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COVID-19: Lessons from South Korean Pandemic Communications Strategy

Seongwon Choi
Trinity University, schoi2@trinity.edu

T. L. Powers

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Seongwon Choi [a] and Thomas L. Powers[b]

aDepartment of Health Care Administration, Trinity University, San Antonio, TX, USA; bDepartment of Marketing, Industrial Distribution & Economics, University of Alabama at Birmingham, Birmingham, AL, USA

ABSTRACT

There is a pressing need for evidence on effective COVID-19 pandemic mitigation efforts. The impact of the pandemic has been far-reaching, making management of the outbreak a daunting task for many countries. As the whole world continues to fight against the pandemic, a close examination of best practices of pandemic management is ever timely. Based on social marketing concepts, this paper reviews the system-level communication strategies used in South Korea in response to the COVID-19 pandemic. South Korea has received growing recognition for its response to the COVID-19 pandemic and provides a noteworthy example of positive and effective pandemic communication. Applying a social marketing mix framework, the paper examines South Korean pandemic communication strategies and identified a high degree of transparency and coherence two major success factors. This paper contributes to the current and future healthcare management literature and practice by delineating factors underscoring successful public health crisis management.

Introduction

The novel coronavirus spread at an unprecedented speed around the globe and caused the world to pause their operations almost altogether. With its unparalleled magnitude of impact, the COVID-19 pandemic has revealed myriad implications for social policy, business [1], and especially for the healthcare management community. The COVID-19 pandemic is not the first viral outbreak that the world has ever faced. However, why has the world had a difficulty in containing the disease? Public health crisis is an example of *wicked problems*. Wicked problems are characterized by unclear scope and causes, high levels of complexity, and divergence in worldviews towards the problem that often involve political judgments [2–4]. Typically, wicked problems lack a single solution and necessitate multi-level interventions encompassing legislative actions, policies, and education, due to the problem's interconnectedness with all levels of society [2,5]. The COVID-19 pandemic (or *pandemic* here on out) is an archetypal example of wicked problems with its development is changing daily to this date. Various countries reported starkly different results following the pandemic related policy interventions, with respect to health outcomes such as the overall number of cases confirmed, the rate of increase in the cases confirmed, and the mortality [6] as well as economic consequences [7]. Differences in policy outcomes underscored the complexity of containing the pandemic [8] and called for more evidence that explains the effectiveness of different types of interventions [1].

Inspired by the heightened need for evidence on salient responses to the pandemic, this paper uses a social marketing framework to investigate a pandemic response by South Korea, with an emphasis on system-level communication strategies. The concept of social marketing has been widely used to examine and address complex social problems, and proven its effectiveness in incurring changes across macro, meso, and micro levels of society [2,3]. Previous studies examined the impact of restrictive interventions such as lockdowns and travel bans [8] with a limited emphasis on communication strategies that is a key to successfully engaging the public in pandemic response. This is despite the benefit of considering the importance of marketing as a contributing factor to the success of pandemic related policies [1].

Effective communication is central to increasing public awareness about the disease and facilitating acceptance of behavioral changes [9], thereby increasing a chance of pandemic related policies to work. Understanding the importance, the purpose of this paper is to review the use of best practice of communication strategies during the pandemic from a social marketing perspective. This paper particularly investigates a South Korean example. South Korea has been recognized for effectively managing the outbreak while minimizing the health and economic consequences of virus [7]. This paper contributes to the healthcare management and healthcare marketing

CONTACT Seongwon Choi ✉ schoi2@trinity.edu 🖃 Department of Health Care Administration, Trinity University, One Trinity Place, San Antonio, TX 78212, USA

literature by highlighting how the COVID-19 pandemic is being addressed representing an intersection of health policy and social marketing.

Background

Social marketing in healthcare

Social marketing serves as the theoretical foundation for this paper and its usefulness for examining a wide range of public health issues has been well documented [2,3,10]. iSMA defined that social marketing 'seeks to develop and integrate marketing concepts with other approaches to influence behaviors that benefit individuals and communities for the greater social good' [11]. Social marketing concerns with bringing about a change across different levels of the society (individual, community, and system as a whole), resulting in holistic systemic change [2,3]. In the context of health, social marketing has been perceived as a useful tool when designing and executing health programs and interventions that target changing the behaviors of individuals [12]. Public health experts and policymakers explored the use of social marketing based on understanding that the knowledge-behavior gap often dissuades targeted individuals from making desired behavioral changes, resulting in the suboptimal outcome of the public health programs [13]. Social marketing concepts have been proven to properly raise public awareness and effectively change core belief systems [14] and long-term health behaviors including smoking, healthy eating, and exercising [10].

The central premise of social marketing is a voluntary exchange. People, without being forced, would willingly accept products, services, ideas, and behaviors that they believe worthy and beneficial for them [15]. Another essential theoretical underpinning to social marketing is customer orientation. As with commercial marketing programs, crafting social marketing programs based on the target audience's characteristics such as beliefs, behaviors, and attitudes is a precursor to success [12,16]. A marketing mix (4P- Product, Price, Place, Promotion) framework is particularly useful for designing and implementing social marketing initiatives. From a social marketing perspective, the traditional marketing mix framework can be used to delineate an initiative in a such a way using four dimensions: Product (including messages on services, a set of behaviors, and policy changes), Price (what the consumer sacrifices to change), Place (context or communication outlets in which consumer's decisions and behavioral changes may occur), and Promotion (the dissemination of information and to educate or appeal to the consumer so it makes them want to engage in new behaviors) [17].

COVID-19 communications

Wicked problems are societal problems with unclear scope, causes, consequences, and possible solutions [3]. Wicked problems involve complex interrelations between constituents, therefore, require interventions that span across the different levels within the system. The single solution is rarely ever sufficient to address wicked problems [2]. The pandemic is a prime example of a wicked problem. Decision-makers face a challenge of coping with the absence of definitive knowledge as it relates to underlying threats, the possibility of ongoing outbreaks, and effective remedies to the virus. In turn, the public is faced with a rising level of confusion, misinformation, and fear; all of which interfere with the public's ability to discern 'what to do'.

Central to a successful pandemic response is effective communication strategies that focus on increasing public awareness through proper education about the disease and means of its mitigation and preventing a spread of inaccurate information [9]. Effective communication during a pandemic empowers the public to take action to lower the risk of contracting the virus by supporting a well-informed perception of the pandemic and the quality of life [16,18]. It targets circulating the right message by the right people to the right audience on time [9]. Therefore, designing and executing salient communication strategies is a critical task for the government, public health authorities, and other related health organizations as part of virus mitigation efforts. This may take a form of clear and coherent messages circulated via multiple media channels and the use of spokespeople [9,12]. Effective communication decreases fear and confusion while preventing a spread of misinformation among the public. As a result, the public is more likely to take the recommended actions [16].

Application of the marketing mix to the pandemic communications

Despite its emerging nature, the pandemic shares commonalities with other public health issues to which social marketing concepts have been applied. First, the success of disease management is largely dependent upon public engagement. In an attempt to combat the pandemic, the World Health Organization (WHO) recommended individuals adopt a set of new behaviors including social distancing, self-isolation, wearing masks, and washing hands [19]. This guideline urges the public to accept a new behavior (wearing masks), reject a potential behavior (large gathering), modify a current behavior (washing hands and social distancing) [16]. Second, the recommendation is based upon the premise of voluntary exchange. It is assumed that the public would willingly

adopt behavioral changes without being forced if they identify benefits of following a set of new behaviors outweigh the inconveniences caused by giving up their old behaviors. Third, the pandemic has demonstrated the greater risk posed for specific populations, requiring tailored strategies to disseminate accurate information as well as to deliver required medical services and products using a wide variety of distribution channels. Applying the marketing mix framework, a communication endeavor to the novel coronavirus is framed to consider elements of the four marketing mix areas [16,20]. The pandemic response explained through the lens of the four areas is as follows:

Product Communication: The notion of the product portion of the marketing mix including services, a set of behaviors, and policy changes [12,16] can be applied to pandemic communications by defining behavioral measures that benefit individuals when they are properly adopted. The objectives of these behavioral recommendations are to minimize the risk of contracting and transmitting the virus, thereby improving the health of an individual and as a result the overall population.

Price Communication: The price dimension can be used to identify non-financial as well as the financial cost associated with engaging in a new set of behaviors (i.e. the product communication dimension) [20]. In the context of the pandemic, the public is asked to give up social interactions and mobility as modifying a handwashing routine and wearing masks, all of which could have both monetary and non-monetary consequences. With a strong emphasis on the perceived benefits however, the public may identify greater benefits from adopting the Product (behavioral changes).

Place Communication: A major consideration of the place dimension of marketing mix concerns making the product available to the audience with the least inconvenience. Given the fact that the virus is easily transmitted to others, there is a need for the product communication (behavioral changes) to be adopted by the entire population for optimal outcomes, therefore, an extensive network of distribution points was needed so the public can access product communications more easily.

Promotion Communication: In an effort to disseminate accurate information on (1) plans and actions, (2) the updated status of the pandemic, and (3) behavioral recommendations to the mass as well as to the target populations, the promotion dimension of the pandemic communication entailing clear, comprehensive, and coherent messages distributed via a range of different media channels should be developed. These social marketing mix application to pandemic communications are summarized in Table 1.

Table 1. Social marketing mix application to pandemic communications.

Marketing mix communication element	Application to pandemic communication
Product Communication	A pandemic communication message entailing set of behaviors to be accepted by targeted individuals
Price Communication	A component of pandemic communication message highlighting benefits over financial and nonfinancial cost incurred for adopting new behaviors
Place Communication	A wide rage of channels through which the pandemic communication message is distributed
Promotion Communication	A coordinated use of communication channels to promote the pandemic communication message while ensuring transparency and coherence

Best practice analysis: South Korean pandemic communications

An example of investigating a pandemic response by South Korea is now examined using a social marketing framework. South Korea has received increasing recognition for its effective pandemic response that has minimized both adverse health and economic outcomes of virus [7,21]. The country has been able to manage (i.e. 'flatten the curve') the pandemic without employing restrictive measures such as mandatory lockdown or work from home order [7]. Early on, South Korea successfully executed mass testing and introduced innovative approaches to scale up the testing capacity such as drive-through testing facilities. Concurrently, the country has also maximized a contact tracing capability based on its information technology infrastructure [21] which is considered vital as the world transitions to the next phase of the pandemic. Except for a short period in early March 2020 [22], South Korea has been successful at controlling the number of newly infected cases below 100, and the death rate below 3% [23] during the first seven months of the pandemic.

Another essential pillar of the South Korean pandemic response, however often less discussed, are communication strategies employed by the governmental authorities. The country has successfully incorporated vertically as well as horizontally integrated [14] pandemic communication to keep the public awareness around the crisis at its highest level. The role of citizens is critical in achieving the desired outcomes of pandemic response policies. In addition to policies enforced by the authorities, the public's voluntary participation in following behavioral recommendations is essential. Recommendations for the coronavirus pandemic entailing substantial behavior modifications inevitably accompany inconvenience and are only effective with the public's compliance [7]. In conjunction with multifaceted policies and programs including large scale testing, aggressive contact tracing, and temporary postponement of large

gatherings (i.e. schools and religious gatherings) [21], the South Korean authority employed communication strategies that followed the social marketing four P areas and made significant strides in communicating messages related to the areas of product, price, place, and promotion considerations.

Understanding the elements of South Korean pandemic communications

Product Communication: The behavioral recommendations by the South Korean public health authority can be categorized into those related to (1) prevention of individuals from contracting the virus and (2) proper treatment of potentially infected individuals. The first category of behavioral measures includes keeping personal hygiene (i.e. hand washing), limiting social interactions (i.e. social distancing, and avoiding large gatherings), and wearing protective masks. The latter category of behavioral measures includes when an infection is suspected or any symptoms are present, individuals are advised to comply with self-isolation, and reporting to local public health authorities or the central helpline for treatment. These behavioral measures, with the public buy-in, are to slow down the rate of infection. In turn, the collection of individual actions would decrease the risk of overburdening the health system and overall fatalities both directly and indirectly caused by the virus.

Price Communication: In encouraging individuals to adopt a new set of health behaviors, price-related messaging highlighting that perceived benefits are greater than costs is essential. Behavioral modifications recommended for the pandemic require individuals to personally invest including money and time spent to purchase masks, psychological discomfort caused by limited social interactions, and time and effort spent to learn a new way of conducting job-related tasks. If the benefits obtained by accepting the new behaviors are not perceived to outweigh the aforementioned costs, it is less likely for individuals to modify their behaviors. The South Korean authority crafted messages highlighting solidarity and a collective benefit that can be achieved by each individual complying with recommended guidelines.

Place Communication: From a place perspective, the entire population of the country is considered as the target audience as everyone is at risk of contracting and being a vector of virus transmission to others. Therefore, the Product (a set of behaviors) has to be widely known and adopted by as many individuals as possible for optimal outcomes. The South Korean pandemic communication is characterized by extensive circulation of pandemic related information as well as the behavioral measures via a wide variety of communication outlets targeting different levels within the society.

Promotion Communication: From a promotion perspective, the primary focus has been to best educate citizens about the pandemic, thereby increase their engagement. South Korean public health authorities have focused on developing and disseminating accurate messages as minimizing uncertainty around the outbreak. The messages consist of four core elements: (1) government's plans and actions, (2) evolvement of the pandemic, (3) a set of recommendations to Korean citizens as a whole, as well as to the higher-risk populations, and (4) prevention of misinformation. The messages are circulated daily via a wide range of media channels and in various formats (i.e. electronic documents, live streams and printed signs). Spokespersons (i.e. subject matter experts and public health officials) have been frequently used to ensure the trustworthiness of the messages.

Facilitating the pandemic message acceptance

Uncertainty and a lack of clarity that may arise from insufficient or inaccurate information often deter the target audience to accept the recommended message (Product) [9]. South Korea had learned this a hard way. In 2015, when Middle Eastern Respiratory Syndrome (MERS) broke out, the administration and public health agency faced harsh criticism for failing to inform citizens properly. A lack of clear communication on the development of the MERS outbreak and the governing body's plans and actions heightened the uncertainty among the public, resulting in loss of trust in the governing body and its crisis management. Learning from the past mistake, South Korean COVID-19 pandemic related messages were crafted and disseminated with a strong emphasis on (1) transparency and (2) coherence from the early stage.

Transparency: Unlike chronic health issues, an acute viral outbreak accompanies heightened uncertainty and unpredictability, exacerbating fear and anxiety among the public. Therefore, early and transparent communication is critical to minimize the negative emotions that may hinder maintaining the credibility of public health recommendations and the sources [9]. According to risk communications theory, one's perception of risk is formed early on, based on the types, amount, and accuracy of the information available to him or her. The information is then sifted through one's beliefs, and values forming an image or perception specific to the person. Once formed, these perceptions tend to persist and hardly change [9]. Therefore, in order to maintain the desired level of awareness, timely and transparent communication with the public and various stakeholders on what has been learned and what remains to be known is essential [9].

Since the beginning phase of the pandemic, the South Korean government has been dedicated to

fully disclosing pandemic related information to the public. Jointly with the President's office, the Ministry of Health and Welfare and, the Korean Centers for Disease Control and Prevention formed the Central Defense and Safety Countermeasure Headquarters. The center has delivered daily development of the pandemic to the citizens through various communication outlets such as live briefings via major television stations and online media platforms (Figure 1a), the website (Figure 1b), and written reports (Figure 1c) [23]. The daily live briefing is delivered by spokesmen, usually public health officers holding leadership positions in the Korean Centers for Disease Control and Prevention. The contents include updates on the accumulated number of confirmed cases, the accumulated number of cases confirmed negative, the number of individuals quarantined, the number of individuals completed 14-day self-quarantine, the number of community transmission cases, the number of deaths. The briefing also presents daily changes (increase and decrease) in the aforementioned metrics along with narratives on new cases. The briefing discloses information on time and places where individuals with newly confirmed positive for infection had visited to encourage people who had been in the vicinity could get tested voluntarily. Individuals also received a summary of the daily development of the pandemic at the national and regional level via text messages (Figure 1d).

Coherence: As with commercial marketing communication, developing and disseminating clear and coherent messages are critical for the success of public health communication [24]. The need for coherent and consistent messages to influence consumers is well explained by the concept of integrated marketing communications (IMC) that highlights the benefits of coordinated communication elements centered around message consistency [13,25]. IMC also emphasizes the use of multiple media outlets and promotional instruments to produce coherent voice that works together to communicate the desired core message [14], thereby increasing a likelihood of success of a marketing campaign.

Dresler-Hawke and Veer [14] highlighted the integration efforts to be made vertically spanning the different levels of communication agents as well as horizontally spanning the different types of communication platforms to ensure coherence and consistency of the core messages. Vertical integration of social marketing communication entails harmonizing communication strategies between different levels within the society (socio-cultural level, community level, local level and, individual level). It follows that social marketing messages heavily focused on a single level alone is unlikely lead to message adoption. Therefore, messages need to be crafted and circulated at each level in order for a holistic societal change. Similarly,

use of few communication channels may result in messages disseminated only to a limited pool of people [14]. A communication campaign during the pandemic alike necessitates a high degree of integration to ensure that the core message to be effectively delivered regardless of senders or methods by which the message is transmitted and to maximize the effectiveness of the communication campaign [9,16].

In conjunction with the central government's daily briefing and national level pandemic communication campaign, each regional and city level government offices have provided daily updated information on the aforementioned items. They also supplemented the residents with local and community level information including local healthcare facilities where the patients with confirmed infection were admitted and successfully treated, the status of testing for individuals with suspected infection, detailed contact tracing information for individuals with confirmed and suspected infection, and list of public spaces that were sterilized by the officials and safe to visit (Figure 2a–c) [26–28].

From a horizontal integration perspective, the pandemic related messages have been circulated via a wide range of media outlets. In addition to central government's use of major broadcast channels, each level of governmental entities or public entities disseminated the messages as a form of physical prints including pamphlets, stand-up banners, wall signs (Figure 3a), text messages flagged as an emergency (Figure 1d), phone calls, governmental websites, and social media accounts (Figure 3b) [29–31].

Discussion and conclusion

This paper has reviewed pandemic communication strategies based on social marketing concepts, highlighting actions taken in South Korea. Social marketing has been widely used to bolster the public awareness and engagement in public health interventions and policies [10] to achieve desired societal changes [3]. Mitigating the pandemic has been an extreme challenge for many countries. The pandemic has revealed its ever-complex nature and underscored the need for multi-faceted system-wide interventions. Effective pandemic management entails timely legislative actions, strong leadership, well-functioning health systems, and effective education and communication campaigns [6,16]. The success of pandemic related interventions is heavily dependent upon the public awareness and their compliance with the behavioral recommendations and guidelines suggested by the health authorities. In engaging the public, salient communication campaigns especially are a vital element in properly educating the public and increase awareness [14,16] the South Korean example demonstrates these capabilities.

Figure 1. (a) A daily briefing broadcasted via a major news channel and YouTube channel. (b) Daily updates available via Ministry of Health and Welfare website. (c) Daily written reports prepared and circulated electronically via the National Crisis Management Center website. (d) Targeted text message communication (by residence) on the progress of the pandemic, contact tracing information and recommended behavioral measures.
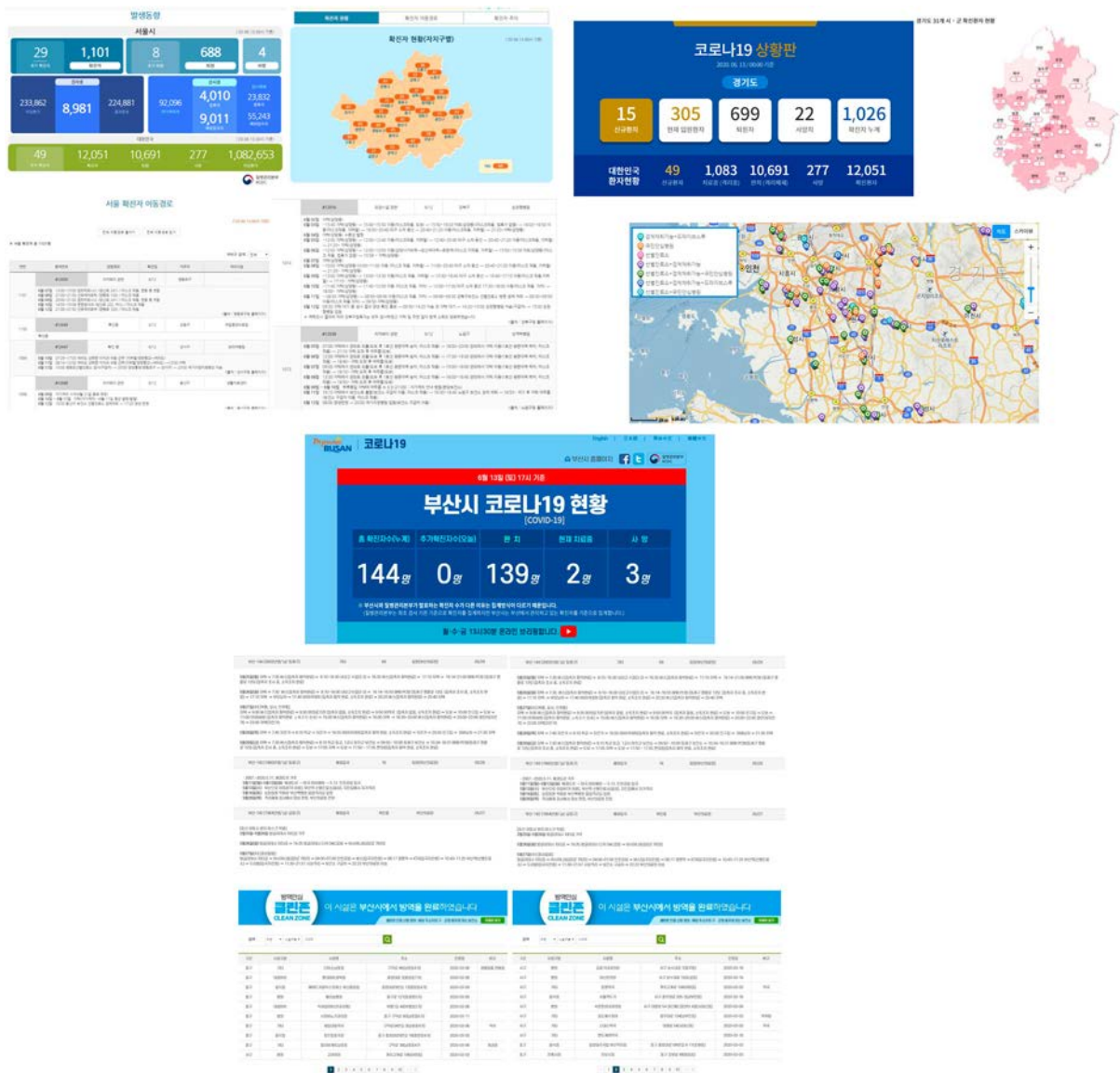
Figure 2. (a) Seoul City's pandemic communication: COVID-19 Dashboard (top), Contact tracing information (bottom). (b) Gyeong-gido's pandemic communication: COVID-19 Dashboard (top), Map of COVID-19 testing and treatment facilities (bottom). (c) Busan City's pandemic communication: COVID-19 Dashboard (top), Detailed Contact tracing information (middle), a list of facilities sterilized and confirmed by the city officials (bottom).

Under the leadership of the central government as well as public health authorities, South Korea has effectively implemented pandemic related policies, such as an order to ban large gatherings, enactment of mass testing, aggressive contact tracing, and coordination of a network of healthcare organizations for treatment [7]. More importantly, the country deployed large scale communication campaigns to properly educate and involve the public in its pandemic management effort. Since the beginning of the pandemic, the public buy-in has been exceptionally high in South Korea. Most Koreans started using protective equipment immediately after the government officially declared the outbreak [7] and their compliance with self-quarantine and social distancing measures, all of which enabled the government to manage the outbreak without more stringent measures.

While managing the pandemic, the world has learned the interdependence of nations, government agencies, and individuals and the importance of concerted efforts that could align the goals and objectives of each constituent [1]. In conjunction with preparing the country with adequate testing capacity and contact tracing technology, the South Korean health system coordinated a far-reaching communication campaign centered around transparency and coherence since the early days of the pandemic. This review revealed three major lessons for future pandemic communication strategies that can contribute to the system-level success of pandemic responses. First, a full disclosure of the pandemic related information is highly desired. Widespread uncertainty and misinformation among the public undermine the success of public health initiatives as they interfere with raising public awareness [9].

Figure 3. (a) Pandemic Communication using banners, wall signs, and posters: public metro (top left), a public park (top right and bottom right), and post office (bottom left). (b) Pandemic Communication via websites and social media outlets: Seoul city website (top left), Seoul city social media (top right), Gyeonggido social media (bottom left), Busan city (bottom right).

Given the emerging nature of the pandemic, ongoing communication to disclose comprehensive information on the progress of the pandemic is critical. Transparency contributes to building trust in leadership and public health authorities and mitigating uncertainty and fear among the public. In turn, the public is more likely to comply with the policies and interventions enacted by the authorities. Second, communication campaigns during the pandemic require a high degree of coordination across diverse entities. The coordination enables the core message to stay coherent across multiple sources while successfully providing customized information to the targeted audience (i.e. regional or local residents). As demonstrated in the communication actions taken by South Korea, a pandemic response may involve different entities providing information. A particular emphasis thus has to be given to ensuring each entity to maintain core messages coherent (i.e. what to do, and who to contact) at the same time, to deliver tailored information to its target audience (i.e. regional/city level daily updates and contact tracing information). Third, the use of a wide variety of communication channels is encouraged. The highly contagious nature of the novel coronavirus virtually makes the whole population a target audience of the communication campaign. The broader audience is best reached via multiple communication channels [32]. Therefore, communication initiatives during the pandemic must consider channeling messages via multiple communication outlets.

The COVID-19 will be remembered as one of the harshest diseases in modern history [1]. The extent of its impact on our daily lives is unparalleled with that of previous pandemics. Not only has it put health systems to a test but it has also revealed a major challenge that the world was up against: that no one isolated solution or no one entity can eradicate the virus [6,7]. The lesson from the South Korean case is clear – health systems have to be dedicated to working in a coordinated manner to achieve a core objective: to keep people healthy and safe. The pandemic has forced health systems to reflect on how to improve preparedness for the next public health crisis. The global healthcare management research community is responsible for investigating best practices and expanding our understanding of pandemic management so that success can be quickly replicated and adopted in other places. As demonstrated in this paper, social marketing concepts contribute to the understanding and the management of current and future policy efforts towards the COVID-19 as well as potential future outbreaks.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Seongwon Choi (Corresponding Author, schoi2@trinity. edu) is Assistant Professor in the Department of Health Care Administration at the Trinity University. Her work focuses on healthcare marketing, health services administration and healthcare management.

Thomas L. Powers, PhD is Professor of Marketing in the Collat School of Business at the University of Alabama at Birmingham. His research focuses on marketing strategy, health care marketing and international marketing topics.

ORCID

Seongwon Choi http://orcid.org/0000-0002-1812-0081

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