



# Performance Services of Home Care-Based Health and Marine Ambulance Telemedicine in Makassar City(Case Study of Health Service Performance Based on Home Care and Marine Ambulance Telemedicine on Barrang Lompo Island, Makassar City)

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## ABSTRACT

The purpose of this study was to measure the performance of home care-based health services and marine ambulance telemedicine in Makassar City. because public health has an important role in efforts to improve the quality of human resources, poverty alleviation and economic development. The Human Development Index puts health as one of the main components of measurement besides education and income. With the weakening of health services based on Home Care and Ambulance Telemedicine Marine, the community feels that they do not get effective services, where people expect to get better and more effective health services, but in fact they find that health services are getting weaker. This study uses a quantitative descriptive method, with data collection techniques using a questionnaire. with 307 respondents based on the Slovin formula. The results of this study indicate that the performance of home care-based health services and marine ambulance telemedicine in Makassar City is still categorized as not good, this is seen from 29.5% indicating that the performance of health services is still not good.

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## 1. Introduction

Health is the most basic thing, because if the body is healthy then all work becomes easier. Behind the public awareness to live healthy, people always crave to get the maximum service as well. Therefore, the government always provides new programs or policies so that all levels of society get equitable health services. Because (Konli, 2014; Jacobis, 2013; Thio, 2001) health is a basic need for all people who still need special attention from the government. The community must have awareness and willingness to always maintain health and to be able to live a healthy life (Perdana & Herawati, 2018). The government always strives to provide health services to the community equally (Luthfia & Alkhajar, 2019).

The general condition of Indonesia's health is influenced by environmental factors, behavior, and health services (Sutarto, 2017). Meanwhile, health services consist of several components, including the availability and quality of health service facilities, medicines and health supplies, health workers, financing and health management. Basic health service facilities, namely Puskesmas which are strengthened by supporting Puskesmas and Mobile Health Centers, have been established in almost all parts of Indonesia, but equity and affordability of health services is still an obstacle (Hasnidar et al., 2020).

The development of transportation technology also causes an increase in the speed of travel time between regions and between countries which is faster than the incubation period of the disease,

increasing the risk of entry and exit of new infectious diseases (new emerging diseases) and re-emerging diseases (Purba, 2021). Technological advances in various other fields also have an impact on changing disease patterns and increasing health risks caused by nuclear radiation, biological pollution, chemical contamination, bioterrorism, and food, thus requiring comprehensive and coordinated efforts to prevent disease and control health risk factors, and require resources, community participation, and international cooperation (Purba, 2021; Syarif & Haryanto, 2018). As in Figure 1 below, it is identified and analyzed the dominant research problems related to the performance of home care-based health services and marine ambulance telemedicine in Makassar City.

Home Care and Telemedicine programs are health services that are carried out remotely, the scope of which is very broad, such as providing health services, education and preventive services. Home Care and Telemedicine have become an important part of a treatment whose benefits are accelerating patient access to referral centers, as a form of first aid to patients (Subramanian, 2004; Garne, et al., 2016).

Home Care and Telemedicine ensure that people who experience health problems can be helped quickly every day. With the Home Care and Telemedicine, the people of Makassar City hope for the provision of fast and appropriate first aid services, by picking them up directly at the patient's house.

Home care and telemedicine programs are also expected to be able to reduce patient anxiety about health services, especially for island communities that are difficult to reach. Home care and telemedicine programs are also used to select patients, both patients who really need special care and patients who can be treated only by visiting the patient's home (Dimmick, et al., 2000). This marine ambulance service is specifically for archipelagic communities who must be referred and need health services, especially in an emergency. This marine ambulance service is designed with a maximum speed and is able to operate in various situations, such as strong winds and high waves (Munoz-Bonet, et al., 2020).

This sea ambulance is expected to be able to reach every island in Makassar City, it is also hoped that the sea ambulance has a high use value and is right on target. Because this sea ambulance is expected to be able to bring access to health services closer to all people in the islands. For example, during bad weather and strong winds.

According to Law Number 36 Year 2009 concerning Health Article 5 paragraph (1) "everyone has the same right in obtaining access to resources in the health sector" then the Makassar city government launched the latest public service in the health sector. The service is in the form of a marine ambulance fleet, which will operate in the Barrang Lompo Islands area and its surroundings in Makassar City. In order to implement this health law and provide health services to the community, the Makassar city government issued Makassar City Regional Regulation Number 7 of 2009 concerning Health Services in Makassar City Article 2, namely "Provision of health services is carried out by the government by the Public Health Center Hospital and its network". So with this sea ambulance, people in the Barrang Lompo Islands in Makassar City can receive treatment quickly and evenly. As well as in article 3, namely "service recipients are residents of the City and outside the City" then the government does have an obligation to provide health service facilities to island community.

Actually, several islands in Makassar City already have health centers that can handle patients, both patients who require special care, such as patients who are required to be hospitalized intensively. However, with the sea ambulance service, it is hoped that it will make it easier for islanders who need special treatment at the Makassar City hospital in an emergency. This marine ambulance service is also on standby for 24 hours.

In addition to being intended for the people of the islands who are sick, this sea ambulance is also equipped with various health support equipment. Such as standard health equipment, Tele-EKG and Telemedicine as well as doctors. Marine ambulances are always expected to be able to provide first aid for patients in need. And this sea ambulance is also able to handle pregnant women. The Home Care and Marine Ambulance Telemedicine programs which were expected to be able to provide first aid to island communities who needed help did not run effectively.

With the weakening of health services based on Home Care and Marine Ambulance Telemedicine, the community feels that they do not get effective services, where people expect to get better and more

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effective health services, but in fact they find that health services are getting weaker. Due to the lack of human resources according to a statement from the Makassar City Health Service, health services in Makassar City have become ineffective, as well as the weakening of health services based on Home Care and Marine Ambulance Telemedicine.

Referring to these facts, it can be formulated the problem that health services based on home care and marine ambulance telemedicine in Makassar City are still not "effective". Departing from these objective conditions, the authors are interested in conducting research on Barrang Lompo Island, Sangkarrang District, Makassar City. Therefore, in measuring the performance of health services, the author uses the theory proposed by Agus Dwiyanto by using 4 variables, namely; Productivity, service quality, responsibility and responsiveness.

## 2. Research Methods

In this study, the approach used is descriptive quantitative by using a questionnaire to the respondents who have been determined (Sugiyono, 2015). In this study, researchers describe in detail, depth and comprehensively related to the Performance of Home Care-Based Health Services and Marine Ambulance Telemedicine in Makassar City. To the people of Barrang Lompo Island. Through this approach, researchers will analyze in more depth how the Home Care and Marine Ambulance Telemedicine programs are run, using quantitative methods as one of the benchmarks that make the benchmark for the success or failure of the performance of the health services provided. By involving various individuals, groups and organizations that can be scientifically justified.

The data collection technique used by the author in this study saw a large number of respondents, namely by distributing questionnaires and also conducting document reviews (Sugiyono, 2015). The questionnaire in question is through a list of questions distributed to all respondents while document review is through a study of literature sources, documents, regulations, laws, decisions, and related literature that can support primary data obtained through questionnaires.

**Table.1**

Likert Measurement Scale

No.	Respondents Response	Weight
1.	Totally agree	5
2.	Agree	4
3.	Slightly disagree	3
4.	Disagree	2
5.	Strongly disagree	1

Source:processed by researchers 2021.

The population and sample in this study were the people of Barrang Lompo Island, amounting to 307 people. The data from the questionnaire results in this study were analyzed using the descriptive percentage method and presented in one table through the calculation of the frequency distribution. In this study, the data analysis technique used by the author is inferential statistics. argues that statistical inference is a statistical technique used to analyze sample data, and the results can be applied to the population. Five types of answers are given using a Likert scale as shown in table 1 above.

## 3. Result

Research on the performance of home care-based health services and marine ambulance telemedicine in the city of Makassar. Service performance has an important role in carrying out this health service program, because health is very important for the community, so as to improve the quality of health services to the community, especially the island community.

Public health has an important role in efforts to improve the quality of human resources, reduce poverty and economic development. The Human Development Index puts health as one of the main components of measurement besides education and income. Therefore, every activity and effort to improve the health status of the community as high as possible is based

on non-discriminatory, participatory, protective, and sustainable principles which are very important for the formation of Indonesian human resources, increasing the nation's resilience and competitiveness, and national development.

### **3.1 Productivity of Home Care-Based Health Services and Marine Ambulance Telemedicine**

Productivity is the ability of medical personnel and related agencies to carry out the marine ambulance home care and telemedicine program by maximizing providing services to island communities in need. Associated with the effectiveness and efficiency of the work of employees and related agencies in order to achieve the desired results.

This generally describes that the performance of home care-based health services and marine ambulance telemedicine in Makassar City has a very good productivity with a percentage of 34.23% agreeing. Because the productivity of medical personnel who work in sea ambulances can improve health services to the island community, as well as discipline in providing services to the community. And this also proves that the medical personnel on duty in the sea ambulance have sufficient skills to serve the island community who need first aid using this sea ambulance fleet service.

### **3.2 Quality of Health Services Based on Home Care and Marine Ambulance Telemedicine**

Service quality is an important component in a public service, service quality is the service provided to the community in accordance with service standards that have been set in a policy. Service quality is something that tends to be very important in explaining the quality of public service performance, because from service performance there are also various public views about the satisfaction or dissatisfaction of the community when getting services by the relevant agencies.

This describes that in general the performance of health services based on home care and marine ambulance telemedicine for service quality indicators is still not good, this can be seen from 33.8% or 104 people who do not agree. Because according to the people of the Barrang Lompo Islands, the existing equipment in the marine ambulance service is not sufficient, this is because most of the equipment is not functioning properly.

### **3.3 Responsiveness of Home Care-Based Health Services and Marine Ambulance Telemedicine**

Responsiveness according to Dwiyanto (2006) is an organization's ability to recognize community needs, develop service agendas and priorities and develop public service programs in accordance with community needs and aspirations. In short, it can be said that this responsiveness measures responsiveness to the hopes, desires and aspirations and demands of the community.

This describes that in general the performance of home care-based health services and marine ambulance telemedicine for responsiveness indicators is still not good, this can be seen from 32.6% or 100 people giving statements that do not agree. Because according to the people of the Barrang Lompo Island Archipelago, Makassar City, in obtaining this marine ambulance service, medical personnel are often not responsive enough to provide services. Often this marine ambulance suffers some damage, such as a malfunction in one of the engines which makes this marine ambulance service a mandate for a long period of time. So that it makes people who need the services of this marine ambulance fleet to be disturbed.

### **3.4 Responsibilities of Home Care-Based Health Services and Marine Ambulance Telemedicine**

Responsibility according to Agus Dwiyanto, argued that responsibility explains whether the implementation of public organization activities is carried out in accordance with correct administrative principles or in accordance with organizational policies, both explicit and implicit.

Responsibility or responsibility is a measure that shows how far the process of providing public services is carried out in accordance with correct and established principles or provisions of administration and organization. In the provision of services, there are various organizational administrative provisions and organizational principles that have been set to support the quality of employee responsibility for performance in service delivery.

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This describes that in general the performance of home care-based health services and marine ambulance telemedicine for accountability indicators can be said to be good, this can be seen from 29.9% or 92 people giving statements agreeing to several sub-indicators of responsibility. Which means that medical personnel or several parties related to this marine ambulance have provided services in accordance with established SOPs or operational standards, one of which is not burdening the community with the costs of using this sea ambulance. And has provided services to the community in accordance with the principles of correct administrative standards.

**Table 2.**  
Results of Performance Variable Data

No	Indikator	TA	A	SD	D	SDS	Total
1	Productivity	26,8	34,2	27,8	9,8	1,24	
2	Service quality	15,9	25,9	33,8	18,0	6,3	
3	Responsiveness	20,1	24,6	32,6	12,8	9,96	
4	Responsibility	13,9	29,9	23,9	18,6	13,7	
		19,2	28,7	29,5	14,8	7,8	100%

Source:processed by researchers 2021.

Based on the results of the research mentioned above, it can be described in a simple way, which is shown in the table above.

#### 4. Conclusions

The results of the study on Barrang Lompo Island, Makassar City, amounted to 29.5% which showed that the performance of home care-based health services and marine ambulance telemedicine in Makassar City showed that the performance of health services was still not good. This shows that there are several factors that affect the performance of home care-based health services and marine ambulance telemedicine so that their implementation has not been fully implemented properly. According to observations, one of the inhibiting factors for the performance of home care and telemedicine based health services for marine ambulances is that there are still many equipment in the sea ambulances that do not work properly, and it is not uncommon for the Archipelago people who want to use the marine ambulance fleet service to have difficulties. This is usually caused by a malfunction in one of the marine ambulances, so sometimes a marine ambulance engine is used.

#### 5. References

- Dedy, M. (2018). *Public Policy Studies and Public Services*. Bandung: Alfabeta.
- Dimmick, S. L., Mustalski, C., Burgiss, S. G., & Welsh, T. (2000). A case study of benefits & potential savings in rural home telemedicine. *Home Healthcare Now*, 18(2), 124-135.
- Dunn, W. N. (2003). *Introduction to Public Policy Analysis*. Yogyakarta. Gadjia Mada Press.
- Garne, K., Brødsgaard, A., Zachariassen, G., & Clemensen, J. (2016). Telemedicine in neonatal home care: identifying parental needs through participatory design. *JMIR research protocols*, 5(3), e100.
- Hasnidar, H., Tasnim, T., Sitorus, S., Hidayati, W., Mustar, M., Fhirawati, F., ... & Sulfiandi, S. (2020). *Public Health Sciences*. Our Writing Foundation.
- Jacobis, R. (2013). Service Quality Factors Influence on Patient Satisfaction Inpatient Jamkesmas Participants at BLU Prof. RSUP. Dr. RD Kandou Manado. *EMBA Journal: Journal of Economic Research, Management, Business and Accounting*, 1(4).
- Konli, S. (2014). Public Health Services at the Community Health Center in Gunawan Village, Sesayap District, Tana Tidung Regency. *Journal of Government Science*, 2(1), 1925-1936.
- Luthfia, A. R., & Alkhajar, E. N. S. (2019). Public Service Practices: Puskesmas as the Frontline of Health Services. *DECISION: Journal of Public Administration*, 1(2), 71-81.
- Muñoz-Bonet, J. I., López-Prats, J. L., Flor-Macián, E. M., Cantavella, T., Domínguez, A., Vidal, Y., & Brines, J. (2020). Medical complications in a telemedicine home care program for pediatric ventilated patients. *Journal of telemedicine and telecare*, 26(7-8), 462-473.
- Nugroho, R. (2003). *Public policy; Formulation, Implementation, Evaluation*. Jakarta: PT. Elex Media Kompotindo.
- Perdana, F., & Herawati, H. (2018). Efforts to improve maternal and child health through health literacy programs and book grants in the village of Cintamulya RW 05 Jatinangor. *Dharmakarya*, 7(1), 6-10.

- Prawirosentono, S. (1999). Employee Performance Policy. Yogyakarta: BPF.
- Purba, I. P. (2021). Implementation of Law Number 6 of 2018 Concerning Health Quarantine in East Java Facing the Covid 19 Pandemic. *Jurnal Pahlawan*, 4(1), 1-11.
- Ruky, A. (2004). Performance Management System. Jakarta : PT. Main Library Gramedia.
- Samsudin. (2005). Human Resource Management. Bandung Faithful Library.
- Sedarmayanti.(2003). Human Resources and Work Productivity. Bandung: Ilham Jaya.
- Siagian, S. P. (2015). Development Administration. Jakarta. Aksa Earth.
- Simamora, H. (2004). Human Resource Management. Yogyakarta: SIE YKPN.
- Sinambela, L.P. (2006). Public Service Reform: Theory, Policy, and Implementation. Jakarta: PT. EarthScript.
- Subarsono, AG. (2005), Public Policy Analysis. Yogyakarta: Student Library.
- Subramanian, U., Hopp, F., Lowery, J., Woodbridge, P., & Smith, D. (2004). Research in home-care telemedicine: challenges in patient recruitment. *Telemedicine Journal & e-Health*, 10(2), 155-161.
- Sugiyono.(2015). Educational Research Methods (Quantitative, Qualitative, and R&D Approaches). Bandung: CV Alfabeta.
- Sutarto, S. T. T. (2017). Environmental factors, behavior and malaria. *UNILA AGROMEDICINE*, 4(1), 173-184.
- Syarif, N., & Haryanto, S. Law Enforcement Against Criminal Acts of Health Quarantine Based on Law no. 6 of 2018 concerning Quarantine