

# A Holistic-Comprehensive Approach: Best Practices to Improve Health Policy for COVID-19 Pandemic

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## Abstract

The COVID-19 pandemic affects entire communities and causes a huge impact on all life aspects which include biological, psychological, social, and spiritual well-being. Health systems and health policies are promising developments and opportunities to review progress and accelerate interventions in COVID-19 control. Studies devoted to core holistic-comprehensive issues surrounding this pandemic are limited. Therefore, this article aimed to review several best practice studies that reflect holistic-comprehensive approaches to COVID-19. A comprehensive literature review was written based on 15 articles from the data sources which are Google Scholar, Science Direct, ProQuest Health, and Medical Complete, and ProQuest Science Journals from 2010 to 2020, searched terms related to holistic, comprehensive, outbreak, pandemic, epidemics, and COVID-19. There are many evidence-based practices on safe and effective strategies to improve all aspects of well-being before, during, and after the COVID-19 pandemic. Among these promising strategies, a holistic-comprehensive approach could also be considered as a necessary action to improve health policy during the pandemic. A holistic-comprehensive approach involved providing bio-psycho-socio-spiritual care and offered a continuum of healthcare that provides promotive, preventive, curative, and rehabilitative services. A holistic-comprehensive approach to the COVID-19 pandemic requires a sustained commitment from entire communities, stakeholders, and policymakers to achieve better health outcomes for all.

**Keywords:** Coronavirus, health policy, holistic-comprehensive, pandemic

## Introduction

The current coronavirus disease 2019 (COVID-19) pandemic in many countries is expected to diminish over the coming months. This pandemic situation also affects entire communities and causes a huge impact on all life aspects which include biological, psychological, social, and spiritual well-being. Health systems and health policies are promising developments and opportunities to review progress and accelerate interventions in COVID-19 control.

The best practices and guidelines shared throughout the world demonstrate that several interventions to control this infectious disease are possible. There are many evidence-based practices on safe and effective strategies to improve all aspects of well-being before, during, and after the COVID-19 pandemic. Among these promising strategies, a holistic-comprehensive approach could also be considered as a necessary action to improve health policy during the pandemic. A holistic-comprehensive approach involved the provision of bio-psycho-socio-spi-

ritual care and offered a continuum of health care: promotive, preventive, curative, and rehabilitative services.<sup>1,2</sup>

A holistic-comprehensive approach is intended to address the challenges of bringing healthcare services in more direct and comprehensive care during the pandemic. Assessment of all potential determinant factors that influence health status in individuals, families, and communities should be addressed.<sup>3,4</sup> Studies demonstrated factors related to the outcomes of COVID-19, including the immune responses, age, sufficient treatment, and socioeconomic factors. Recent estimates suggest that social and economic change contributed to the rapid spread of COVID-19 pandemic, for instance, social and demographic characteristics, public health infrastructure, health statistics, economic development, and environmental quality.<sup>5-7</sup> The culture of society also influenced the psychological response to the pandemic and their willingness to manage mental health issues.<sup>8</sup> Hence, it is important to understand the individual as a whole person

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not just as a patient or diagnosis.

A holistic perspective in health policy means that addressing health determinant factors at all levels is important to organize and develop goal-directed comprehensive interventions for COVID-19. There were five main elements in holistic policy: (1) considering the whole individuals and the interactions between the social systems, (2) comprehensive understanding of other risk factors related to health, such as psychology, culture and socio-economic status, (3) developing community partnerships, creating reciprocal relationships and establishing open communication, (4) increasing collaborative practice for health promotion, and (5) improving sustainability in health systems and healthcare.<sup>9</sup>

A previous study investigated the benefits of using holistic health management during the Ebola outbreak in West Africa. They found that health systems should include efforts to incorporate cultural beliefs and practices when determining strategies during an outbreak. The findings revealed that a holistic approach for comprehensive care is needed to address the challenges of emerging infectious diseases.<sup>10</sup> Studies devoted to core holistic-comprehensive issues surrounding this pandemic are limited. Therefore, this article aim to review several best practice studies that reflect holistic-comprehensive approaches to COVID-19.

## Method

A comprehensive literature review was performed to retrieve recent articles addressing holistic-comprehensive approaches related to COVID-19 treatment. Although there is no standardized consensus on this type of literature review, we have tried to critically evaluate articles and provide suggestions for future research by using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram. This study was written based on 15 articles from the data sources that were Google Scholar, Science Direct, ProQuest Health, and Medical Complete, and ProQuest Science Journals from 2010 to 2020, searched terms related to holistic, comprehensive, outbreak, pandemic, epidemics, and COVID-19. In addition to this, all articles were then screened to determine their relevance.

Articles meeting these criteria were included if articles were peer-reviewed, using the English language between 2010 and 2020, presented empirical studies related to COVID-19 (quantitative and qualitative), and investigated holistic-comprehensive approaches to pandemic, outbreak, and epidemic.

A total of 50 articles were retrieved and then screened based on inclusionary criteria (Figure 1). Of this number, the study revealed 20 articles that met the inclusionary and exclusionary criteria. The study which had incomplete information was automatically excluded. Significant

articles were selected and only 15 articles obtained to be reviewed (Table 1). Relevant policy related to COVID-19 was identified by reviewing selected articles, and reports related to best practices to implement a holistic-comprehensive approach. Best practices research aimed to describe any practices as alternatives to improve the management by implementing strategies that are more successful in the relevant fields.<sup>11</sup>

Any relevant articles presenting evidence (whether primary or secondary) on holistic-comprehensive approaches were also included in the analysis. Additionally, this study was complemented by grey literature reviews from newspapers' reports, government websites with regards to rules and regulations, and current situation updates on COVID-19. We describe best practices studies that reflect holistic-comprehensive approaches to COVID-19 based on the Centers for Disease Control and Prevention (CDC) before, during, and after the pandemic.

## Results

Table 1 describe best practices studies that reflect holistic-comprehensive approaches to COVID-19 based on CDC before, during, and after the pandemic. Any rele-

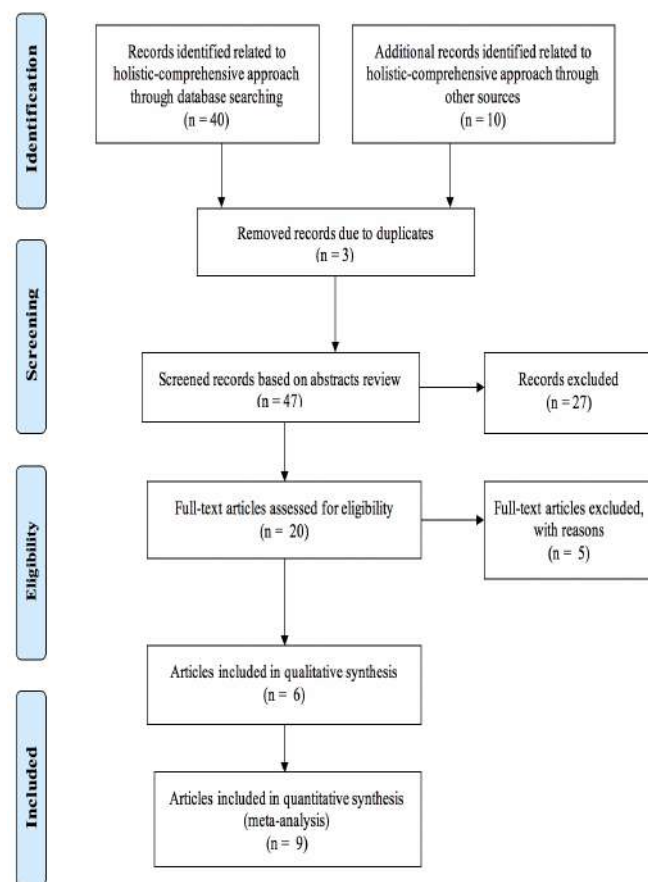


Figure 1. PRISMA Flow Diagram of the Articles Selection Process

Table 1. Literature Review

Study	Reference (Year)	Study Design	Result
1	Saha, <i>et al.</i> , <sup>19</sup> (2018)	Retrospective surveillance	Epidemiology characteristics may affect the interpretation of disease burden
2	Shen, <i>et al.</i> , <sup>27</sup> (2015)	Mathematical model	Patient isolation may not always have a contribution in controlling disease transmission
3	Pan, <i>et al.</i> , <sup>35</sup> (2020)	Cohort study	Public health strategies improved COVID-19 management
4	Njuguna, <i>et al.</i> , <sup>21</sup> (2019)	Surveillance	An integrated surveillance system to help recover from Ebola crisis
5	Arslantas, <i>et al.</i> , <sup>31</sup> (2019)	Modeling a holistic framework	Hazard exposure, vulnerability, poor coping skills, socio-economic factors increased disease risk
6	Abdulkareem, <i>et al.</i> , <sup>32</sup> (2020)	Modeling intelligent learning	Social learning was affected by social and cultural norms
7	Kinsman, <i>et al.</i> , <sup>23</sup> (2018)	Case study	Preparedness and response plans during an epidemic
8	Afayo, <i>et al.</i> , <sup>24</sup> (2019)	Cross-sectional study	The gap between preparedness and response to the outbreak
9	Craig, <i>et al.</i> , <sup>20</sup> (2018)	Surveillance	The surveillance system is a priority during the outbreak
10	Sepers, <i>et al.</i> , <sup>34</sup> (2018)	Participatory study	Needs a comprehensive monitoring and evaluation system
11	Alonge, <i>et al.</i> , <sup>18</sup> (2019)	Interviews with stakeholders	Leadership, social bonding, trusted information, social trust affected community resilience during the outbreak
12	Rabelo, <i>et al.</i> , <sup>28</sup> (2016)	Focus group discussions	Feeling worried, lack of respect, motivation, hope, isolated
13	Siu, <i>et al.</i> , <sup>30</sup> (2016)	Phenomenology	Sociocultural factors using personal protective equipment
14	Respati, <i>et al.</i> , <sup>14</sup> (2018)	Focus group discussion	Eco-health model: prevention, community engagement, environment, and climate
15	Loignon, <i>et al.</i> , <sup>17</sup> (2018)	In-depth semi-structured interviews	Barriers in supportive care: lack of resources, restricted to deliver supportive care, poor coordination

vant articles presenting evidence (whether primary or secondary) on holistic-comprehensive approaches were also included in the analysis. Additionally, this study was complemented by grey literature reviews from newspapers' reports, government website with regards to rules and regulations, and current situation updates on COVID-19.

## Discussion

### A holistic-comprehensive of care

COVID-19 can be well managed through holistic planning using a multi-sectoral and comprehensive approach — “Detect, Develop, Deliver”. In China, researchers detected the genome sequence of COVID-19, and this investigation was then reported to the WHO, allowing all researchers in the world to develop the vaccines. Developing COVID-19 treatment needs a multi-sectoral approach to help with financial budgeting. Additionally, the government should support social and economic changes as the impact of lockdown and work-from-home policy. In response to COVID-19, the Government of Singapore provided \$ 55 million as financial support for 40,000 drivers.<sup>12</sup> In Indonesia, the government took immediate action to assist Indonesian civil society through Family Hope Program (IDR 37.4 trillion), Social Assistance for Staple Food (IDR 2.2 trillion), Village Fund (IDR 21 trillion), Cash Labor-Intensive Program (IDR 16.9 trillion), and Pre-Employment Card Program (IDR 360 billion).<sup>13</sup>

A comprehensive system of care delivery is needed, so people can have access to the continuum of care.

Engaging communities to support and comply with the health policy is needed to achieve sustainability of program.<sup>14</sup> Strengthening public health infrastructure and social networks is essential during the pandemic. Learning from Wuhan is important as they can build 27 hospitals and engage 2,000 workers to prepare for the other two hospitals for treating COVID-19 patients.<sup>12</sup> In Indonesia, almost all the hospitals could deliver appropriate treatment for COVID-19 patients, from conducting a rapid test to comprehensive treatment for COVID-19.<sup>15</sup>

### Best practices to implement a holistic-comprehensive approach

In this study, we described best practices based on a comprehensive literature review to describe and synthesize with regards to holistic-comprehensive approaches related to COVID-19 treatment developed by researchers and clinicians. A holistic-comprehensive approach as best practices to improve health policy for the COVID-19 pandemic was developed and modified according to the CDC, which designed best practices for health professionals to properly respond before, during, and after COVID-19 state of emergency (Table 2). Non-pharmacological approaches were recommended as key messages and actions to address the COVID-19.<sup>16</sup>

As the COVID-19 response begins and ends at the local level, therefore, in the preparedness phase, comprehensive community planning should focus on improving health systems and services, including communications across all levels: leaders, stakeholders, and wider communities. Six components should be taken before prepar-

Table 2. Best Practices to Implement a Holistic-Comprehensive Approach during the COVID-19 Pandemic

Period of Pandemic	Best Practices to Implement a Holistic-Comprehensive Approach
Before	Develop community resilience and recovery after the outbreak. Improve coordination of care and connecting individuals with community resources. Manage available resources to keep people informed during the outbreak. Coordinate the supply of essential medicines. Increase emergency referral centers during the pandemic. Evaluate public health surveillance for emerging threats.
During	Ensure effective communication with the local community. Take appropriate measures to ensure immediate relief and support being given. Coordinate emergency resources to support bio-psycho-socio-spiritual needs. Develop health policy addressing stigma and mental health issues.
After	Evaluate the strategies used to control the outbreak. Facilitate healthy behavior change. Build partnerships with stakeholders to strengthen community capacity and skills.

ing emergency plans: (1) developing community resilience and recovery after the outbreak, (2) improving coordination of care and connecting individuals with community resources as a strategic transformation for better healthcare, (3) managing available resources to keep people informed during the outbreak, (4) coordinating supply of essential medicines, (5) increasing emergency referral centers during the pandemic, and (6) evaluating public health surveillance for emerging threats.<sup>16,17</sup> To achieve a holistic-comprehensive goal of community planning, thus discussions among the local government and stakeholders are needed in the first weeks of the pandemic.<sup>18</sup>

A holistic-comprehensive surveillance system helps health professionals and policymakers to better understand the pandemic disease and develop public health policy for preventing the spread of infectious disease and promoting health behaviors. Information on the COVID-19 collected should include sufficient information on the current state of pandemic disease and the epidemiology of the infectious disease. In a comprehensive surveillance plan, it is also important to identify key populations at increased risk of infectious disease, establish opportunities to manage pandemic, and identify the allocation of resources in the local community as low-income communities were disproportionately affected by the disease.<sup>19,20</sup>

Lesson learned from the cases of Ebola, they built integrated surveillance health systems to strengthen their public health infrastructure, improved early warning systems, increased the capacity of health professionals, pro-

vided adequate support and feedback during and after the implementation of programs.<sup>21</sup> The development of comprehensive planning presumably takes process, and it certainly needs support from whole societies for a successful program.

Before the COVID-19 crisis, there were six main components to consider while developing comprehensive approach: (1) responsive key leaders, (2) multi-sector partnerships and collaboration, (3) comprehensive health surveillance, (4) health education campaigns, (5) health policy to support treatment, and (6) strategies to reduce harm and prevent further crisis.<sup>22</sup> These key important factors can also be used to develop a holistic-comprehensive health policy to achieving sustainable development goals.

Strengthening pandemic readiness and response to COVID-19 is the key to successful health outcomes. A fast and effective response can delay a local outbreak from becoming a global threat. Before the pandemic, health professionals can work together and create collaboration with the government, civil society, stakeholders, and policymakers to develop community resilience and recovery after the outbreak. We can prepare a program that could strengthen the community, how to respond to COVID-19 issues, and build social networks to support during the crisis. We can improve the coordination of care and connect individuals with community resources. We can manage available resources, such as social media, the internet, and local newspapers to provide trusted information and keep people informed during the outbreak. Coordinating the supply of essential medicines and emergency referral centers is also important as this is the fundamental aspect of care. Public health surveillance for emerging threats is needed to inform disease transmission and prepare for prevention and promotion interventions related to the COVID-19.<sup>23,24</sup>

Pandemic readiness enables the community to respond effectively to the disease and prepare for future disease outbreak. Well-trained health professionals play a critical role in improving health management and optimizing coordination during the outbreak. Creating effective communication plans was also the key to avoiding false information related to the disease. Further, comprehensive planning in the readiness phase should include resource mobilization, health facilities, and case management for controlling a disease outbreak.<sup>25</sup>

During the outbreak, effective communication is needed between the local community, leaders, stakeholders, and policymakers. World Health Organization (WHO) and CDC have developed basic principles for risk communication and the need to maintain public trust throughout an outbreak. Therefore, health communicators and policymakers should understand the complexities of the pandemic situation and make strategic re-



sponse plans to the affected populations.<sup>26</sup> Also, the local community can take appropriate measures to respond to such pandemic and ensure immediate relief and support being given. They can also coordinate emergency resources to support bio-psycho-socio-spiritual needs at a local level.

One of the medical treatments for COVID-19 patients is patient isolation. Isolation precautions are commonly used for patients who are either known or suspected to have a COVID-19. However, a study on the Ebola outbreak investigated that isolation was not always effective in preventing the transmission of infectious disease. Comprehensive treatment was recognized as determining factors in controlling such disease.<sup>27</sup>

As the impact of the pandemic, people may experience psychological symptoms such as fear, anxiety, and grief leads to prejudices against people in the community and stigma.<sup>28</sup> The stigma associated with COVID-19 is also known as xenophobia, the fears about COVID-19. Stigma was identified as a factor causing inequities in health services and creating a global burden of disease. The fears of COVID-19 are contagious, and it spreads through daily conversations about the pandemic situation. Public mental health systems can be improved if policies to address these issues were put in place.<sup>29</sup> Therefore, in developing health policy, stigma, and mental health issues as the impact of COVID-19 should be well-addressed. Further, the culture of society affects the psychological response to the pandemic and their willingness to comply with the health policy.<sup>8</sup> Authors strongly encourage the entire society to support mental health during the crisis. On the other hand, social, economic and cultural factors were determinants of health status during pandemic.<sup>30-32</sup> In addition to this, WHO provided specific guidance for communities, leaders, health communicators, and mass media to address mental health issues including stigma related to COVID-19.<sup>33</sup>

After the current pandemic, it is crucial to evaluate strategies used to control the outbreak through comprehensive monitoring and evaluation system.<sup>34</sup> Health professionals can facilitate changes for healthy behavior by providing the most accurate information through all media sources. The local community can also build partnerships with stakeholders to strengthen the community's capacity and skills for COVID-19. A study in Wuhan showed an improvement when they combined pharmacological treatment and community participation in responding to COVID-19. This study provided a relevant topic with regards to comprehensive approach when dealing with the COVID-19. Several public health strategies were used to combat the disease, even though there was no proven drug or vaccine for COVID-19. It was recommended to improve health policy to influence decision-makers to control the COVID-19 outbreak.<sup>35</sup>

Authors can learn from Wuhan and Ebola cases that comprehensive interventions require all health professionals to collaborate and demonstrate their valuable expertise in disease management.

## Conclusion

Being physically and mentally healthy during the COVID-19 pandemic is important as it helps us to achieve a state of good health. Strengthening pandemic readiness and response to COVID-19, enhancing communication, recognizing and treating physical and psychological needs are keys to success when dealing with the COVID-19. In conclusion, a holistic-comprehensive approach to the COVID-19 pandemic requires a sustained commitment from entire communities, stakeholders, and policymakers to develop programs and multi-stakeholder cooperation to achieve better health outcomes for all.

## Abbreviations

COVID-19: Coronavirus Disease 2019; PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses; CDC: Centers for Disease Control and Prevention; WHO: World Health Organization.

## Ethics Approval and Consent to Participate

Not Applicable

## Competing Interest

The authors declare that they have no conflict of interest to disclose.

## Availability of Data and Materials

The authors confirm that the data supporting the findings of this study are available within the article.

## Authors' Contribution

All authors contributed equally to the work presented in this paper.

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