Contemporary trends in the design and implementation of health information and education campaigns

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Abstract: Health information and education campaigns represent essential components of intervention strategies intending to address and solve various public health problems. Therefore, a constant preoccupation of both practitioners and researchers in the field was to determine the most effective ways to optimize campaigns' design and implementation. The results of these efforts materialized in adapting theoretical models from various connected fields: behavioral sciences, communication theory, and marketing. In the last decade, most health education campaigns implemented in Romania demonstrated multiple structural elements following contemporary design and implementation trends. Yet, there is not an organic integration of those new concepts and orientations at the strategic level and, in most campaigns; the emphasis is on the transmission of information while the formative is left in the background.

Keywords: information campaign, education for health, communication strategy

Introduction

Information campaigns can be defined as intentional attempts to inform or influence behaviors in broad segments of the public, over a defined period, using an organized set of communication activities and transmitting a series of messages through multiple channels for the general purpose of producing non-commercial benefits for individuals and society (Atkin & Rice, 2015). Given the contributions they make in support of the overall effort, health education and information campaigns are considered essential components of intervention measures to improve or address various public health problems and are also the subject of numerous analyzes aiming to determine the most effective ways to optimize their design and implementation, using various models derived from behavioral sciences, communication theory and marketing (Cheng, Kotler, & Lee, 2011) (Robinson, et al., 2014) (Quattrin, R.; Filiputti, E.; Brusaferro, S., 2015). Whether carried out exclusively in the clinical environment or as part of broader social marketing programs, the design of all campaigns includes several key elements: defining the addressed issue(s), formulating the purpose and objectives pursued, establishing the strategy for building and disseminating messages, for using various communication channels as well as the strategy for systematic monitoring and evaluation of activities and the impact of the campaign (Institute of Medicine, 2002) (Rice & Atkin, 2015).

Theoretical models for designing and carrying out health information and education campaigns

Because the general purpose of campaigns is usually to induce behavioral changes, the most commonly used theoretical models are those derived from behavioral sciences, as a systematic understanding of the determinants of behaviors and how these behaviors can be changed is essential. Theories in this category include, among others, the theory of motivated action, the theory of planned behavior, or the social-cognitive theory. These models provide information about the cognitive processes and social-environmental factors that influence behavior and behavior change. For example, planned behavior theory holds that the best predictor of behavior is the predicted behavioral intention of attitude, subjective norm, and behavioral control. For changing behaviors, a campaign can adopt various strategies but, in essence, seeks to change beliefs that can ultimately lead to the greatest change in health behavior (Ajzen, 1991).

The second category of theories comprises those from the communication sciences. They provide systematic models of communication processes and the effects involved in health communication campaigns. Within this broad category, several significant clusters can be identified. The elaboration likelihood model (Petty & Cacioppo, 1986), for example, is a widely used persuasion theory that addresses the different ways in which the audience

processes information when it receives campaign messages. The extended parallel process model (Witte, 1992) addresses a very specific problem of message design, namely how to adequately capitalize on fear as a source of motivation to generate changes in health behavior. Other theories, such as setting the agenda for communication (McCombs & Shaw, 1972), are useful in campaign efforts to mobilize public and political support by supporting the media.

In addition to behavioral and communication theories, psychological theories that provide benchmarks for audience segmentation and message formulation, ecological public health models, and sociological theories can clarify the supra-individual mechanisms of change, that a campaign can capitalize on. Regardless of its origin any theory that has the potential to increase the effectiveness of the campaign must be considered and investigated. Without theory and theory-driven research, health communication campaigns are likely to remain largely trial and error-based.

Setting the purpose and objectives

To establish the purpose and objectives of the campaigns it is necessary to identify the target audience. In general, although campaigns target large segments of the audience, they rarely target all categories without discrimination, focusing on those groups that are most likely to optimally receive the messages transmitted and adopt changes in attitude and behavior. For the selection of the target audience, two aspects are considered in particular: which are those categories most exposed to risks and, on the other hand, which are those categories that can resonate most effectively with the format and activities of the campaign (Atkin & Rice, 2015).

The goal of public health interventions is often, though not always, behavior change, and therefore campaign objectives are often a systematic understanding of how it is assumed that there will be a change in behavior(s) within the target population. Important sources of information on this front include relevant theory, the experience of previous interventions, and - probably most importantly - specific issues addressed in the campaign as well as audience analyses. Probability-based national and/or regional surveillance data are often useful in identifying important demographic and behavioral characteristics of the target population. To develop in-depth knowledge of potential ways to change behavior, additional research is often needed to assess the public's current knowledge, attitudes and beliefs, availability for change, communication preferences and habits, and the social and political relevance of the messages conveyed. The results of the research efforts are summarized to inform the objectives of the campaign, which can directly aim at changing the behavior or any of its antecedents in the conceptual framework of the campaign. The

objectives of the well-chosen campaign consider time, resource, and environmental constraints and will seek to maximize public health gains under these constraints.

Analyzing the way in which gender, education, and social status influence the perception and impact of messages from campaigns for a healthy lifestyle in Poland, Borowiec et al. concluded that women with higher education show a significantly positive attitude towards this type of message, at the opposite pole being the inhabitants of large cities, those with executive functions and intellectuals (Borowiec, Lignowska, & Drygas, 2012). The issue raised by this team of researchers is based on the credibility of the messages conveyed in this type of campaign and, on the other hand, the way in which they are appropriate for the various segments of the public (e.g., men and people with a low level of education).

Another study also conducted in Poland by Lignowska et al. draws attention to the need not to underestimate the importance of the mental predisposition of the audience, a predisposition that can determine a certain susceptibility to messages transmitted through the media (Lignowska, Borowiec, & Slonska, 2016). The study showed that a higher degree of individualism, a lower level of expectations, and a higher degree of confidence are all related to a positive attitude and a greater openness to accepting media messages.

Development of the message elaboration strategy

Campaign message delivery strategies fall into two broad categories: content strategies and execution strategies. Content strategies simply mean what informational content the campaign's messages should focus on. A critical step in developing content strategies is to identify the specific beliefs that matter for the targeted behavior change through the campaign. Often referred to as "target beliefs", these are ideas or notions that are strongly associated with the health behavior or behavioral intent in question. At the same time, it is also important that these beliefs still have room for change and are likely to build strong messages (Hornik & Woolf, 1999). Depending on the nature of the target beliefs/beliefs, a campaign may seek to promote, suppress, or change those beliefs, to affect the intent and/or behavioral change along the way.

A necessary condition, however, for the construction of such messages is to understand the mechanisms of perception and processing of campaign messages, regardless of the media and channels through which they are transmitted, and to estimate the effect that dissimilar categories of messages can have on individuals (Geiger and Newhagen, 1993; Nabi and Clark, 2008). This is more so as health campaign messages often compete with or even contradict social norms, mentalities, habits, behaviors, or (sometimes aggressive) marketing messages for certain products.

Depending on the content of the messages sent during the campaigns, informational messages (which appeal to cognition and logic) and transformational messages (which are meant to trigger emotional reactions from the public) can be identified (Kim and Yang, 2017), in most campaigns aiming at a balance between objective and emotional discourse, considering both the quality and position of the sender of the message and the specifics of the target audience. Informational messages, in turn, can be rational (those that provide details and objective, scientific information on the issue addressed), messages that appeal to the immediate needs of recipients in each situation or context, or can be "routine" messages (those that refer to facts, situations, repetitive and common issues). Messages developed from the perspective of a transformational strategy can be addressed to the individual and the way he perceives himself (ego), can refer to the need for approval and social integration of the individual, or can appeal to the senses (sight, hearing, smell, taste, or touch) to trigger emotions through them (Chaudhuri and Buck, 1995).

Addressing the issue of relevance, quality, and volume of information transmitted to the public in various campaigns, Fabrigar et al. (Fabrigar, Petty, Smith, & Crites Jr., 2006), have tried to determine the types of knowledge that, once assimilated, can lead to behavioral changes. The main conclusions he draws from this perspective show that information that directly refers to the types of desirable behaviors leads to attitudes that, in turn, lead to relevant and consistent behavioral changes. The less behavioral relevance the transmitted knowledge has, the more necessary it is to transmit information with a higher degree of complexity, and, on the contrary, the higher the degree of knowledge relevance, the more obvious the attitudes and behavioral changes are, regardless of the complexity of the information. A third conclusion is that the amount of information provided is often irrelevant to achieving attitudinal and behavioral changes.

Message dissemination strategies

Even the most carefully crafted messages of the campaign will be useless if they do not reach and do not involve the target audience. Campaign message delivery channels include various forms of media, interpersonal networks, community settings, and promotional events, among others. Traditionally, large-scale campaigns have relied on the media, especially television, as the main vehicle for disseminating messages. With the emergence and rapid development of social networks, campaigns have become increasingly creative and diverse with their channel strategies, hoping to capitalize on the vast potential of these new media platforms.

The results of a study by Wames et al. (Wammes, Oenema, & Brug, 2007) show that young Dutch people (who were the target group of a four-year media campaign to prevent obesity - 2002-2005) showed that among the communication channels used in it (radio spots, TV spots, printed materials,

website, call center), the most effective proved to be television and radio. Also, O'Hara et al. (O'Hara, et al., 2014) show that, as part of a campaign to promote health information and coaching service, people who received messages sent through the media signed up to a greater extent to use this service, compared to those who received information by other means (mail, text or audio messages, information brochures, etc.).

The way the exposure, timing, and duration of exposure of the public to the messages conveyed in the media campaigns, especially if we refer to the audiovisual media, can have a major influence on the achievement of the objectives set. Randolph and Viswanath (Randolph & Viswanath, 2004) analyzing twenty-eight media campaigns show that those whose messages were transmitted in the maximum audience intervals and for a sufficiently extended period recorded significantly better results, at least in terms of reception. messages by the target audience.

In an increasingly complex information environment, the dissemination of the campaign should aim at optimizing the exposure to the campaign messages, while maintaining the fidelity of the messages in the dissemination process. If in traditional campaigns the fidelity of messages was considered a less important issue, in the world of contemporary media information users are increasingly able to redefine the meaning of campaign messages through comments, re-posting, and sometimes parody (Zhao, 2020). Although public involvement is, in principle, a favorable outcome of the campaign and can work to amplify campaign coverage and influence, negative interpretation and "reprogramming" of messages by recipients can work against campaign goals and objectives. Careful planning, diligent monitoring, and quick adjustments are required to protect message fidelity and ensure public engagement, as the campaign intends.

Monitoring and evaluation strategies

While the previous three tasks often appear in order, monitoring is required throughout the campaign process. Monitoring usually falls into three categories: formative monitoring, process monitoring, and evaluation of results (Zhao, 2020). Formative monitoring includes efforts to understand the target issue and the audience and to help develop campaign messages. For this purpose, both qualitative and quantitative methods can be used to collect and analyze information and evidence. For example, preliminary messages can be pretested using focus groups, while final, raw messages can be further tested using controlled experiments.

The process evaluation documents the implementation of the campaign and evaluates the extent to which the campaign activities are carried out according to the initial design. The approach to the evaluation process varies widely and often includes analysis of campaign records and follow-up surveys. Regardless

of the methods, process evaluation generally aims to monitor campaign coverage, dosing, message fidelity, and, sometimes, audience involvement over time.

Evaluating results is a complex process, as the immediate and long-term effects of campaigns are often difficult to detect but the use of pre-tested models such as pre-post comparison and longitudinal design of cohorts can help to obtain relevant and valuable information (Hornik & Woolf, 1999). For an effective application, however, campaign evaluators need to know the strengths and weaknesses of these models.

From theory to practice

To analyze the ways of applying these strategies and models in practice, we considered the campaigns carried out by two non-governmental organizations, namely the Romanian Heart Foundation (FRI) and the Cardioscience Association, in the last ten years. As both organizations have both information and education campaigns aimed at the general public and initiatives targeting various categories of medical specialists, I specify that we considered only the initiatives in the first category.

In terms of their aims and objectives, each campaign was built taking into account the characteristics of the target audience. Thus, if "Act now. Save a Life "(FRI campaign) and" Your Heart, Your Health "(Cardioscience initiative) aim to educate the general public about the symptoms and signs of myocardial infarction and, respectively, the prevention of cardiovascular diseases, other approaches, such as" The impact of lifestyle change in adolescence "(Cardioscience), have a better-defined target audience. In both situations, however, it can be seen that the promoters define, implicitly or explicitly, secondary target groups. Most often, they include risk categories (defined by age, gender, or risk factors to which they are exposed or present). For example, in all these campaigns, special specifications are made for people over the age of 50, for women, for people who are obese, for those with a sedentary lifestyle, or who practice an unbalanced diet. Another type of secondary target group is that of family members (eg. parents with adolescent children) for whom they are educated in observing others and in identifying external signs of negative changes in health.

For the dissemination of messages, all the analyzed campaigns use a mix of channels that include in particular the prints (brochures, leaflets, posters, articles in the written press), the internet (web pages of the organizations with sections dedicated to each campaign or Facebook pages and on various other social networks), audio or video materials transmitted through audio-visual media or on the Internet. written as well as video or audio messages. The increasing use of the Internet and audiovisual media in campaigns in Romania is in line with

the general trend of modernizing public information and education campaigns, these channels ensuring greater coverage of the target audience, as well as a better reception of transmitted messages.

A general observation regarding the way of formulating the campaign messages, in correlation with the proposed objectives, is that in the messages a great emphasis is placed on informing the public, while the objectives follow mainly changes of attitude and behavior. In general, there is a tendency for formative messages, which seek to change attitudes, to be lost in a pile of scientific information and arguments that, not infrequently, are difficult for non-specialist audiences to remember. Notable exceptions in terms of a better match of the format and content of campaign messages to the characteristics of the public are those messages that present concrete cases, in which the recipients can be found.

If text messages mainly contain information aimed at increasing the understanding of the problems presented, audiovisual or mixed messages usually have much more diverse content and include both presentations of negative and/or positive behaviors with the consequences they determine, as well as explicit calls for attitudinal and behavioral changes beneficial to health.

An interesting way of formulating the messages is the one adopted by the campaign "Act now. Save a Life "(FRI) in which a series of videos were made and broadcast in which, in suggestive acting interpretations, the symptoms of acute myocardial infarction are explained from the perspective of patients. These messages are, in form and content, much more accessible and are more likely to be retained by recipients compared to texts in written materials such as: "Of the total deaths due to heart attack, half occur in the first 3-4 hours from the onset of symptoms - most often before the patient arrives at the hospital. In addition, the longer the time to release blood flow to the affected area, the greater the chances that the person will be left with irreversible myocardial damage, which causes heart failure and even death. The time elapsed from the onset of the first symptoms to the receipt of appropriate treatment is one of the vital factors for a person who has suffered a heart attack. "[1][1]

The vague formulation of the aims and objectives of the campaign is a general feature of all the cases analyzed ("to encourage the population to ...", "to draw attention to ...", "to highlight the importance ...", "to promote...", "to increase the degree of understanding ..." and, especially, "to inform the public about ..."). This may be the main reason why the reports or information on the achievement of these goals and objectives are equally vague and do not provide a relevant picture of the effectiveness of the initiatives. Monitoring and evaluation strategies are therefore built less on the concrete achievement of objectives and more on the achievement of numerical indicators (number of events, materials developed and disseminated, events, participants in events, etc.). It is even more

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[1] Text is taken from https://www.romanianheart.ro/portfolio/actioneaza-acum-salveaza-o-viata/

difficult to try to assess the impact of campaigns by illustrating real changes in attitudes and behavior in the target audience. And this is because, as a rule, the evaluation is done in the final stage of implementation or immediately after the end of the campaigns. Considering the relatively short durations of these campaigns (from a few months to one or two years), on the one hand, and the results of scientific research showing that behavioral changes and, especially, those at the level of attitudes or mentalities, on the other hand, it is obvious that efforts to evaluate these issues immediately after a short campaign lead to irrelevant results.

Conclusions

In recent decades of research on health information and education campaigns, the importance of the scientific rationale for their design, implementation, monitoring, and impact assessment was highlighted. Particular importance is given to building strategies for communicating campaigns and in particular how messages are sent so that they resonate as well as possible with the specifics of the target audience, their ability to understand, and their preferences regarding the format of these messages.

The health education campaigns carried out in Romania in the last ten years, although demonstrating a series of structural elements following contemporary design and implementation trends, do not eloquently demonstrate the organic integration at the strategic level of new concepts and orientations. Through the formulated objectives, through the typology, and especially through the content of the messages and the actions carried out, these campaigns focus on the transmission of information leaving on the secondary the formative level, respectively the necessary changes at the attitudinal and behavioral levels.

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