



The Challenges of the Covid-19 Pandemic and Modern Approaches to Service Gap Identification in Public Health Organizations

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ABSTRACT:

In the new normal, it is crucial to consider how to develop managerial capabilities through retraining and up skilling, especially in organizations that deal with public healthcare services. Different diseases and health hazards must be addressed by public health organizations. While many of these risks are of a normal nature, some may be related to pandemics or infectious disease outbreaks and require an emergency response. crisis in global health The COVID-19 pandemic has revealed how successful the public health systems of the world's most advanced nations, including the US, Italy, Spain, and Germany, are. Developing nations like India have depended on preventative measures like lock downs and social seclusion since they do not plan to rely solely on their health care systems. During such pandemics, adopting principles like reskilling and up skilling becomes extremely important for Public Health Organizations. In light of these developments, it is crucial to investigate cutting-edge and contemporary methods for identifying and closing service gaps in the current Public Health Response System. With the use of exploratory research, the current study offers a conceptual framework on contemporary methods for identifying service gaps and growing difficulties in public health organizations.

Keywords: Service Gaps, Public Health Response, SERVQUAL, and Emerging Challenges during COVID-19.

1. INTRODUCTION

Pandemics like COVID-19 are undoubtedly eliminated or have their effects reduced by effective public health response services. The only choices for nations like India, which has the second-highest population in the world and limited health care, are self-protective measures like lock down and social seclusion. As the number of casualties approached unprecedented levels, this pandemic raised major concerns about the reliability of health services offered globally.

In the new normal, it is crucial to think about developing managerial capabilities through retraining and upskilling, especially for organizations that deal with public healthcare services. During such pandemics, adopting principles like reskilling and upskilling becomes extremely important for Public Health Organizations. By making modifications to important service components like tangibility, dependability, and transparency, the quality of healthcare services can be significantly improved. Assurance, responsiveness and empathy. The challenges of health workers also need to be assessed during such pandemics.

The threat of pandemic has existed for a very long time, and it has a variety of shapes, degrees of severity, and occurrences. In addition to these factors, the difficulties stakeholders confront when responding to pandemics should also be taken into account. Today's globalization and easy access to transportation have made it possible to travel anywhere on the planet in less than 36 hours. More than 5000 different virus and 300,000 different bacterial species have the potential to harm humans. Since the incubation time of numerous infectious diseases can vary and might range from days to weeks before the person feels the symptoms, an infected person could transmit the disease quickly and cause immense destruction. With these developments the problem in healthcare system further aggravates (Cook & Cohen, 2008). Different epidemic diseases have caused severe fatality in the history in different time horizons such as the 1918 Pandemic A/H1N1 which caused severe fatality and resulted in about 100 million deaths around the world, thereby shattering the global healthcare services.

The A/H5H1 high influenza pandemic that struck between 1957 and 1968 caused extensive damage as a result. The 'Swine Flu' that was first reported in Mexico in 2009 raised concerns about a possible pandemic (Baumgartner et al., 2009). The widespread effects of the epidemic appear to be incredibly difficult to control. The HIV/AIDS virus, which was discovered for the first time in the Democratic Republic of the Congo in 1976, was also shown to be extremely dangerous to human life and has been responsible for considerable morbidity up to this point. The most recent Corona Virus, or Covid-19, was discovered in Wuhan, China in December of 2019 and has since spread quickly around the entire world while producing a high rate of fatality. According to the World Health Organization (WHO), corona virus is the largest family of viruses which cause illness both in humans and animals. This virus causes several respiratory infections such as Middle East Respiratory Syndrome (MERS), a common cold to a more severe illness, the Severe Acute Respiratory Syndrome (SARS).The most recent one is COVID-19.

Globally, the healthcare sector is expanding incredibly quickly. While healthcare costs and malpractice are rising quickly, patients continue to worry about the standard of care and the effectiveness of their therapies. In light of this, patients and healthcare professionals emphasize available service options and favor a secure, hygienic, and comfortable atmosphere.

Although significant efforts have been made to identify the problem dimensions, they appear to be dispersed and limited to a small number of dimensions, which causes effort overlap and a lack of innovation. It is imperative that we take a thorough approach by creating a conceptual framework on contemporary approaches to service quality and significant issues.

RESEARCH OBJECTIVES

The current study is an effort to develop competency in public health organizations and proposes a conceptual framework that could serve as a guiding mechanism in providing health services. It also emphasizes the importance of service quality factors, such as tangibility, reliability, assurance, responsiveness, and empathy in the context of incident profiling, resolving stakeholders' problems, use of information technology in healthcare delivery, and adoption of strategic plans to deter different diseases and health hazards must be addressed by public health organizations. While many of these risks are of a normal nature, some may be related to pandemics or infectious disease outbreaks and require an emergency response. The proposed research will lay out the road map for improved public health preparation and response in the future (with the use of a thorough conceptual framework).

It becomes relevant now to address these issues for timely improvement in service mechanism & curbing the loss of human life further arising from such pandemics. The present study proposes a conceptual framework on modern approaches towards Service Gaps Identification & emerging challenges in Public Health Response with the help of exploratory research.

It would also be interesting to examine the role of healthcare information system in quality of service delivery & response mechanism.

2. MAJOR RESEARCH WORKS REVIEWED

Recent research encompassing different SERVQUAL Model features in healthcare services of Saudi Arabia, Iran, South Korea, Malaysia, Turkey, and India have been attempted. With the aid of 258 inpatients and the SERVQUAL Model, Alumaranet et al. (2020) aimed to compare the service quality of private and public hospitals in Saudi Arabia. Regarding SERVQUAL aspects, patients express satisfaction. Madhura & Iyer (2018) make an effort to comprehend the function of information systems in the provision of healthcare services. Healthcare information systems have been used by the majority of healthcare service providers. SERVQUAL model is used to retrieve the gap score. In South Korea, Don Hee and Kim (2017) assessed the effects of the HEALTHQUAL assessment items. When Jennifer et al. (2013) tried to survey health departments regarding their knowledge of acute public health crises, they were unsuccessful. The study offers insightful information on how systems might adapt to the types of dangers that arise when functions are activated. Fan et al. (2017) recognize the importance of the doctor-patient connection in society and make an attempt to quantify the service gap in order to improve healthcare quality. Lesley & Koubek (2008) seek to change the service quality measuring tool. Chingang & Lukong (2010) focuses on applicability of SERVQUAL model & evaluates satisfaction level of service users. Zohreh & Tabaraie (2013) identify huge service gap on responsiveness, empathy and assurance dimensions in a study on use of SERVQUAL model on health services in Iran. Saeedet. al (2018) find all dimensions of SERVQUAL model negative in another study on health services in Iran. Oguz & Dilaver (2011) evaluated service quality of hospitals in Turkey. Dinesh & Malviya (2012) find positive impact of service quality dimensions on patients. Subchat (2013) examine the service quality of healthcare in Nongkhai and finds the overall service quality as perceived most important among all 5 dimensions of SERVQUAL model. Rafatet. al. (2016) found a significant gap between significance & performance in 5 dimensions with reliability & assurance having highest service gap. Linimol and Chandrachoodan (2016) investigate the service quality for healthcare settings in Saudi Arabia & conclude that this model enables the service users to seek variety in better way. Mohsin & Run (2010) test the SERVQUAL model scale for measuring Malaysian private health service quality & find negative service quality gap. Scale development analysis produced useful insights, which can be used in wider healthcare policy and practice. SERVUSE is added and cross sectional survey is conducted to track the gap scores with modified model. Nooredin (2018) attempts to measure service gap for dental services in Iran using SERVQUAL. Donaldson (1999) prescribes the inclusion of documentation for quality improvement, inspection & audits, rights to patients, reporting on healthcare services etc. for improvement in service quality.

Strategic Planning for Response and Service Quality

During the 2009 pandemic, the healthcare system was under a heavy pressure. The majority of the population was exposed to the H1N1 influenza virus due to its rapid dissemination. The medical institution was overburdened by the rising number of patients and the population's rising vulnerability to the virus. Many nations lacked pandemic strategies, or if they did, the plans were poorly carried out. Other health service problems that undermine the health service include improper resource use, difficulty building capacity, and poor central coordination (Fisher et al., 2011). The majority of US hospitals lack sufficient medical supplies and isolation facilities, even for a modest response. The authority did, however, provide funding to assist hospitals that would enable the health system to effectively handle bioterrorism and emergency situations (Cook & Cohen, 2008). As a result of the increased risk of pandemic outbreaks, the quality of health care in post-conflict or conflict zones is vulnerable. Conflicts also result in poor quality and ineffective health services (Bedford et al., 2019).

Good governance, appropriate standards, motivation, and responsibility are key aspects that contribute to the improvement of health care and result in high quality services. Without these components, health services would inevitably result in subpar performance, bad administration, and corruption. The

researcher went on to say that by enhancing governance, health services' management procedures would be improved, which might boost their effectiveness and raise their overall performance.

The AH5N1 influenza has drawn attention from previous pandemics like the swine flu due to its potential to spread globally in the future. To increase resource efficiency, minimize potential mortality, and improve resource usage, proper planning is required. The creation of a pandemic preparedness strategy requires a well-coordinated effort. "Objectives, structure of incident management; surveillance; communication; mitigation measures; maintenance of essential services; agenda for gaps in knowledge; and review, testing, and revision of plans" are among the components of an effective pandemic strategy, according to Azziz et al. (2009). Problems of Stakeholders

The most pressing issues for medical service providers and researchers are the development of effective vaccines and potential treatments for pandemics. A sufficient healthcare infrastructure is needed for the introduction of the vaccination. The first task for the government, local authorities, and foreign organizations is to decide how much vaccine to allocate and to take the lead in the procurement process. Another problem that occurs with vaccine supply and logistics during a pandemic is working with government authorities to streamline some processes for batch release, labeling, and eliminating certain rigidities to hasten vaccine distribution. Along with all of the aforementioned important difficulties, vaccine storage and transportation are also significant issues. (Luc Hessel and the Influenza Working Group of the European Vaccine Manufacturers (EVM), 2009). Another problem is hospital healthcare and support staff, who run a significant chance of contracting epidemic infections if appropriately unequipped and not given the tools they need. The most dangerous place to work is a hospital. First-line healthcare facility employees, such as the nursing staff, are particularly vulnerable to lost-time accidents. According to a 2006 study by the Study Safety and Health Administration Survey, hospital staff members are at risk for contracting a variety of illnesses from infections, contact pathogens, allergies, as well as from violence and work-related stress. Numerous areas of our planet's living environment have been impacted by pandemics, both directly and indirectly. These effects could not only apply to one sector but rather to a number of them. It is important to investigate a number of topics related to COVID-19's effects on food, socioeconomic status, consumer buying, and the demand side effect. The current food shortage caused by a pandemic's high demand for food would significantly disrupt agricultural output, and these demand-side dynamics would lead to significant changes in the food market (Cranfield, 2020). The best recommendations that are always made by medical professionals and have been shown to be the best to protect and prevent diseases from further spreading are to stay inside, practice good hygiene, social seclusion, ban travel, place a lot of screens in areas that are highly exposed to the disease, maintain a prolonged curfew, and many other measures that need to be taken. The use of artificial intelligence and autonomous systems, in addition to smart wearables, has a vital role in the healthcare services as this would reduce the possibility of virus transmission and assist healthcare workers, patients, and medical professionals in the challenging time of the pandemic. However, the role of technology should not be ignored during the pandemic.

Incident Profiling

The Spanish Influenza pandemic of 1918–1919, which claimed more than 50 million lives worldwide, is regarded as the mother of all pandemics in recorded history. This influenza had left a great deal of unresolved issues, presented the public health with the toughest obstacles, and cast doubt on the importance of public health. In-depth historical investigation, meticulous inspection, and experimental work are all necessary to learn the truth about the 1918 epidemic (Taubenberger & Morens, 2006). There are significant distinctions between occurrences brought on by natural catastrophe and pandemic when dealing with huge casualties. Pandemic fatalities need separate preparation, and catastrophe deaths also demand separate planning. A single organization should organize and carry out the preparation appropriately for both sorts of crises (Scanlon & McMahon, 2011). The reported numbers of fatalities brought on by various viruses vary widely. First, virological monitoring, which lacks a uniform reporting mechanism, is how the information about the virus is obtained for the fatalities reportedly brought on by A H1N1 influenza in 2009 in various nations.

Review and Implications

Throughout history, epidemics have occurred regularly. Numerous research have been done and are currently being done to determine why certain pandemics occur. And why is there not a treatment for eliminating the underlying illness that causes these pandemic diseases? And there are also a ton of additional concerns in the area of public health management that need to be addressed. Therefore, according to certain studies, more thorough trials and ongoing research are required to provide fresh findings. Naturally, pandemics always result in fatalities; mass fatalities have occurred before, and the current new corona virus has also resulted in a sizable number of fatalities that is currently rising globally. As a result, dealing with mass casualties is a challenging problem for the authorities. There should be a distinction made between the mass fatalities that result from disasters and the mass fatalities that are caused by pandemics; in this case, the pandemic deaths should be handled separately due to the potential risks that they pose to other people, which the authorities must take care to avoid. Due of the recent Covid-19 phenomenon, several nations have created excellent procedures for treating these fatalities. The pandemic dead have occupied even a distinct area in several nations.

The research indicated that certain nations lack an ideal standardized system for the statistical record of patients, which is also a crucial component in the management of public health. This was another problem in the public response to the epidemic.

Pandemics have historically presented significant difficulties to several parties. The government of any nation is the first major player to be discussed in this. Today's developed nations have faced a number of difficulties, and the developing nations are always in need of assistance from the developed nations, particularly during natural disasters and pandemics. The provision of vaccines, medications, and medical supplies to citizens of any nation is a key problem for preserving human life. Due to many restrictions and a lack of resources during the epidemic, even wealthy nations struggled to provide the necessary tools or medications for their citizens in a timely manner. The fundamental issue was the lack of tools, vaccines, or medications for pandemic management, which led to serious issues. Other studies contend that in order for nations to survive during pandemics, they should manufacture, purchase, or contribute the necessary supplies.

An additional tool in the battle against pandemics is information technology. According to recent research, information technology has played a significant role in assisting healthcare professionals worldwide during pandemics, perhaps lowering the danger of an epidemic and preventing it altogether. This demonstrates how much information technology may aid in the management of public health in the future. With the active deployment of information technology, the goals of reskilling, upskilling, and improving management competence in public health care organizations may be effectively accomplished.

According to information from previous pandemics, a strategic strategy is required to combat a pandemic. Another major contributing reason to the low quality of services is the absence of a pandemic strategy. Second, it is important to take into consideration the appropriate usage of resources and the development of capacity during a pandemic. Maintaining high-quality services is every country's primary goal, but owing to conflict and violence, it might be difficult to do so. This is where the biggest pandemic concern may occur. The public health authority should make great efforts to continue providing service in these locations. Another essential component of public health services that might result in high quality healthcare is good governance and appropriate standards.

3. THEORY FRAMEWORK

The present study is an effort towards competency building in Public Health Organizations and proposes conceptual framework that may act as guiding mechanism in rendering health services and highlights the significance of service quality aspects namely; tangibility, reliability, assurance, responsiveness and empathy in context of incident profiling, resolving stakeholders' problems, use of information technology in healthcare delivery and adoption of strategic plan to deal with such pandemics.

The theoretical framework shows that providing hospitals with proper medical equipment and medical supply such as personal protection kits (PPE), enough inventory of medicine, proper utilization of the current capacity and sources of hospital during pandemics, and the information technology, such as wearable and use of high technology will help in preventing the transmission of diseases. Intangible efforts such as prompt response to cases such as mass screening, and defining micro containment zones will play a key role. Experience of past response to pandemic can also be a great tool for handling of pandemic. The attitude of healthcare worker also can influence the health care service like these personal care is important. On

the other hand, the government plays a key role in handling rules and restrictions, can prevent the spread of disease and as pandemics, as overall the government helps in facilitating the mediating factor, can help to reduce the number of cases and healthcare organization in procurement of medical supply and indirectly can help the health service. Equipment. Furthermore, the government by implementing

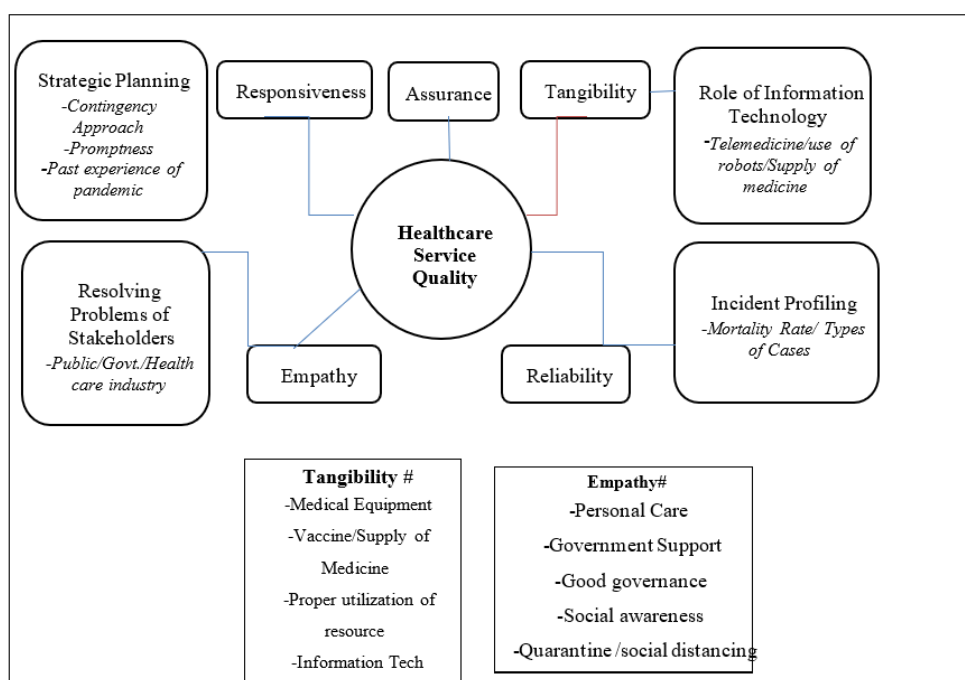


Fig. 1. Theoretical Framework on Public Healthcare Management during Pandemics

4. CONCLUSION

A pandemic has a significant impact on many different areas of a nation, thus it must be appropriately managed. Planning for pandemic preparedness in advance, excellent governance, adhering to the right standards, providing incentives, and wise resource management are signs of a good strategic plan

and will be seen as a good reaction to any pandemic. Information technology is currently essential for reskilling, up skilling, and increasing managerial competencies in public health organizations. It will also be useful for predicting and containing any upcoming pandemics.

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