The Pentahelix Partnership Responses during Covid-19 Pandemic in Makassar

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Abstract: *Background*: A Partnership is one of the strategies for accelerating responses of Covid-19, especially in understanding the decisions made by the government and the various reactions of the community regarding the Covid-19 pandemic.

Objective: This study aims to explore partnership efforts *pentahelix* involving the government, academia, community, business sectors, and the media in handling Covid-19.

Methods: The qualitative study was carried out through in-depth interviews with 18 participants consisting of government, media, academics, and community elements. The participants were members of the Covid-19 Handling Task Force (Covid-19 Task Force) and people who were directly involved in handling Covid-19 in Makassar. The content *analysis* was performed using the collected data. The themes that emerge from the data are the *pentahelix* partnership with the government, community groups, academics, business sectors, and mass media. The data were collected from December 2022 to March 2023.

Results: The pentahelix partnership involves 5 parties: government, community, academics, business sectors, and the media. The partnership is accomplished through coordination, collaboration, participation, and mutual assistance. This partnership is established in the implementation of government policies in handling Covid-19 with the formation of Task Forces where the community participates in its implementation. Coordination between the government and academics regarding ways to resolve the Covid-19 case; collaboration with business sectors in providing facilities and infrastructure for handling Covid-19 activities as well as with the media that assist in disseminating information, public education, and news related to the incident of Covid-19 was adopted to implement the health policies during this pandemic.

Conclusion: handling covid-19 with *pentahelix* partnerships was carried out through coordination, collaboration, participation, and mutual assistance of all parties. The partnership process is a strategy for implementing health programs related to the handling of Covid-19 which are regulated by the government.

Keywords: Covid-19, Pandemic, Partnership, *Pentahelix.*

INTRODUCTION

At the beginning of the emergence of Covid-19, the Indonesian government continued to implement Clean and Healthy Behavior (CHB) and the Healthy Living Community Movement as a form of effort to deal with infectious diseases. This movement invites people to always wash their hands with soap and running water and maintain body immunity by consuming balanced nutrition [1]. After the WHO declared a pandemic, the Indonesian government formed a special team to handle Covid-19, namely the Task Force for the Acceleration of Handling Covid-19 based on Presidential Decree Number 7 of 2020 concerning the Task Force for the Acceleration of Handling Corona Virus Disease 2019 (Covid-19). Furthermore, the task force is part of the Committee for Handling Covid-19 and National Economic Recovery (CHCNER), which is divided into several sections, one of which is the Task Force for Handling Covid-19 which is chaired by the Head of the National Disaster Management Agency (NDMA). This task force then continued the task of the previous task force. Local governments then adjusted by forming task forces at provincial and district/city levels.

Health promotion faces the challenge of preparing to respond quickly to the COVID-19 pandemic without waiting until a crisis occurs. The current challenge is that health promoters are sometimes unaware of appropriate health promotion methods for infectious diseases [2]. To deal effectively with the pandemic, health promoters must not only understand the virus and how it spreads but, also understand the decisions made by governments and various societal reactions to the COVID-19 pandemic [3].

Appropriate health promotion strategies are needed to influence people's behavior during the Covid-19 pandemic. According to the WHO, health promotion strategies are to advocate for health, build an atmosphere, and promote community movements [4]. Additionally, according to the Indonesian Ministry of Health, the main basic strategies for health promotion are empowerment, atmosphere building, advocacy,

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and imbued with a spirit of partnership. The atmosphere can be fostered individually, in groups, or in the public. . Fostering the public atmosphere is one of the efforts made to develop partnerships with *pentahelix* models. [5]. The *Pentahelix* strategy concept has also been developed by the Government of Indonesia to accelerate the handling of Covid-19 [6]. Draft *pentahelix* is a model of cooperation or collaboration involving 5 different parties, interrelated and dependent on each other to improve the welfare of society as a whole. The P*entahelix* strategy involves 5 parties including government, community, academics, private sector/business sectors, and social media. The government has played a role in issuing various policies to suppress the spread of Covid-19. Communities and business sectors played an active role in implementing various policies and appeals during the Covid-19 pandemic. Academics play a role in developing research and community services, as well as in suppressing the spread of Covid-19. Finally, the media as socialization was publicity related to Covid-19 [7].

The government's handling of Covid-19 with various policies in force is still considered ineffective because it is not based on a research database [8]. In Makassar City itself, the government of Makassar City has carried out the handling of Covid-19 by issuing various policies at the institutional and community levels. These policies include accelerating Covid control by forming a task force, implementing health protocols, implementing Large-Scale Social Restrictions, and the Makassar Recover Program *(Smart Emergency Protocol Against Covid-19 & Service).* This program is based on Makassar Mayor Regulation Number 5 of 2021 concerning Makassar Recover (*Smart Emergency Protocol Against Covid-19 & Service*). The Makassar Recover program was conducted by the city government by forming 3 task force teams namely the Raika Task Force (Crowd Decomposition Task Force), the Covid Hunter Task Force, and the Detector Task Force.

In addition, the Makassar City Health Office was involved in handling Covid-19 along with a team of field officers at 47 health centers throughout the Makassar City sub-district. Countermeasures were carried out with health education activities in which active counseling cadres were alerted in each village by Integrated Health Service Post members from each Community Health Center (CHC). Each CHC has a person in charge of health promotion who is active during the pandemic by informing various activities via WhatsApp (WA), including individual counseling or door-to-door visits [9]. A study shows that Forging partnerships with community groups is a significant connecting point during and after a pandemic [10]. Collaborative efforts to establish partnerships, especially in community groups, reduced the impact of the co-19 pandemic [11].

PARTICIPANTS & METHODS

This study used a qualitative design and explored through in-depth interviews *(in-depth interviews)*. The research was conducted from December 2022 to March 2023 by conducting interviews with 18 participants from various agencies involved in handling Covid-19. The selection of informants was carried out purposively, that is, they were members of The Covid-19 Handling Task Force in Makassar City. Those selected were those from the Health Service, the Regional Disaster Management Agency (RDMA), the Social Service, the Communication and Information Service, the National Unity and Politics Agency (NUPA), Civil Service Police Unit (CSPU), Transportation Service, the Covid-19 task force expert team, as well as other parties such as the public, academics, and the media.

The research data collection process was conducted after obtaining approval from the Ethics Commission of the Faculty of Public Health, Hasanuddin University. To maintain the confidentiality and consent of the participants, the interview process was conducted after the participants received an initial explanation regarding the research objectives, gave permission to be recorded during the interview, and agreed to the *informed consent* provided by the researcher. Subsequently, the interviews began with open questions contained in the semi-structured interview guide. The interview questions concerned partnership strategies in health promotion with the topic of the question referring to the health program that was running during the Covid-19 pandemic, the parties involved, the coordination and collaboration that was carried out, and the joint agreement formed. None of the participants' names used in this study were their real names. The data analysis technique used was the data analysis technique described by Creswell. The analysis began with determining ideas to identify categories, link categories, and then form themes. Themes were described through personal experience by grouping statements into units of meaning. Furthermore, the data were interpreted by developing a description of how the phenomenon was experienced

and presenting a narrative from that experience in the form of discussion.

FINDINGS

Participants in this study amounted to 18 people consisting of members The Covid-19 Handling Task Force (Covid-19 Task Force) in Makassar City as well as other parties directly involved in handling Covid-19 such as the media, the public, and academics as the Covid-19 Task Force expert team.

CHARACTERISTICS OF PARTICIPANTS

There were 18 participants in this study who worked in several Makassar City regional government agencies, academia, the media, and the community involved in handling Covid-19 (Table **1**).

Partnership *Pentahelix*

The Pentahelix strategy concept is one of the methods currently being developed by the government to accelerate the handling of Covid-19 [6]. Pentahelix

Table 1: Characteristics of Research Participants

No	Participants	Age (Years)	Gender	Education	Term of Service (Years)	Department
1	Agus	52	Male	Graduate	4	Secretariat Staff of RDMA of Makassar City
2	Nirwan	52	Male	Graduate	9	Extension function of Health Service of Makassar City
3	Amir	47	Male	Graduate	1	Head of National Unity and Politics Agency of Makassar City
4	Alex	42	Male	Undergraduate	1	Head of Planning Sub-Division of the Communication and Information Office of Makassar City
5	Mathius	33	Male	Graduate	2	Head of Public and Personnel Subdivision of the Transportation Service of Makassar City
6	Yuni	47	Female	Graduate	2	Head of Inter-agency Relations of CSPU of Makassar City
7	Citra	29	Female	Undergraduate	2	Counselor for Handling Social Problems of Social Service of Makassar City
8	Abi	50	Male	Graduate	6	Head of Village Government Section Rapoocini District, Makassar City
9	Ela	60	Female	Senior High School	15	Resident/Head of RW 11 Kassi-Kassi Village, Rapoocini District, Makassar City
10	Ani	24	Female	Undergraduate	2	Kabar Makassar Reporter
11	Anti	47	Female	Doctoral	1	Head of Section for People's Welfare, Panakukang District, Makassar City
12	Mimi	52	Female	Undergraduate	1	Section Head of Peace, Order, and Enforcement of Local Government Regulations in Tamalate District, Makassar City
13	Madi	57	Male	Graduate	2	Resident/Head of RW 08 Maccini Sombala Village, Tamalate District, Makassar City
14	Dila	37	Female	Undergraduate	2	Analyst of Government Information Systems, Manggala District, Makassar City
15	Sari	58	Female	Undergaradute	7	Resident of RT 02 RW 04, Borong Village, Manggala District, Makassar City
16	Alex	46	Male	Junior High School	6	Residents of RT 01 RW 06 Bulurokeng Village, Biringkanaya District, Makassar City
17	Fajar	37	Female	Senior High School	2	Resident of RT 01 RW 03 Paropo Village, Panakukang District, Makassar City
18	Agil	56	Male	Doctoral	1	Head of the Hasanuddin University Public Health Doctoral Study Program / Expert Team for the Makassar City Covid-19 Task Force

*(RT: Neighborhood Association, RW: Community Association).

involves 5 parties. The first is the government, including ministries and agencies, the police, and the military. The second category includes business sectors such as State-Owned Enterprises, private entrepreneurs, Micro, Small, and Medium Enterprises (MSMEs), and cooperatives. The third is the community, which includes non-governmental organizations (NGOs), hobby communities, and mass organizations. The fourth is academics, which includes universities, educational institutions, and research institutions. The fifth is the media, including mass media, electronic media, or print media.

Organization (Government)

Based on the results of interviews with participants, various activities that support health promotion in handling Covid-19 involve all components of the regional apparatus in the city government, such as the Indonesian National Army (INA), Police, Prosecutors' Office, CSPU, RDMA, Health Service, Transportation Service, Fire Service, and others. In handling Covid-19, a special COVID-19 task force was formed in Makassar City, called the *Raika Task Force* (Crowd Breaker), the Covid Hunter Task Force, and the Detector Task Force. *The Raika Task Force* was tasked with carrying out health protocol patrols in places where many people gather such as places to eat, places of worship, shopping places, or places of entertainment, where the leading sector is CSPU accompanied by RDMA, the Health Service and the Indonesian National Police. The Covid Hunter Task Force was tasked with mobilizing Covid patients for quarantine. The personnel inside were health workers accompanied by the Indonesian National Police, Civil Service Police Unit, and Covid Masters in the sub-district. Meanwhile, the Task Force Detector was focused on tracing for residents who have contracted the Covid-19 virus from house to house in the RT (Neighborhood Association) environment, where this team involved the community and health workers. It was in this team that all components of the city government synergized in handling Covid-19. The *Raika Task Force* and the Detector Task Force when they were out in the field and dealing with the community also carried out health promotion efforts by continuing to enforce health protocols such as wearing masks, washing hands, maintaining distance, staying away from crowds, and reducing mobility. Meanwhile, the Covid Hunter Task Force in handling COVID-19 helped quarantine or self-isolation activities for residents identified as having contracted the COVID-19 virus.

> "*In the team that is under control, the one that is organized is RAIKA. Yeah, a crowd-breaking team. Now we are collaborating with the Indonesian National Army, the police, the prosecutor's office, then CSPU, as the leading sector of the Covid task force to get down to implementing the regional regulations set by the city government*" (Yuni-Interview-female-CSPU-27/12/2022)

Based on participant statements, one of the efforts made by the government was to form the Raika Task Force Team, which routinely conducted patrols to break down crowds while still observing health protocols in places where people usually gather, such as places to eat, shopping places, entertainment places, and even places of worship. In carrying out health promotion during the Covid-19 pandemic, posts were also formed which were spread throughout the city of Makassar, starting from the sub-district level to the RW (Community Association) level and also the main post where there were also representatives from each Regional Apparatus Organization *(*RAO) who took turns guarding.

> "*At the post, there are almost all Regional Apparatus Work Units, almost all RAO have representatives, Transportation Agency, CSPU, Health Service, Fire Service and others*" (Matius-Interview-male- Transportation Service-28/12/2022)

This post was used as a coordination function, educational function, and information function related to handling the Covid-19 case. At this point, each RAO representative could coordinate with each other regarding matters related to handling Covid-19 and subsequently, to educate residents who passed around the post as well as the place where information related to the Covid-19 case was accommodated.

Community Group

Based on the results of the interviews with participants, partnerships were carried out in the community using individual, group, or community approaches. Individual approach involved by coordinating with community leaders, heads of sub-districts, and heads of RT, and RW. While the group approach, for example, involved Community Protection Unit, youth mosque community, youth organizations, and others. It was also assisted by the Community Empowerment Institute (CEI) in involving the

community to become a detector team. The Detector Task Force formed by the government also included participation by residents to become a team that went down to residents' homes to carry out *testing* and *tracing* together with local health workers.

> "*The movement for handling Covid in their village is assisted by CEI, village heads, structural officials, cadres, and their special team called detectors*" (Anti-Interview-female-Panakukang District-13/3/2023)

> "*I'm wearing a detector suit, I'm in RW 6, I'm a detector, I'm also an RT like that. Because it's said that only the sub-district can run it like that*" (Alex-Interview-male-Resident-18/3/2023)

> "*Usually the community. We invite these communities to be like the youth community of the mosque, we involve youth organizations. It's all community-based*" (Agus-Interview-male-RDMA-9/1/2023)

The participant's statement shows the involvement of the community apart from being a companion or liaison in conveying education to residents, they also directly joined a detector team to walk around residents' houses in the RT environment together with health workers, so that the residents who were visited could easily accept the presence of the detector team. In addition to the detector team, cadres had an active role in conveying education related to Covid in every implementation of the Integrated Health Service Post.

Businessmen

Based on the results of interviews with participants, there was cooperation with business sectors, including State-Owned Enterprises such as Logistics Agency, private entrepreneurs such as PT Bosowa Berlian, and MSMEs such as food vendors.

> "*Oh, another partner from Logistics Agency. The rice provider the logistics department. Also with sub-districts, sub-districts. Of course, social service officers for field verification must first coordinate with the village head, the sub-district head, that's it*" (Citra-Interview-female-Social Service-6/1/2023)

In this case, partners coordinated with each other and with the Social Service in carrying out Covid-19 Social Assistance activities as providing food for the community's needs and for providing Social Assistance to communities affected by Covid-19. Then the assistance obtained in partnering with private entrepreneurs, for example, was facilitated by the provision of facilities and infrastructure for handling Covid-19. The assistance provided was in the form of equipment to carry out disinfectants in Makassar City areas in spraying activities in areas where there were identified cases of Covid-19.

> "*Coming from several private agencies, for example from PT Bosowa, we were given equipment assistance, such as an individual sprayer, a carried sprayer, a sprayer, then we provided disinfectants, liquids, we also usually given by them, including hazardous materials clothes. also, those we usually get help*" (Agus-Interview-male-RDMA-9/1/2023)

Participants also revealed that they had provided Personal Protective Equipment (PPE) and disinfectant materials for the smooth running of the area spraying activities carried out by the RDMA. Furthermore, in collaboration with MSMEs business sectors, every MSMEs in Makassar City was asked to be willing to limit their opening hours at night to reduce the transmission of Covid-19. This activity was carried out by joint patrols, where the CSPU acted as a leader. The involvement of all business sectors helped and supported health promotion activities in handling Covid-19 during the Covid-19 pandemic.

> "*At night, CSPU also carries out their duties, from entrepreneurs, MSMEs, coffee shops, and so on. We accompany every schedule, accompany Operations Control Assistance, to provide socialization not until too late to open a business. There is a set of time limit. The maximum is if the limit is 10 o'clock*" (Abi-Interview-male-Rappocini District-17/1/2023)

Academy

Based on the results of interviews with participants, academics played a role in research development by looking at Covid trend data, which was then to be analyzed. At the beginning of the emergence of Covid-19, academics were asked to act as a team of

consultants for the government to solve the problem of Covid-19 cases regarding what actions could be taken with a public health approach for preventing and minimizing the spread of Covid-19. The approach referred to here is to carry out 3T activities, namely *testing* (early examination to determine whether a person has contracted Covid-19 or not), *tracing* (identifying the history of Covid-19 patients with anyone who has interacted), and *treatment* (follow-up care). In addition, academics played a role in community service by recommending their students or alumni to participate as volunteers in various Covid-19 handling activities including 3T activities.

> "*And there was yesterday the registration of the health workers team in collaboration with universities. Alumni and students*." (Amir-Interview-male-NUPA-18/1/2023)

> "*That's in the aspect of analyzing, analyzing by looking at existing Covid data, updating Covid and then making Covid trends which they will then analyze. From these, we are also given material related to covid. Then there are also pocketbooks related to covid. So those are the covid materials that I socialized directly to several CHC in Makassar city*" (Nirwan-Interview-male-Health Service-12/1/2023)

> "*It was agreed that the Governor would ask Oke, the Public Health Faculty to become a consultant. We were consultant at the time. The pure public health approach is what we are doing, so it's not a medical approach, right, because that's the approach, for example, to be able to make sure he's positive, he has to be screened, there are stages of testing, tracing, and treatment*" (Agil-interview-male -Hasanuddin University-27/3/2023)

The participants' statements show the role of academics in handling Covid-19. The government in forming the COVID-19 handling task force also coordinated with academics as a team of experts to provide input for handling COVID-19.

Media Mass

Based on the results of interviews with participants, efforts to utilize media, such as radio and TV broadcast media were also carried out in the implementation of health promotion during the Covid-19 pandemic. Media cooperation was conducted with journalists and reporters to disseminate information. Thus, information, whether in the form of the number of Covid cases in an area or education regarding the implementation of health protocols and healthy behavior, could be easily disseminated to the public.

> "*We are cooperating by radio. Also working with TV such as Fajar TV, news TV, what else is Celebes TV too*" (Nirwan-Interview-male-Health Service-12/1/2023)

> "*We have media cooperation with media journalists, the media are like journalists and reporters. Those who help us also socialize it*" (Alex-Interview-male-Communication and Information Service - 11/1/2023)

The media also published in collaboration with the government. News information was shared among media. Coordination was carried out through conversation groups on social media, in which there were government elements, so that coordination was well established.

> "*For example, if it is a collaborative form of cooperation with the municipal government, for example, if it has a release, it will surely pass it on to the media's branches. Thus, in the municipal government, there is a group of journalists for those who have the city communication and information agency of Makassar city or communication and information agency of sulsel in it. So if for example, they have a release, there is a protocol team, he will be thrown into the group*" (Ani-Interview-Female-Media Kabar Makassar-7/3/2023)

DISCUSSION

In this research, the partnership is identified with the *pentahelix* model where the partnership process is carried out by involving 5 parties including the government, the community, academia, the private sector/business sectors, and the media. These five parties worked together to carry out health promotion in handling Covid-19. Synergy itself becomes a product of partnerships [12]. Increased synergy is carried out by coordinating regularly with stakeholders, decision-makers, and various cross-sectors [13].

The partnership in Makassar City during the handling of Covid-19 was by establishing cross-sector collaboration in handling Covid-19 cases according to their respective fields and roles. For example, in the scope of government, various government professional organizations coordinated with each other through WhatsApp media groups and held virtual meetings via Zoom. Routine virtual meetings were held which served as a forum for reporting if new cases or urgent matters were found that must had to be dealt with immediately. Previous research has shown the government's role in preventing the spread of Covid-19 by making various health policies. Before making a health law, the government first identifies how the public will react to the Covid-19 pandemic and then plans health programs [14]. However, for the government of Makassar City not all people wanted to accept and respond well to the health policies that were formed during the Covid-19 pandemic. Socialization was still lacking, especially at the beginning of the pandemic. . Hence, the government needed to first build trust with the community

All components of the government were involved in and jointly intensified health promotion to deal with Covid-19. Government organizations collaborated and participated according to their respective roles. They were members of a task force that specifically dealt with Covid-19, called the Covid-19 Task Force. In Makassar City, several task forces were formed, such as the Raika Task Force (Crowd Decomposition Task Force), the Covid Hunter Task Force, and the Detector Task Force. The teams were formed as an implementation of one of the Makassar City Government policies, the Makassar Recover Program (Smart Emergency Protocol against Covid-19 & Service). Of not only the city government but all parties including the community itself participated in this implementation. In this case, the government, such as the Indonesian National Army, had a heavier responsibility than the community itself to enforce health protocols, side by side with health workers fighting Covid-19 [15].

Health promotion activities are not only the responsibility of the government but also require the direct involvement of community to improve and increase the quality of their health status [16]. Handling must be carried out quickly and massively, especially during a pandemic. A study showed that involving the community plays an important role in controlling the spread of Covid-19. However, it still considers the cultural, social, and economic status of the community [17]. The potential to involve different communities in the public can help control infectious diseases such as Covid-19. This community involvement can assist future planning in making decisions in handling cases of infectious diseases.

Partnership activities with the community are conducted using individual, group, or community approaches. Such activities if implemented properly can increase community participation [18]. This can be seen in working with community members, community leaders, and religious leaders who are respected and trusted by community groups in the region. This way the planned program is easily accepted by the local community because it involves them directly, The research findings also found that several health programs, such as health check-up activities by the team *detector* during the Covid-19 pandemic, were not realized optimally in several areas due to community refusal as it did not directly involve trusted people of the area, and it was difficult for the community to accept new or unknown people to enter into education related to Covid-19. Because the role of local community leaders is crucial as they are considered role models, the right strategy is to first approach them [13]. However, based on information from several sources, it was found that health examination activities by the team *detector* in those areas of high cases of covid-19 were realized well where the team directly involved the head of the RT.

In addition, this study found that while carrying out health promotion the tasks such as outreach and education in the community did not run smoothly because some people avoided and dissociated themselves from the team of health workers who went out to the community to carry out education and early detection of symptoms covid-19 virus. Previous research has revealed that providing information alone does not lead to behavioral changes [19] but, the submitted information must also come from a trusted source. Therefore, it is necessary to partner with community leaders, who are trusted by the community. Therefore, the most appropriate conditions is to involve health workers who are known and live in the local community.

Partnerships with a group approach were also carried out by the Makassar City Government. The group partnership research conducted by the City Government of Makassar involved youth organizations, youth mosques, and the Community Protection Unit in carrying out socialization and community education.

Working in partnership with community groups is a very important connecting point during and after the pandemic [10]. Communities are expected to be more prepared to respond and make decisions to adapt to life challenges, and the needs of fellow citizens when a health crisis occurs. Other researches also state that partnerships carried out with a community group approach can reduce the impact of the co-19 pandemic [11].

Public trust in the government is a key fsector in controlling health crises during pandemics [20]. In addition to public trust, the community's willingness and self-awareness to behave healthily have created resilience for the community in dealing with the Covid-19 pandemic. Another research also mentions that to increase public acceptance of government policies, environmental changes are carried out, namely social support and interpersonal relationships with the community as an opportunity for the community to make decisions and regulate their behavior in response to existing policies [21].

The business/private sector plays a role in providing facilities to handle Covid-19 [22]. During the pandemic, various countries have carried out isolation measures at home for patients or families of Covid-19 patients. Isolation was also carried out in Indonesian city areas such as Makassar. The impact of this isolation affects the social, economic, and psychological lives of people affected by Covid-19. Previous research in Iran also showed that people undergoing home quarantine experience social, economic, and psychological problems [23]. This condition is certainly a consideration for the government when making decisions. The solution provided by the government is to assist with the food needs of the people affected by Covid-19. In realizing this, the government cooperates with business sectors, State-Owned Enterprises, private entrepreneurs, and MSMEs. One way is to establish partners with food providers, such as Logistics Agency, which are engaged in the management of rice supply and distribution. Assisting with the food needs of the community is conducted through the Social Service.

Parties from the media also play an important role in health promotion because they have the potential to improve communication and information in developing and fostering collaborative relationships among decision-makers, which including various stakeholders such as community members, an organization, or policymakers [24]. The media is also one of the sources for adopting a health policy based on the data presented by the media [25]. The handling of Covid-19 in Makassar City not only utilizes the media as a tool for carrying out health promotion through outreach and public education but also as a source of the latest information regarding the number of Covid-19 cases. Media Information also influences the government in forming regulations. Sometimes, the information circulating in a community is not based on facts. This is because the media are required to be fast in making news releases. Based on the statement of an informant who works for a media company, the anticipation is carried out by "checking facts" where data is confirmed repeatedly to parties responsible for collecting related data, such as the health service or the Covid-19 task force team.

Academics plays a significant role in handling Covid-19. Researchers with substantial technical capabilities are trying to find vaccines and drugs for dealing with the Covid-19 virus. They formulated various appropriate governance strategies in handling the Covid-19 pandemic, certainly with valid data evidence [26]. In this research, academics also acted as consultants for the government in forming regulations. The involvement of academics in carrying out health promotion in handling Covid-19 by analyzing data on existing Covid cases, offering suggestions regarding effective procedures for solving Covid-19, and developing a community approach model considering the culture of the people of Makassar. In addition, alumni and students with a health education background were also involved in health promotion efforts through volunteering.

CONCLUSION

The partnership strategy in this research was identified by the *pentahelix* model involving 5 parties such as government, community, business sectors, media, and academics. The goal of the government itself was to issue regulations, such as forming task forces to handling Covid-19. The community was tasked with carrying out and complying with existing regulations, as well as joining the task force to carry out programs related to handling Covid-19. Apart from complying with existing regulations, business sectors also supported government regulations by assisting with the facilities needed to implement the Covid-19 handling program. Academics were also involved as consultants for the government in forming regulations related to handling of Covid-19. Finally, the media was a source of information and public education for all

sectors, especially for the community regarding the development of Covid-19 case and various handling of Covid-19.This handling requires coordination, collaboration, and participation of all parties. Each party had responsibilities based on its role in dealing with and fighting the Covid-19 pandemic situation. All government regulations related to the handling of Covid-19 were strongly influenced by the readiness of community participation to participate in dealing with the Covid-19 pandemic.

ACKNOWLEDGEMENTS

We would like to express our appreciation to the research deputy Faculty of Public Health, Hasanuddin University for supporting this research. We would also like to thank all the participants in the present study, without their cooperation and support of whom, this research would not have been possible.

ETHICAL PERMISSION

The study was approved by the ethics committee Faculty of Public Health, Hasanuddin University with the number 14353/UN4.14.1/TP.01.02/2022.

AUTHOR CONTRIBUTION

Sukri S, Riskiyani S, Syafar M: Conception and design. Sukri S: Provision of study materials or patients. Sukri S: Collection and assembly of data. Sukri S and Riskiyani S: Data analysis and interpretation. All authors: Final approval of manuscript

CONFLICTS OF INTEREST

Nothing to be reported.

FUNDING/SUPPORT

Authors received no financial support for the research, authorship, and publication of this article.

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Received on 25-09-2023 Accepted on 18-10-2023 Published on 10-11-2023

https://doi.org/10.6000/1929-6029.2023.12.20

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