



# Social Knowledge in Public Health: Case Study on Substantiating and Instrumenting the Social Marketing Campaigns in Romania

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## Abstract

Social marketing influences in a relevant manner the process of producing and disseminating social knowledge, thus asserting attitudes and approaches according to various objectives of social evolution.

The field literature reveals the fact that for the area of public health, the studies on social marketing are based both on improvement of specific social knowledge and strategic approaches for knowledge transfer towards the beneficiaries of public health policies, transfer designed to have impact on change of attitude and enhancement of social knowledge level.

The current chapter presents a case study concerning the social marketing campaign in the area of public health, “NO to randomly taken antibiotics”, in Romania, aimed to promote adequate antibiotic use by informing the doctors and nonspecialized public concerning their risk of excessive and wrong use.

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### Learning Objectives

This chapter analyses the social marketing campaign in the public health area “NO to randomly taken antibiotics”, developed by the Ministry of Health in Romania.

The study has the following objectives:

- Conceiving and developing a framework of analysis for the social marketing campaign in the public health area, substantiated on the importance, role and assertion of social knowledge, concerning the treatment with antibiotics of the Romanian citizens
- Identifying the types of strategies used in the implementation and delivery of the campaign in view of reaching its objectives, highlighting the marketing mix and the type of informational approach
- Presenting the campaign impact on the improvement of citizens’ health, change of behaviour and attitude concerning the Romanians’ treatment with antibiotics for simple diseases, by means of presenting the results of a questionnaire applied to citizens from Bucharest.

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## Introduction

Although there is no clear definition, at general level, social knowledge represents the body of collective knowledge produced by a community. The process of creating social knowledge involves the different participation of several actors, institutions and individuals. Thus, social knowledge becomes the outcome of the relationships and connections between the community members. Social behaviour definitely depends on the level of social knowledge in a certain community.

Girard and Girard (2011: XV) provide relevant theoretical frameworks “for improving the understanding of the scientific role of social knowledge in business, government, or non-profit sectors”.

The theoretical frameworks based on researchers’ outcomes and practitioners’ best practices reveal the diversity and scientific importance of social knowledge, conceived for using social media in order “to create, transfer, and preserve organizational knowledge—past, present, and future—with a view to achieving the organizational vision” (Girard and Girard 2011: XIV).

The typology of knowledge as “different ways of knowing about a social issue” embodies (Bryant 2002):

- *Instrumental* or expert knowledge—usually created by “experts”. It is perceived to be, like its creators, objective and systematically developed through “scientific”—usually quantitative—research methods.

- *Interactive* or lay knowledge—develops from lived experience and is exchanged among people in their daily lives.
- *Critical knowledge*, which is reflective knowledge. This knowledge considers the role of social structures and power relations in reinforcing inequalities and disempowering people. Critical knowledge considers questions of right and wrong, analyses existing social conditions and outlines what can be done to alter social conditions to improve quality of life.

Linking instrumental, interactive and critical knowledge can root policy ideas in the community within which health promotion programmes and public health policy are ultimately applied. The solicitation and use of interactive and critical knowledge are consistent with the principles of health promotion and democracy (Bryant 2002).

Narrowing the debate to the health area, it is necessary to start with Solar and Irwin's statement (2010: 4) that "complexity defines health".

In this context, the series *Debates, Policy and Practice, Case Studies* of the World Health Organization (WHO) describes the so-called social determinants of health, health being understood as a social phenomenon requiring multiple complex action forms and inter-sectoral policies.

Social knowledge will represent their support and reason, being continuously associated with learning, innovation or collaborative socialization of knowledge.

## Social Marketing as Instrument of Social Knowledge

The field literature debates about "social production of health and disease", highlighting three important theoretical approaches:

- Psychosocial approaches
- Social productions of disease/political economy of health
- Eco-social frameworks (Solar and Irwin 2010: 4)

Social marketing in the health area belongs to the third approach.

Social marketing, the use of marketing to design and implement programmes to promote socially beneficial behavioural change, has grown in popularity and usage within the public health community (Grier and Bryant 2005).

Social marketing recognizes that what people know, and even people's attitudes, do not always impact their actual behaviour.

It seeks to understand people's motivations and needs, as well as to gain a better understanding of how the environments in which their actions take place influence behaviours (ECDC 2014: 5). Knowledge represents a factor influencing their behaviour.

The objectives of social marketing as instrument of social knowledge in the health area are described, even indirectly, by the WHO (1998). In this context, public health activities should:

- Enable individuals and communities to gain more power over the personal, socioeconomic and environmental factors that affect their health
- Involve those who are concerned about an issue in all stages of project planning, implementation and evaluation
- Be guided by a concern for equity and social justice

Achieving such goals will require collaboration between experts and community members, specifically by drawing upon community members' knowledge about their health and well-being. This knowledge should be complemented with critical analysis of how social and political structures affect health. It is also important to make explicit the various forces that influence whether different forms of knowledge are allowed to contribute to the policy development process or not (Bryant 2002).

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## Case Development

During 2012–2015, according to the statistics of the European Centre for Disease Prevention and Control, Romania was the second country in Europe (after Greece) concerning antibiotic consumption per 1000 inhabitants. In the hospitals participating in the data collection, the prescription of antibiotics seems exaggerated and/or wrong, while the measures for preventing the infections associated with medical assistance are insufficient/inefficient (CNEPSS 2017). According to the Romanian Health Observatory (2017), Romania is the EU Member State with the highest weight of antibiotic use without medical prescription. The evidence reveals a high level of resistance to antibiotics in Romania.

High European officials, such as the Director of the European Centre for Disease Prevention and Control, Dr. Marc Sprenger, have drawn attention since 2014 that Romania belongs to “the red area”, and the solutions depend to a large extent on the “political will”.<sup>1</sup>

The CARMIN study (2015) and the Romanian Health Observatory (2017) consider the following causes for the above situation:

- Insufficient information and/or wrong mentality of the population concerning the role, benefits and risks of antibiotics; guides for antibiotic therapy are not suitable or are ignored.
- Excessive and unjustified use of antibiotics, through excessive prescriptions, both in hospital and ambulatory, either at the patient's request or by doctors.
- Facile accessibility to antibiotics, without complying with the regulations.
- Collaboration of pharmaceutical companies with opinion leaders in view to disseminate messages favouring the excessive use of antibiotics.
- Low number of specialist doctors dedicated to solving the problem.

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<sup>1</sup>Interview in Medical Life, 21 November 2014. [http://www.viata-medicala.ro/Romania-are-unul-dincele-mai-mari-consumuri-de-antibiotice.html\\*articleID\\_9392-dArt.html](http://www.viata-medicala.ro/Romania-are-unul-dincele-mai-mari-consumuri-de-antibiotice.html*articleID_9392-dArt.html)

The statistics of the Ministry of Health in Romania indicate that more than half of the antibiotics sold are given on uncompensated prescription or even without prescription; half of this consumption is not justified, from the medical point of view. The Ministry of Health considers that the excessive consumption is generated by patients, distributors and doctors.

In view to support the above-mentioned issues, concerning the citizens' and doctors' behaviour, the Minister of Health in 2016 (Vlad Voiculescu), in a press conference, asserted: "On the one hand, the patients and their families ask the doctors or chemists to prescribe or release antibiotics without medical prescription. On the other hand, the prescribers recommend useless antibiotics for several reasons: lack of updated medical information, either at the patient's or his family's pressure, persuasion of pharmaceutical companies. (. . .)The above are confirmed by doctors and chemists".

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## Methodology

*Research Design* In order to achieve our research objectives, within the study, we used exploratory research. It was performed by means of an exploratory inquiry among the consumers of antibiotics, in the form of a questionnaire, and by analysing the social marketing campaign run in Romania, proving that this high consumption of antibiotics in our country is also the product of social knowledge.

## Analysis of the Social Inquiry

*Defining the Sample* We used the non-probabilistic sampling technique, more precisely, convenience sampling. The questionnaire was applied to citizens in Bucharest, capital of Romania, 18 to 80 years of age (the City of Bucharest, in year 2018, according to the National Statistics Institute, had a population of 2,104,967 inhabitants).

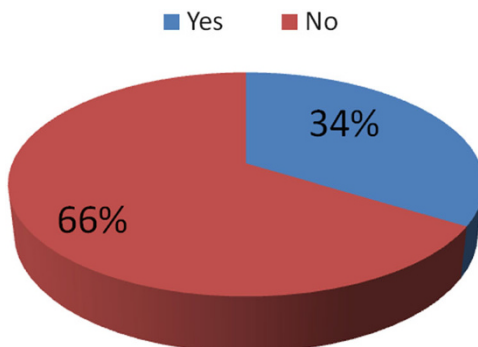
*Data Collection* The questionnaire initially identified the sex and age of respondents. It comprised seven questions designed to determine the respondents' perception concerning the antibiotic consumption, aiming to identify the citizens' behaviour related to the consumption of drugs and the impact of the campaign developed by the Ministry of Health.

Data collection took place during the period 25 January–28 February 2018. All 235 online questionnaires were valid.

*Results* 73.8% of the respondents are female, and 26.2% are male. Concerning the age, 59.4% of the respondents are 18–30 years of age, 21.8% are 31–40 years of age, 13.7% are 41–50 years of age and 5.1% are over 51 years old.

Concerning the question "Have you consumed antibiotics in the last 5 years?", the responses were as follows: 65% of the respondents had consumed based on clear

**Fig. 1** Have you heard about the campaign of the authorities: “NO to randomly taken antibiotics”? Source: Authors, based on data obtained from the questionnaire



indications of a doctor, 24.8% without clear indications from a doctor and 10.3% did not consume.

At the same time, regarding the question “Have you consumed antibiotics without a doctor’s prescription in the last year?”, there were 23.5% affirmative answers. For the question “When you are sick, which is the first action that you do?”, 20.9% of the respondents mentioned that they were taking the same treatment as the previous time, without seeing a doctor, 12.8% respondents were doing nothing, 5.1% were seeking the advice of a friend/parent, while 26.5% were asking the support of a chemist and only 34.6% were paying a visit to the doctor.

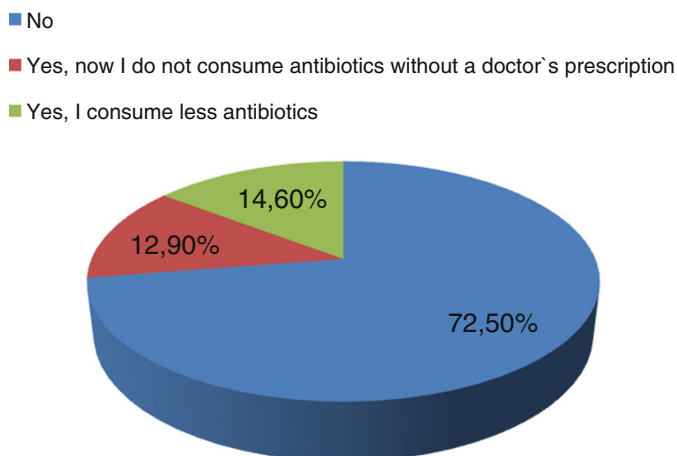
Concerning the question “Do you have antibiotics at home for the time being? (just in case)”, 52.8% responded affirmative.

Taking into consideration the above answers, we notice that only a small part of the respondents have a doctor’s advice-centred behaviour, the others were taking treatment with antibiotics by themselves, sometimes prudently.

We shall analyse the questions related to the impact of the social marketing campaign “NO to randomly taken antibiotics!” from our questionnaire. For the question “Would you listen/follow the advice of a social campaign to consume antibiotics only based on a specialist doctor’s recommendation?”, 78.5% responded affirmative. For the question “Have you heard about the campaign of the authorities: “NO to randomly taken antibiotics”?”, 66.2% of the respondents provided negative responses (see Fig. 1), while for the question related to the influence of that campaign on their behaviour, 72.5% provided negative responses, 12.9% affirmative responses, only with the doctor’s recommendation, and 14.6% mentioned that they were going to consume less antibiotics (see Fig. 2).

## Analysis of the “NO to Randomly Taken Antibiotics” Campaign

On 18 November 2016, the Ministry of Health launched the awareness campaign on the risk of useless antibiotic consumption, *NO to randomly taken antibiotics*, drawing attention to the fact that Romania is on the top of the European ranking



**Fig. 2** Has the “NO to randomly taken antibiotics” campaign influenced your behaviour? Source: Authors, based on data obtained from the questionnaire

concerning antibiotic consumption (above 90% of antibiotic consumption takes place outside the hospital, for infections treated at home).

The campaign “NO to randomly taken antibiotics” has aimed to increase the awareness on the adequate use of antibiotics by informing the doctor and public on the risk represented by inadequate and abusive use.

The campaign took place in the period 18 November–31 December 2016.

In the framework of the campaign “NO to random taken antibiotics!”, several informational, educational and support materials were made (video spots, posters, flyers) for diverse target groups—patients, family doctors, specialist doctors in hospitals and drug producers, i.e. a combination of “types” and “forms” of customized interventions for each target segment. There are sets of instruments and messages for doctors in view to promote the adequate and responsible antibiotic use, as well as for informing the patients on the risks of resistance to antibiotics.

Analysing the materials of the campaign “NO to randomly taken antibiotics!”, we notice that it has been based on knowledge development, information to enable behaviour change and to develop a new behaviour. The campaign addressed a target group with problematic behaviour, as well as the target group with positive behaviour, which should be encouraged and supported.

The strategy of the campaign “NO to randomly taken antibiotics!” was an induction one: the attitudes are positive, but socially desirable behaviour does not carry them out. The objective of the strategy is to try to induce the accomplishment of that behaviour (Santemas 1999). Its actions aimed at education and information, in view to discourage the target group from recommending or taking treatment with antibiotics in useless cases.

In order to reduce the number of the people practicing self-medication, not as direct result of the campaign, the public authorities in Romania carry out controls in

pharmacies to check the selling system of antibiotics (based only on prescription) and “punish” the pharmacies for releasing antibiotics without prescription.

The campaign uses the four Ps (Kotler et al. 2002): product, price, place and promotion. These key elements of social marketing are central to the planning and implementation of an integrated marketing strategy (Grier and Bryant 2005: 6.4).

*The product*, in social marketing, refers to the set of benefits associated with the desired behaviour or service use. In the field literature, there is a distinction between the main product (what the people obtain when adopting the behaviour, etc.) and the genuine product (desired behaviour) (Kotler et al. 2002). In the framework of the campaign “NO to randomly taken antibiotics!”, the products are intangible—knowledge and information.

*The price* is represented by the cost of getting information in view to acquire knowledge to adopt the adequate behaviour related to behaviour change. The cost comprises intangible prices. It could be psychological (psychical discomfort associated with behavioural change, fear concerning the safety of treatment and healing) and social (risk to be perceived differently in the age group).

*The place* includes the location for developing the campaign but also includes intermediaries—organizations and people—who could provide information enabling the change process. The campaign “NO to randomly taken antibiotics!” has been developed in the places of interest visited usually for medical purpose, namely, the cabinets of family doctors, hospitals and channels of distribution such as television, press and website of the ministry.

*The promotional* activities of the campaign “NO to randomly taken antibiotics!” include advertisement on television channels, website, Facebook, printed materials and special events.


The following promotional materials and activities of the campaign “NO to randomly taken antibiotics!” were designed in view to facilitate the adoption of the desired behaviour:

- Broadcasting a TVspot, produced under the coordination of the Ministry of Health.
- Distributing boxes with pseudo-drugs, printed with the label “NO to randomly taken antibiotics!” and flyers. 12,000 boxes were distributed to family doctors, 13,000 boxes to doctors in hospitals and 25,000 boxes to patients, associations of students of the faculties of medicine and pharmacy.
- 10,000 posters were displayed in hospitals.
- Organization of the *European Antibiotic Awareness Day* on 18 November 2016, on the topic “Developing multidrug resistance to bacteria—severe threat for patients’ safety and life”, with the motto: “Red code for antibiotics: public information, careful prescription, rigorous hygiene in hospitals”.

The European Centre for Disease Prevention and Control (ECDC) promotes and supports the prudent antibiotic use. Since 2008, ECDC coordinates the organization of the European Antibiotic Awareness Day, an initiative for public health, aimed to provide a platform and support for the national campaigns in this field. ECDC



**Table 1** Trends in the consumption of antibiotics for systemic use in Romania, 2012–2016 (expressed as daily dose defined per 1000 inhabitants per day)

Country	2012	2013	2014	2015	2016	Trends in antimicrobial consumption, 2012–2016	Average annual change 2012–2016
Romania	30.4	31.6	31.2	33.3	29.5		0.00

Source: European Centre for Disease Prevention and Control, Summary of the latest data on antibiotic consumption in the European Union, ESAC-Net surveillance data, November 2017, p. 5

provides a series of materials and instruments of communication (video, posters, patients' stories, info graphics, key messages, etc.) in view to develop national campaigns concerning the danger represented by resistance to antibiotics for the public health.

The campaign has developed an integrated social marketing strategy, based on the four P in view to influence the target group behaviour.

The campaign used the informational approach (focused, above all, on persuasive information) (Santesmases 1999).

Based on the available information, it is quite burdensome to evaluate the efficiency of the analysed social marketing initiative. It has been also hard to identify the pertinent information, and we consider that the effects are rather "external" (self-reporting by respondents). Concluding, we dare to assert that the social marketing campaign had a positive impact.

In 2016, the statistics of the European Centre for Disease Prevention and Control ranked Romania the fourth country in Europe (after Greece, Cyprus and France), on a lower position compared to year 2015, concerning the antibiotic consumption per 1000 inhabitants, but the trend is to decrease the consumption. The evolution of the consumption of systemic use antibiotics in Romania in the period 2012–2016 (expressed as a daily dose defined per 1000 inhabitants, per day) can be seen in Table 1.

## Conclusions

The social marketing campaign "NO to random taken antibiotics!" has focused both on the target group behaviour (individual behaviour) and on understanding the warning from the messages and the social and environmental causes.

For the time being, in Romania, the antibiotic use continues to be excessive. A major role is played by target group awareness and education on antibiotic consumption, counteracting causes such as insufficient information and/or wrong mentality of general population concerning the role, benefits and risks of antibiotics; excessive prescriptions both in hospitals and ambulatory; still easy accessibility to antibiotics; and infringement of the regulations for releasing them only based on prescriptions. The future measures refer to surveillance, control and illegal release of antibiotics in pharmacies (CNEPSS 2017).

For the future, in view to counteract the above-mentioned causes and to increase the impact of social marketing campaigns, the cooperation between various actors (public institutions/authorities, NGOs, companies) should be strengthened. At the same time, joint actions could have a greater impact.

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## Discussion Questions

1. Argue the role and importance of social knowledge in the impact of the results of the social marketing campaigns.
2. In the absence of solid proof of official assessment of the efficiency of the social marketing campaign “NO to randomly taken antibiotics!”, can we speak of a “real” positive impact on the population?
3. What other measures meant to counteract causes such as insufficient information/lack of knowledge of the population, regarding the role, benefits and risks of antibiotic administration and excessive prescription, would you recommend in order to rectify this critical situation in Romania? What improvements would you bring to the measures already taken by Romania?

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