
PUBLIC HEALTHCARE CRISIS IMPACTS AND MANAGEMENT

Boryana Vasileva Marinkova

University of National and World Economy, Bulgaria, b.marinkova@unwe.bg

Abstract: Public healthcare crises are unique and inhomogeneous in nature, etiology and typology. They can affect all aspects of systems, organizations and have a profound and lasting impact on individuals, stakeholders, and general society. Crises in public healthcare system, and in any other area, can affect image, trust, financial stability, management decisions, the physical and emotional well-being of employees and other stakeholders. Public healthcare crises can have negative consequences for any system due to reduced revenues, loss of labour, loss of reputation, even due to causing emotional stress at employees or audiences. The impacts are multifaceted, as are the crises themselves, and can be categorized into managerial, communication, technological and external. Crises that have been the subject of timely identification, good governance and appropriate action for lessons learned and future prevention can have a positive impact on organizations and their stakeholders. This creates successful models, improves the organizational image and they become catalysts for change in entire sectors. Crisis management is a system of organizational efforts to prevent, respond to and learn from crises with three main components - proactive, reactive, and learning. Prevention is the proactive component that deals with reducing the likelihood of emerging of a new or the same crisis. The reactive component is related to the rapid management and recovery after going through crisis situations, and the learning component includes the process of continuous learning from all other phases of the crisis management process. To manage a crisis quickly and effectively, we seek to develop comprehensive crisis plans that anticipate and envisage the worst-case scenarios. A comprehensive crisis management plan is imperative to provide streamlined guidelines for timely and effective interaction with the media and the public through marketing communication methods. The need for a systematic marketing approach to public health crisis management is justified by the fact that disasters, accidents, and incidents have been on the rise in recent years, and that investment in crisis preparedness can be justified by prevented human and financial losses, fatalities, and damaged trust. A strong marketing response through integrated marketing communications can stem the tide of public discontent during crisis situations and shorten the long-term post-crisis recovery phase. Crises that have been the subject of timely identification, proper management and appropriate marketing actions for lessons learned and future prevention can have a positive impact on organizations and their stakeholders. In this way, successful models are created, the organizational image is improved, and they become catalysts for change in entire sectors.

Keywords: management, public healthcare, marketing, communications

1. INTRODUCTION

Crises can affect all aspects of the organization. The literature on organizational crises and public healthcare crises abounds with discussions about how crises can affect image, trust, financial stability, management decisions, and the physical and emotional well-being of employees and other stakeholders. Regardless of the cause, crises can have a serious and severe impact on a particular organization or system, and in particular on public healthcare and its players, on related stakeholders and on the community affected. Crises that have been the subject of timely identification, good governance and appropriate action for lessons learned and future prevention can have a positive impact on organizations and their stakeholders.

2. MATERIALS AND METHODS

The literature review includes 28 publications that describe the definitions, types and causes of public health crises at the international, regional and national levels. The selection of publications is based on their titles and the presence of specific keywords in them and the relevant abstracts. The data were collected from the following databases: MEDLINE, Embase, Web of Science and Google Scholar. In addition to the publications in the cited databases, the relevant official EU documents and statements has been reviewed.

3. RESULTS

Regardless of the cause, crises can have a serious and severe impact on a particular organization or system, and in particular on public healthcare and its stakeholders, on other related stakeholders and on the community it affects. Public healthcare crises can cause significant losses, as can crises in organizations, whether public or private. They can negatively affect any system due to reduced revenue, loss of manpower, loss of reputation, lack of trust, and even causing emotional stress after employees or audiences (Pearson & Clair, 1998) (1). Crises that have been the

subject of timely identification, good governance and appropriate action for lessons learned and future prevention can have a positive impact on organizations and their stakeholders. This creates characters and heroes, improves the organizational image and becomes a catalyst for necessary change. An example of such a situation is the intervention of emergency teams from Sofia after the terroristic attack on Sarafovo Airport in 2012, which showed that Bulgarian doctors involved in the treatment of severely injured are competent, fast and coldblooded in the battle for human life(2).

Some of the potential negative crises impacts, reviewed in the literature, are described below.

Human and social impacts: The potential for loss of life is one of the worst consequences of public healthcare crises. Crises in Bulgaria such as the world's leading per capita mortality in the fourth wave of the Covid 19 pandemic, the death of an 8-month-pregnant woman with twins from Covid pneumonia (3), the loss of childhood lives from the virus, the low level of vaccination against Covid 19, and a number of fatal accidents in public healthcare structures such as the death of women in childbirth at birth (4), as well as non-fatal but severe physical crises such as the newborn beaten in 2015 by a midwife in a private hospital in Sofia (5) or the elevator that fell in 2010 with pregnant women in the University Maternal Hospital in Sofia "Maichin dom" (6) shock our society and affect the finest emotional threads of the minds of all individuals. While the potential for physical harm is well documented, the mental or emotional effects of crises on individuals are often neglected (Doepel, 1991) (7). Employees who have survived a crisis may suffer from severe trauma, stress, depression, withdrawal from social interaction, inability to concentrate, fear, anxiety and insomnia, he said. Doepel (1991), in his work on the psychological aspects of crises, states that stress on individuals can come from at least three sources: 1. the nature of the crisis and their actions or inaction during the event, 2. the lack of experience in dealing with such events leading to a sense of uncertainty about the appropriate responses; and 3. the expectations placed on them by the various stakeholders to restore control, safety and trust in the organization. The emotional consequences of the crisis, especially in the field of public healthcare, are related to one of the most popular phenomena among the medical community, namely the burnout syndrome (8).

Management and communication impacts: The crisis can affect not only the teams, but also a number of management activities in public healthcare, such as management decisions and communication. There are many claims in the literature that these activities are difficult during a crisis and that the inability to communicate or act as usual has serious consequences (Pearson & Clair., 1998). Dealing with problems under the pressure of time creates stress, which is often associated with large-scale crises. In times of severe stress, decision makers make more mistakes and suffer from impaired intellectual functioning (Dutton et.al, 2002) (9). The importance of effective communication as a tool of the marketing arsenal during a crisis has also been reviewed in the literature. Scientists and authors who have written about crisis communication emphasize the need for timely and effective communication with both internal and external stakeholders (Seeger et al., 2003) (10). Quality information shared in a timely manner can support the implementation of effective crisis management strategies and prevent information distortions. In the absence of information, people create their own versions of what happened or what caused it. This can lead to the generation of dangerous rumors that have the potential to escalate the crisis situation (Blohowiak, 1987) (11). Despite the proven need for active communication, people and organizations are often reluctant to share bad news (Robert et al., 2002) (12), especially in public healthcare. Sociologists Rosen and Teser (1970) call the phenomenon of organizations and individuals who are reluctant to share negative information with their target audience the effect „MAMA“ (Rosen et al., 1970) (13). Research shows that in some crisis situations, the organization is reluctant to disclose information. However, the first few hours after the crisis are the moment when public opinion begins to take shape (Wisnblit, 1989; Newsom et al., 1993) (14, 15). Stakeholders who are unable to obtain the necessary information from the organization may draw their own conclusions about the situation or seek information elsewhere. The media is often identified as a key external player, but many organizations oppose interaction, despite the undeniable benefits of active media interaction from marketing science. Researchers dedicated to the full use of marketing methods and crisis communication emphasize the importance of communication with the media during a crisis. An organization that quickly communicates crisis information to multiple stakeholders will convey a sense of responsibility, control and honesty. (Mallozzi, C. 1994; Marra, F., 1992) (16, 17).

Technological impacts: Public healthcare is becoming increasingly dependent on high technology. eHealth, information systems, registries, cloud solutions, artificial intelligence, machine learning, mRNA vaccines, biotechnology, telemedicine, Big Data, modern medical equipment, transportation and high-speed communication systems are examples of technologies used in the healthcare sector. These technologies and systems are now so complex that it is difficult to predict all possible interactions and unexpected problems. Failures in one or more of the technological systems can have serious consequences for the organization of public healthcare. Crises that could affect the technological dimension of the sector can be caused by natural disasters or voluntary or involuntary

human actions, ranging from error to deliberate sabotage. Well-documented crises in the recent past that have affected the technological dimension of the energy organization, but also with an impact on health, include the 1986 Chernobyl nuclear accident and the 2011 Fukushima nuclear accident. Examples of technological failures that have the potential to seriously disrupt public healthcare activities include, for example, delayed drug deliveries in 2020 due to border blockades and stockpiling in some EU member-states and systematic disruption of distribution chains, the inability of Bulgarian authorities to provide quality refrigerated transport during the first deliveries of mRNA vaccines, the lack of registries and the inability to process large data sets due to disconnection of all participants in public healthcare in a common e-health interface.

External impacts: A number of articles in the literature discuss the effects of certain crises on people and communities living and dealing outside the public healthcare. One of them and at the same time one of the main problems of public healthcare is the shortage of medicines. This supranational problem has plagued many scientists in recent decades (Bouvy et al., 2021; Badreldin et al. 2021; Shukar et al., 2021; Mishra et al., 2018) with particular weight in the last two years under the shadow of pandemics and increased consumption of medicinal products and pressure on the drug supply chain (18, 19, 20, 21). The reasons for the shortage are multifactorial, including supply problems, demand problems and regulatory issues, allow in their work Shukar et al. (2021) and affect all other areas of life and business. According to the authors, supply problems consist of production problems, lack of raw materials, logistics problems and business problems. In contrast, demand problems include higher product demand, seasonal demand, and unpredictable demand. For regulatory issues, one important factor is the lack of a uniform definition of drug shortages. The shortage of medicines affects all economic, clinical and humanistic stakeholders and also offers non-pharmaceutical approaches to tackling this potential crisis. Bouvy et al. (2021) state that the shortage of medicines must be a priority for the pharmaceutical industry, supply chain stakeholders and national competent authorities and deserves not a commitment of words but a serious commitment and action, as the crisis affects every aspect of people's lives. All public health crises have a negative impact on other social systems, as well as on the supply of medicines, which is a global and interconnected activity, and on the political and economic interaction between the countries.

Public health crises are critical and highly complex. They can affect all dimensions of public health structures, including the human / social dimension, the administrative dimension, the technological dimension, and the external dimension. The nature of the crisis and the effectiveness of the response are the factors that will determine the outcome of the crisis situation.

Crisis management in public healthcare

Crisis management is defined as organizational efforts to prevent, respond to, and learn from crises (Pauchant & Mitroff, 1992). Prevention is the proactive component of crisis management, which deals with reducing the likelihood of a new or the same crisis. The reactive component is associated with rapid recovery and recovery after going through crisis situations. The learning component includes the process of lifelong learning from all other phases of the crisis management process.

Authors who view crisis management as rapid crisis management usually suggest developing comprehensive crisis plans that anticipate and plan for worst-case scenarios. A comprehensive crisis management plan is imperative to provide streamlined guidelines for timely and effective interaction with the media and the public through marketing communication methods. The plan should be "based on rational expectations of how the crisis will manifest itself and how the organization will respond to it" (Paraskevas, 2006) (22). Wisenblit (1989) admitted that crisis management plans contained seven key elements (23): mechanism for identifying potential crises; identifying the audience that would be affected; procedures to be followed during a crisis; contingency plans for business continuity during the crisis; appointment and training of a crisis management team; development of a crisis communication plan; and evaluation and revision of the plan in response to simulated scenarios and actual crises.

The current view of crisis researchers is that the real indicator of success is not just to have a plan in place, but when the plan is in place, to be effective by helping the organization prevent or quickly manage the crisis. Many current accreditation systems in the field of quality and safety in healthcare, such as the JCI (24) and the GHA (25), for example, rely on pre-written and established standard policies to protect against a crisis in the first place and help to speed it up its recognition, thirdly - to limit it as a deployment, fourthly - to meet the communication and management consequences of it as quickly as possible and fifthly - to learn lessons and future prevention policies from it.

Crisis management phases in public healthcare

Public healthcare crisis management can also be seen as a process designed to prevent or reduce the damage that a crisis can cause to an organization and its stakeholders. Crisis management can be divided into three phases according to Sarpong (26): (a) before the crisis, (b) crisis response and (c) post-crisis behavior. According to the author, the pre-crisis phase aims to prevent crises through the process of identifying, analyzing and responding to

project risks. It also consists of an assessment of the likelihood of a crisis occurring, the expected frequency and its potential impact on operations. At the stage of the crisis, ie. if and when the crisis unfolds, efforts must be made to limit the crisis and minimize its profound consequences. Once the assessment has made a significant response, according to the scientists, marketing communication methods should be used immediately to disclose the situation to the public and other stakeholders, thus showing that it controls the current situation. The post-crisis phase requires the implementation and disclosure of the results of the commitments made during the crisis phase. According to Elliott et al. (2005) the aim is at this stage to repair all damage to reputation during the crisis (27).

4. DISCUSSION

The discussion is about the application of marketing approaches and tools in crisis management in public healthcare. Sam Sarpong (2018) aims to seek the connection and interaction between crisis management and marketing methods. He seeks to identify how marketing efforts can be used in effective crisis management. He discusses the stages related to preparing, dealing with and drawing lessons from the crisis, with particular emphasis on developing strategies to address the problems inherent in the crisis. The need for a systematic marketing approach to crisis management by the organization and among public health structures and systems is justified by the following facts and trends: a) cases of disasters and accidents have increased in recent years, and b) investments in preparation for crisis management can be justified by the significant costs to public health of human and financial losses, fatalities and damage to trust and reputation. (Elliott et al. 2005). Marketing is a key function in any sector of service and product delivery to consumers, the most important in this aspect is the health sector given the critical importance of the service it provides and which is measured by lives saved and quality of life. For this reason, every organization must learn and be guided by some basic principles of marketing, says Saprong. Marketing principles are an effective tool in crisis management, as marketing is recognized as an important part of crisis communication, especially during the long-term post-crisis recovery phase. According to the author, a strong marketing response can stop the wave of public discontent during crisis situations.

Any organization that fails to communicate quickly and honestly with its numerous internal and external audiences in a crisis situation can suffer serious damage to its reputation, key relationships and ongoing activities. Rubel et al. (2011) argue that all organizations and all brands can experience a crisis, assuming that it is marketing that enables the organization to recover from a crisis, and emphasize that crisis communication and marketing are important tools for providing information to key target groups, and in public healthcare cases, the target audience is the whole society of the region, the country or even the whole world population, as in the case of the coronavirus pandemic (28).

5. CONCLUSIONS

To quickly and effectively manage a crisis, we seek to develop comprehensive crisis plans that anticipate and plan the worst-case scenarios. A comprehensive crisis management plan is imperative to provide streamlined guidelines for timely and effective interaction with the media and the public through marketing communication methods. The need for a systematic marketing approach to public healthcare crisis management is justified by the fact that disasters, accidents and incidents have been on the rise in recent years, and that investment in crisis preparedness can be justified by prevented human and financial losses, fatalities and damaged trust. A strong marketing response through integrated marketing communications can stem the tide of public discontent during crisis situations and shorten the long-term post-crisis recovery phase. Crises that have been the subject of strategies for timely identification, proper management and appropriate marketing actions for lessons learned and future prevention can have a positive impact on organizations and their stakeholders. They create successful models, improve the organizational image and become catalysts for broad and vital reforms.

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