

Best Practice For The Management To Stop The Pandemic Of Corona Virus Disease 2019 (COVID-19) in Thailand

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Abstract

The pandemic of coronavirus disease 2019 (COVID-19) in Thailand, there has been an epidemic throughout the country. In the period after April until in the end of August 2021, there were more than twenty thousand infected people per day. Therefore, the state has taken various measures to solve such problems. This was able to successfully resolve the issue, however, it is still a problem that needs to be resolved. Thailand has been successful in stopping the spread of COVID-19 splendidly. The reports showed that, Thailand has recovered from COVID-19 at the best out of 184 countries, with Thailand having a score of 82.06 on the Global COVID-19 Index (GCI). Therefore, the research aimed to study on measures and operations during the COVID-19 pandemic in Thailand and to find the best practices to stop the COVID-19 pandemic in Thailand. The qualitative approach was employed. The in-depth interview was conducted with 10 key informants. The findings 1) Cooperation from the people to strictly act in order to protect themselves from the COVID-19 virus. 2) Establishment of the Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus 2019 (COVID-19), which was a centralized administration that can integrate orders, policies and laws for flexibility in management. 3) The lessons learned in dealing with both SARS and H5N1 epidemics, so that health care workers and health professionals were able to continue to learn and develop to cope with emerging diseases. 4) Preparation of field hospitals, establishing Community Isolation (CI) and Home Isolation (HI) in a systematic way to efficiently refer patients. 5) The Village Health Volunteer System (VHV) was an important mechanism for public health in Thailand to access insights in each area. Moreover, there had the surveillances of new clusters.

Introduction

On January 8, 2020, China reported that the novel coronavirus detected in pneumonia patient sample (Zhou, et al, 2020). On the same day, the Republic of Korea found a suspected case of the pneumonia caused by the coronavirus who pending laboratory results and followed up on symptoms of the 29 contacts (Lim, et al, 2020). In addition, in Hong Kong found 54 travelers from Wuhan showed symptoms of possible infection (Law, 2020). Incident found that, the 37 patients had infections such as Influenza A, Human. Rhinovirus/Enterovirus, Respiratory Syncytial Virus (RSV), Parainfluenza, RSV/Coronavirus 229E, Human metapneumovirus, etc. (Emergency Operations Center Department of Disease Control) (Groves, et al, 2021).

As a result, the government of Thailand by the Department Disease control had conducted surveillance and screening of the aircraft passengers on the route that flies directly from Wuhan, China at Suvarnabhumi Airport, Don Mueang Airport Chiang Mai Airport and Phuket Airport. Thai's government has taken the following measures 1) Coordinate with the Chinese Embassy for cooperation to be a medium for the health care of Chinese travelers. 2) Disseminate a manual on surveillance and disease investigation in the case of suspected pneumonia patients from corona virus new species as well as informing the channels for referring patients and suspected patients' pneumonia caused by the novel coronavirus 3) Disseminate information about suspected pneumonia caused by the novel coronavirus to the medical personnel and the public health staffs 4) Closely monitor the situation in foreign countries 5) Conduct surveillance and referral of the PUI patients from the communicable disease control international checkpoint to a designated hospital 6) Survey the availability of the Negative Pressure Room, pharmaceutical and non-pharmaceutical supplies. 7) Creating a team to monitor the situation of the implementing various measures to prevent outbreaks closely (Triukose, et al, 2021).

Although various measures have been taken in the prevention of the outbreaks, there were more outbreaks during the third and fourth rounds of the epidemic after April 2021 until the cumulative number of cases

exceeded a million by the end of August 2021. Moreover, the number of the infections increasing by a day more than twenty thousand (Intapan, et al, 2021). However, the implementation of the above measures, this makes Thailand able to stop the pandemic of coronavirus disease 2019 (COVID-19) in Thailand very well. It can be said that, the result of the successful operation was no infection found from the domestic epidemic for more than two months (Malathum and Malathum, 2020). The new infected people came from abroad who were quarantined in state quarantine. Therefore, the government had taken action to easing measures. The indulgent phases were divided periodically for the different sectors, especially the business sector (Wetchayont, 2021). The Global COVID-19 Index (GCI) indexing report shows that, Thailand was recovering from COVID-19 at the best from a total of the 184 countries, with Thailand having a score of 82.06 (Oxford Policy Management, 2020). This showing action and effective management which can be considered as best practice (Khan, et al., 2018). Therefore, the lessons were removed to conduct a detailed study of the operation from 10 January 2020 to the present to be a good example in action by conducting a study from the medical personnel and the public health staffs. To summarize, it was best practice to take action to stop the spread of COVID-19 in Thailand successfully.

Most of the previous papers focused on many areas in this issue, for example, the first one, Lin and other author's studies in the title of "A conceptual model for the coronavirus disease 2019 (COVID-19) outbreak in Wuhan, China with individual reaction and governmental action". The article aimed to propose conceptual models for the COVID-19 outbreak in Wuhan with the consideration of individual behavioral reaction and governmental actions (Lin, et al, 2020). The second one, Marome and Shaw studied in the title of "COVID-19 Response in Thailand and Its Implications on Future Preparedness". The objective of this study was to analyse the health resources in the country and focuses on the response through community-level public health system and legislative measures. To draw some lessons on future preparedness, especially with respect to the four priorities of Sendai Framework for Disaster Risk Reduction, and puts some key learning for future preparedness (Marome and Shaw, 2021). The third one, Erkhembayar and other authors studied in the title of "Early policy actions and emergency response to the COVID-19 pandemic in Mongolia: experiences and challenges". The aim of this study was to examine the emergency preparedness experience, effectiveness, and challenges of the early outbreak policies on COVID-19 prevention in Mongolia, as well as any unintended consequences (Erkhembayar, et al, 2020). The last one, Yu and other authors studied in the title of "Observation on China's Strategies to Prevent the Resurgence of the COVID-19 Epidemic". This study presented the measures that can provide a reference point for the global public health system that is facing the pandemic (Yu, et al, 2020).

The current study attempts to fill this gap in the literature by focusing on firstly, the measures and actions in the pandemic of coronavirus disease 2019 (COVID-19) in Thailand in order to recognize the measures and actions of Thailand, and secondly, the best practices to stop the spread of the infected of coronavirus disease 2019 (COVID-19) in Thailand.

Research problem

Firstly, what are the measures and actions in the pandemic of coronavirus disease 2019 (COVID-19) in order to recognize the measures and actions of Thailand. Secondly, what are best practices to stop the spread of the infected of coronavirus disease 2019 (COVID-19) in Thailand.

Research hypothesis

Thailand recovering from Covid-19 The best out of 184 countries, with Thailand having a score of 82.06 on the Global COVID-19 Index (GCI), it can be inferred that, Thailand could be managing performing efficiency. Therefore, the transcription of lessons needs to be studied in detail in the daily operation from 10 January 2020 to the present, what details are being carried out to conduct studies from practitioners and a thorough investigation into the action, and then summarize and show the best practices of action to stop the spread of COVID-19 in Thailand.

Method

Design

This study was qualitative research. The data were collected by interviewing personnel in 2 groups: those with authority in national agencies and a group of related medical and multidisciplinary experts using the Cross Check Data process. Next, the content analysis and comparing was used with the recorded data from the situation report from the data record.

Participants

The sample was selected considering its relevance in terms of the criteria. In this regard, 10 informants who were 1) The persons having authority and duties in the national agencies, consisting of 5 people, consisting of

personnel working in the agency of the Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus 2019 (COVID-19) 1 person, the personnel working in an agency under the Ministry of Public Health at the national level during the corona virus epidemic situation 2 person, and personnel working In the national support agency in the operation during the coronavirus disease 2019 epidemic situation 2 people 2) The medical personal who are responsible for preventing or stopping the epidemic in the epidemic situation of the Covid-19 all total 3 people. 3) The multidisciplinary experts working on prevention or stopping the pandemic of coronavirus disease 2019 (COVID-19) 2 persons.

ParticipantsCriteria

The selection of qualitative research participants was based on the following criteria:

1. Persons with authority in national agencies

1.1 The doctor or the board of directors of the Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus 2019 (COVID-19) that operates until September 2021.

1.2 Physicians with executive positions in agencies under the Ministry of Public Health at the national level He is a worker during the epidemic situation of the Coronavirus Disease 2019 and is an executive of the Department of Communicable Disease Control and the Division of Epidemiology or as a representative working without being a retired person in the year 2021

1.3 Executive physicians in large field hospitals are SanamBusarakham Hospital or representatives working without being retired in the year 2021

2. Medical professionals who are responsible for preventing or stopping the spread of the novel coronavirus disease 2019 (Covid-19) on condition of consideration that it is necessary to be Senior Physician or Medical Lecturer and holds an administrative position in a large hospital. Ramathibodi Hospital Siriraj Hospital, or provincial public health physicians or representatives working without retirees in the year 2021 or provincial public health doctors must be provinces with the highest outbreaks or infections in Thailand

3. Multidisciplinary experts or other occupations who perform protective duties or suppressing the epidemic in the epidemic situation of the Coronavirus Disease 2019 (Covid-19) by having to be an operator as a head or supervisor of a national operating unit, such as executives of the Pharmaceutical Organization. Head of Nursing or in medical technology or pharmaceuticals in a large field hospital, SanamBusarakham Hospital

Process

a) It began with the Preparation of the letter requesting permission to collect key informant data by contacting and sending a letter requesting permission to the organization of the key informant directly. Next, Conduct interviews through online meeting programs such as WebEx, ZOOM or Microsoft Team to facilitate key informants. In the case of a research assistant or research team attending the hearing, name, surname, in order to inform the key informant. Next, the research instrument is a data record form and interview form were used.

b) Data Collection; The qualitative research which is the in-depth interview by using the purposive sampling to selected the key informant, focusing on Firstly, this research aims to study the measures and actions in the situation of the pandemic of coronavirus disease 2019 (COVID-19) in Thailand in order to recognize the measures and actions in the situation of the pandemic of coronavirus disease 2019 (COVID-19). Secondly, to find best practices to stop the spread of the infected of Coronavirus Disease 2019 (Covid-19) in Thailand by 1) knowing the significant problems in preventing and controlling the epidemic of Corona 2019 (Covid-19) in Thailand 2) the measures and actions that were the best practices and efficiency in the prevention and control of the pandemic of coronavirus disease 2019 (COVID-19) in Thailand. The research collected the data with the 10 key informants.

c) Data Screening and Analysis; The Collecting the data of the measures and the implementation of the situation of the pandemic of coronavirus disease 2019 (COVID-19) with the relevant agencies in Thailand, since the beginning of infection in Thailand since January 10, 2020. The summarize of the information on measures and actions in the pandemic of coronavirus disease 2019 (COVID-19) were taken daily by recording the changes situation of the measures and the implementation, including collecting data from interview transcripts of the 10 key informants, verifying the accuracy and reliability of the interview data by the following methods: 1) Compare the data that summarizes data on the measures and actions in the pandemic of coronavirus disease 2019 (COVID-19) were taken daily from the Department of Disease Control, Ministry of Public Health, the Covid-19 Situation Administration Center and the Administrative Center, Coronavirus Disease 2019 Epidemic Administrative Center, Ministry of the Interior 2) Verify data from interviews between two groups of personnel, namely the authorized groups in national agencies and a group of experts related medical and multidisciplinary with the cross check data process before content analysis and comparing with the data obtained from the daily situation reporting data record. The data analysis methods were as follows: analysis of information on measures and operations on the situation of the pandemic of coronavirus disease 2019 (COVID-19) of relevant agencies in Thailand by using the content analysis model and typology and taxonomy.

Results and Discussion

Firstly, this research aimed to study the measures and actions in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic in order to recognize the measures and actions in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic. It was found that the measures and actions in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic in Thailand could be divided into 4 phases as follow:

Phase 1: It was the emergence of a new epidemic, this causing people to panic because there is not much knowledge about the new diseases.

Phase 2: Chaos and confusion, this was caused by unclear management of the epidemic as well as confusion about information because it has a lot of fake news. Moreover, there had the group of people tried to taking advantage of the situation, such as hoarding goods that are protective equipment for protecting the corona virus, such as facial masks and medical rubber gloves.

Phase 3: Increasing of the knowledge about the epidemic situation. The government learned from situations occurring around the world and the people were knowledgeable about the ways to protect themselves. However, the government had a problem in balancing between the epidemic prevention measures by lockdown in some provinces or even close the country and the releasing of some measures to allow the economy to continue.

Phase 4: Living a new normal life which was the last phase of the epidemic situation. Nevertheless, there was a problem with the lack of rigor in personal protection measures. The government has learned and experienced from Phase 3, that allowing the government to formulate appropriate measures to balance the prevention of the spread of COVID-19 with the economic operation. Moreover, during this period, the governments had implemented vaccinations for the citizens, including ensuring that they are properly and adequately informed from the Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus 2019 (COVID-19) who obtain the information from WHO. The Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus 2019 (COVID-19) was established, which is a centralized administration, in order to offer the correct information to the Thai people. However, the methods of providing information are multidimensional. It can be said that controversy for political advantages inevitably causing operational problems.

Secondly, to find best practices to stop the spread of the infected of Coronavirus Disease 2019 (Covid-19) in Thailand by

1) Finding the significant problems in preventing and controlling the epidemic of Corona 2019 (Covid-19) in Thailand were as follow:

(1) The Communication problems and public relations, providing clear information and reliable affect the overall situation which will make people understand the situation and measure that the government uses to manage the situation of the Coronavirus Disease 2019 (Covid-19) epidemic. However, in reality the government agencies provide information that lacks of the unity. Therefore, it cannot be denied that communication problems and publicity has caused difficulties in implementing prevention and control of the epidemic in Thailand, such as the problem of hoarding of the COVID-19 protective equipment. Moreover, the confusion of information also affects trust and confidence in the operation of the government. The confusion of information arises from allowing the national media and social media to distort or provide inaccurate information, such as information transmission about side effects of vaccination causing misunderstandings and panic with the people.

(2) The lack of integration between government agencies which such problems caused by duplication in the performance of duties which affects the operation and resulted in conflicts between the Minister, the Permanent Secretary of the Ministry of Public Health and the medical personnel team. Therefore, the incident caused the people's credibility to the government agencies to decrease. and affect the actions to deal with various problems.

(3) The vaccine shortage problem due to lack of production capability in the country due to lack of knowledge about vaccine production. Therefore, Thailand cannot produce vaccines by itself and need to be imported from foreign manufacturers. Moreover, the issue of vaccine administration has been brought up as a political attack to create an advantage or disadvantage in the political.

(4) The problems in administration in situations that do not correspond to the crisis, such as the use of the Communicable Disease Control Act, which is the duty of the departments under the Ministry of Interior and the provincial governor but the people who play the most important role in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic are the healthcare workers and the Ministry of Health. As a result, the provincial public health cannot be completely controlled. Therefore, they had to coordinate with the provincial governor to coordinate or direct further orders to relevant law enforcement agencies to set up checkpoints to control people's travel across provinces.

2) The measures and actions that were the best practices and efficiency in the prevention and control of the epidemic of the Coronavirus Disease 2019 (Covid-19) in Thailand were as follow:

(1) The cooperation from the people to strictly act in order to protect themselves from the Coronavirus Disease 2019 (Covid-19) COVID.

(2) The establishment of the Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus 2019 (COVID-19) which was a centralized administration that can integrate orders, policies and laws for flexibility in management.

(3) The lessons learned in dealing with both SARS and H5N1 epidemics, so that health care workers and health professionals continue to learn and develop to cope with emerging diseases.

(4) The preparation of field hospitals, establishing Community Isolation (CI) and Home Isolation (HI) in a systematic way to efficiently refer patients.

(5) The Village Health Volunteer System (VHV) is an important mechanism for public health in Thailand to access insights in each area. Moreover, there had the surveillances of new clusters. Moreover, the collecting information, history, or path of transmission of that cluster in order to prevent the spread of the virus.

Discussion

The findings of this study were consistent with previous research that related to the topic in this research which can be described following the research issue which were as follows;

The result from the first objective found that the measures and actions in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic in order to recognize the measures and actions in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic. It was found that the measures and actions in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic in Thailand could be divided into 4 phases which related to the research of Sundawa and other authors in the title of "New Normal in The Era of Pandemic Covid-19 in Forming Responsibility Social Life and Culture of Indonesian Society". This research aims to explain the problems currently understood by the world and directly felt by Indonesian citizens, and reveals how the New Normal life is happening in Indonesian society (Sundawa, et al, 2021).

The result from the second objective found that the best practices to stop the spread of the infected of Coronavirus Disease 2019 (Covid-19) in Thailand by 1) finding the significant problems in preventing and controlling the epidemic of Corona 2019 (Covid-19) in Thailand were as follow:

(1) The Communication problems and public relations, providing clear information and reliable affect the overall situation which will make people understand the situation and measure that the government uses to manage the situation of the Coronavirus Disease 2019 (Covid-19) epidemic. However, in reality the government agencies provide information that lacks of the unity. Therefore, it cannot be denied that communication problems and publicity has caused difficulties in implementing prevention and control of the epidemic in Thailand, such as the problem of hoarding of the COVID-19 protective equipment. Moreover, the confusion of information also affects trust and confidence in the operation of the government. The confusion of information arises from allowing the national media and social media to distort or provide inaccurate information, such as information transmission about side effects of vaccination causing misunderstandings and panic with the people. This result is related to the work of Kjerkol and other authors in the title of "Effects of COVID-19 on communication, services, and life situation for older persons receiving municipal health and care services in Stjørdal municipality in Norway". The results indicate that COVID-19 restrictions both impaired the quality of life and security and aggravated loneliness. Regarding the older and communication, it was crucial to identify channels of communication with which the older are most comfortable. The results of this study clearly show that (a) the older had a definite preference for face-to-face personal communication; (b) although the older were familiar with the audio phone call and used it as a substitute for home visits, it reduced their security and quality of life; and (c) video-based media such as smartphones, tablets, and PC were not desirable alternatives to regular voice-based phones (Kjerkol, et al, 2020).

(2) The lack of integration between government agencies which such problems caused by duplication in the performance of duties which affects the operation and resulted in conflicts between the Minister, the Permanent Secretary of the Ministry of Public Health and the medical personnel team. Therefore, the incident caused the people's credibility to the government agencies to decrease, and affect the actions to deal with various problems. These finding related to the work of Hasan and other authors in the title of "Integrated health service delivery during COVID-19: a scoping review of published evidence from low-income and lower-middle-income countries". The result found that service delivery, health workforce, medicine and technologies were the three most frequently integrated health system building blocks during the COVID-19 pandemic. While responding to COVID-19, the L-LMICs principally implemented the IHSD system via systematic horizontal integration, led by specific policy measures. The government's stewardship, along with the decentralized decision-making capacity of local institutions and multisectoral collaboration, was the critical facilitator for

IHSD. Simultaneously, fragmented service delivery structures, fragile supply chain, inadequate diagnostic capacity and insufficient workforce were key barriers towards integration (Hasan, et al, 2021).

(3) The vaccine shortage problem due to lack of production capability in the country due to lack of knowledge about vaccine production. Therefore, Thailand cannot produce vaccines by itself and need to be imported from foreign manufacturers. Moreover, the issue of vaccine administration has been brought up as a political attack to create an advantage or disadvantage in the political which related to the research of Asundi and other authors in the title of “Global COVID-19 vaccine inequity: The scope, the impact, and the challenges”. This research outlines the scope and impact of inequitable vaccine distribution and identify challenges in vaccine development, manufacturing, and distribution as well as potential solutions to address this crisis (Asundi, et al, 2021).

(4) The problems in administration in situations that do not correspond to the crisis, such as the use of the Communicable Disease Control Act, which is the duty of the departments under the Ministry of Interior and the provincial governor but the people who play the most important role in the situation of the Coronavirus Disease 2019 (Covid-19) epidemic are the healthcare workers and the Ministry of Health. As a result, the provincial public health cannot be completely controlled. Therefore, they had to coordinate with the provincial governor to coordinate or direct further orders to relevant law enforcement agencies to set up checkpoints to control people's travel across provinces. This research related to the work of Mascio and other authors in the title of “Public Administration and Creeping Crises: Insights From COVID-19 Pandemic in Italy”, and they commentary on the Italian case contributes to the call for public administration scholars to incorporate crisis management into the main research agendas of the field to tackle the effects of COVID-19. The latter have been regularly applied when Italian governments confront with natural disasters and prompt action is ensured by a repertoire of extraordinary measures running in parallel to burdensome ordinary procedures (Mascio, et al, 2020).

Conclusion

The best practice of the measures and actions in the epidemic of the Coronavirus Disease 2019 (Covid-19) in Thailand can be summarized as follows:

(1) The Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus 2019 (COVID-19) to integrate laws, orders and prepare measures for operations during the epidemic situation. Besides, including prevention of taking advantage of unreasonable trade, material hoarding of the protective equipment and equipment for testing corona virus 2019. In addition, the government were trying to negotiate the purchase of vaccines, drugs, protective equipment and inspection equipment by coordinating all departments to operate in the same way to prevent and stop spread to the best of their ability.

(2) Provide important information to the public both in terms of protection, advice on how to maintain a safe life and compliance with measures by using an application to track the epidemic situation and vaccination registration. Including accurate information to stop various fake news that may cause confusion, and panic to the people.

(3) The application of knowledge that has been learned from diseases that have previously spread in Thailand, such as SARS, H5N1, makes the administration of the Ministry of Public Health, having experience in the care of epidemics, such as screening infected people, searching for an infected person, patient care, vaccination for people, controlling the movement of high-risk groups, quarantine material handling or medical equipment was done systematically.

(4) The systematic work processes of the Ministry of Public Health. This was a joint operation at the ministry level, county level, provincial level, and district level, making the ordering to operate effectively. Moreover, the operation by village health volunteers (VHVs) who play an important role in the communication of public health information by which they were responsible disseminating knowledge, planning and coordinating public health development activities as well as providing various public health services such as health promotion surveillance, disease prevention, first aid and the treatment by using drugs and medical supplies within the scope specified by the Ministry of Public Health including referral of patients to rehabilitation services and consumer protection for health. Furthermore, The Village health volunteers (VHV) work with family health volunteers and migrant health volunteers as well.

Recommendations

1) Systematic development of the government information in situations of epidemic outbreaks with the same direction. Furthermore, there is an integration of medical professionals, medical professors, and mass communicators to build credibility and the prevention of various fake news that may arise and create panic or misunderstanding of the public about the situation of the epidemic.

2) Promoting the strength of primary health care work by focusing on the integration of community health systems. The village health volunteers (VHVs) are able to work with community leaders and people in the community. It can be said that, the VHV plays an important role in the community in preventing and stopping the spread of the epidemic in Thailand. Therefore, the government should provide assistance such as compensation to the VHV group to be appropriate for their duties.

3) The establishment of a command center that has a central role in integrating orders, laws, regulations and personnel device allocation for up to date. This is mainly based on the opinions of medical professionals at the beginning. Whenever the situation begins to ease Measures should be relaxed to allow the economic sector to continue doing business, and balancing the enforcement of epidemic prevention measures.

Acknowledgements or Notes

Data were collected during the coronavirus disease 2019 (COVID-19) outbreak required permission to enter areas that are at risk of spreading because, the data collection process during the coronavirus disease 2019 (COVID-19) epidemic. Therefore, the researchers conducted prevent the spread of the coronavirus disease 2019 (COVID-19), whether it's keeping distance between the researchers, and the participants by wearing cloth masks or a mask alcohol gel is prepared throughout the period of visiting the area to collect data.

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