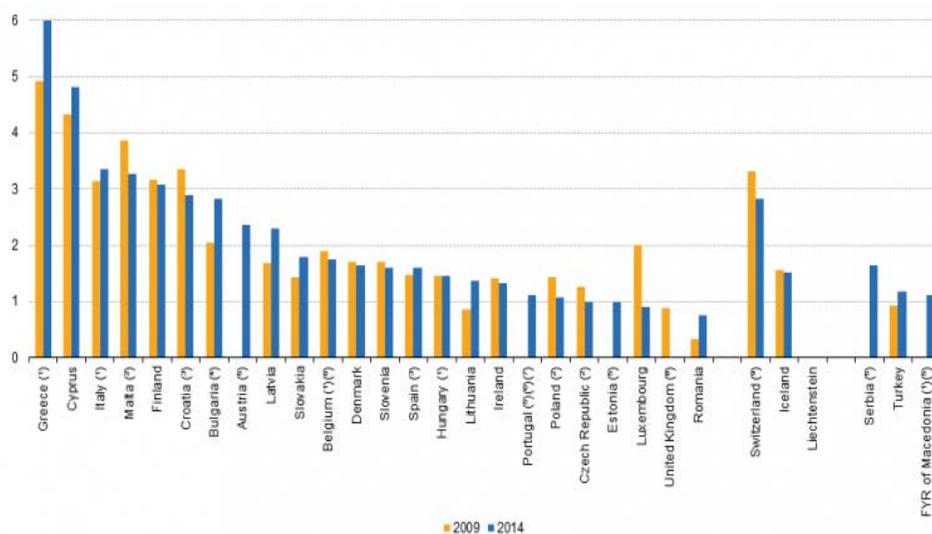
Note: Germany, France, the Netherlands and Sweden: not available.
(¹) 2013 instead of 2014.
(²) Break in series.
(³) 2010 instead of 2009.
(⁴) 2011 instead of 2009.
(⁵) 2009: not available.
(⁶) Hospitals only.
(⁷) 2014: estimate.
(⁸) 2014: not available.
(⁹) 2009: estimate.

Fig. 6. *The number of mammograms performed per 100, 000 inhabitants, 2009 and 2014*
Source: *European   Commission: http://ec.europa.eu/eurostat/statistics-explained/index.php/*
    File:Mammography_units,_2009_and_2014_(per_100_000_inhabitants).png

Figure 6 shows the situation of the number of mammograms performed in the European Union, including Romania. Romania has the lowest number of mammograms performed.

Breast cancer is the most common type of cancer in women, accounting for 25.2% of all cancer cases. Despite the high incidence, the mortality rate of breast

cancer is one of the lowest compared with other types of cancer. Detected in early stages, breast cancer can be treated. However, Romania recorded a mortality rate higher than the European average (29%) and even than the worldwide average (31%), meaning a percentage of 36%.

5. Conclusions

Health education is a way to improve quality of life, being at the same time, an alternative to the population health provided for the adoption of a certain type of behaviour that influence lifestyle and therefore, improves health.

The fundamental element of health education is communication, in which the cognitive, motivational and formative side plays an important role. It is considered often the key-element of health promotion and the most visible and supportive environment for transmitting information of a medical nature.

Using the data presented above, it can be concluded that Romania proves to be in need of development, and in need of education. In health, these two needs can be accessed through the more aggressive promotion of the existing health programs, by promoting the prevention of diseases such as cancer, by developing curricula for health education, especially by encouraging people to use all the means and modern techniques for detection in the early stages of diseases where the treatments are available and effective.

References

Berkowitz, E., 2011. *Essentials of Health Care Marketing*, 3rd ed. Sudbury: Jones & Bartlett Learning.

Brătucu, G., Enache, I., Pralea, A., 2013. *Marketing social-politic*. Braşov: Editura Universităţii Transilvania din Braşov.

Brătucu, G. and Ispas, A., 1998. *Introducere în marketingul social*. Braşov: Editura Infomarket.

The Chamber of Deputies, available at:
http://www.cdep.ro/pls/legis/legis_pck.htp_act?ida=102702

European Commission, 2014. Eurobarometru Siguranţa Pacienţilor si Calitatea Serviciilor, available at:
http://ec.europa.eu/health/patient_safety/docs/ebs_411_factsheet_ro_en.pdf

Eurostat statistics, available at:
http://ec.europa.eu/eurostat/statistics-explained/index.php/Unmet_health_care_needs_statistics (consultat la data de 07.03. 2017)

Donovan, R. and Henley, N., 2010. *Principles and Practice of Social Marketing. An International Perspective*. Cambridge University Press.

Douglas, E., 2016. *Social Marketing Research for Global Public Health: Methods and Technologies*. Oxford University Press.

Enăchescu, D. and Marcu, M., 1998*. Sănătate publică şi management sanitar*. Bucureşti: Editura All.

Georgescu, D. et al., 2015. Assesment of public perception about public health policies, Public Health and Management. *Acta Medica Transilvanica*, vol. 20, nr. 3, pp. 4-6.

Glanz, K., Primer B., 2008. *Health behavior and health education: Theory, Research and practice*. San Francisco: Jossey-Bass.

National Institute of Statistics, 2016, available at: http://www.insse.ro/cms/files/Anuar%20arhive/serii%20de%20date/2014/Anuar%20statistic%20al%20Romaniei%202014.pdf

Kotler, P. and Lee, N., 2007. *Marketing in the Public Sector. A Roadmap for Improved Performance*. New Jersey: Pearson Education Inc.

Kotler, Ph., Zaltman, G., 1971. *S*ocial Marketing: an Approach to Planned Social Change. *Journal of Marketing*, vol.35, no.3, pp.3-12.

Neiger, B. et al, 2003. Positioning Social Marketing as a Planning Process for Health Education". *American Journal of Health Studies*, **18** (2/3), pp.75–81.

Şerban, C., an. Planificarea activităţilor de marketing în cadrul organizaţiilor nonprofit: Proiectarea unui program de marketing social în mediul online, *Revista de marketing* Vol.5, Nr.3, online. Available at : http://www.edumark.ase.ro/RePEc/rmko/53/3.pdf

Văidean, V., 2015*. Factori determinanţi ai stării de sănătate a populaţiei. Evidenţe empirice*. Colecţia Cercetare avansată postdoctorală în ştiinţe economice. Bucureşti: Editura ASE.

http://cursdeguvernare.ro/cheltuielile-publice-ale-romaniei-si-eficienta-lor-in-ultimii-10-ani-structura-si-domeniile-deficitare.html [Accessed March 2017]

http://www.openpolitics.ro/subiect/alegeri-2016/sanatate-2/ [Accessed February 2017]