Factors associated with the quality of health services for hypertension patients at Adow community health center, Central Pinolosian Sub District South Bolaang Mongondow Regency

Febi K. Kolibu*, Paul Kawatu, Ardiansah Tucunan

ABSTRACT

Background: The community's need for health services encourages health care facilities to always provide quality services. The implementation of health service quality assurance will not only have an impact on the organization, but also satisfaction for existing resources within the organization because of patient satisfaction. The purpose of this study was to determine the relationship between the dimensions of the quality of health services with the satisfaction of hypertension patients at the Adow public health center, central Pinolosian Sub District, South Bolaang Mongondow Regency.

Methods: This study is a quantitative study with a cross-sectional design. The study population consisted of hypertensive patients at Adow health center with a total sample of 100 patients who were taken using the purposive sampling technique.

Results: Univariate analysis on the quality of health services found 67% of respondents stated that the dimensions of tangible were good, 50% of patients stated that the dimensions of reliability were good, 88% of patients stated that responsiveness was good, 72% of patients stated that the dimensions of assurance were good and 92% The patient stated that the empathy dimension was good. The results of the bivariate analysis proved the correlation between the dimensions of physical evidence - satisfaction of hypertensive patients (p=0.000), the dimensions of reliability - patient satisfaction (p=0.000), dimensions of responsiveness - patient satisfaction (p value 0.000), assurance-patient satisfaction (p=0.002) and empathy-patient satisfaction (p=0.017)

Conclusions: The quality of health services for hypertensive patients at the Adow community health center based on an assessment of the dimensions of tangible, reliability, responsiveness, assurance, and empathy is included in the good category. There is 53% of patients expressed their satisfaction with the services provided by the Adow community health center. In addition, this study has proven that there is a relationship between physical evidence, reliability, responsiveness, assurance, and empathy with the satisfaction of hypertensive patients at the Adow community health center.

Keywords: Quality, Health Services, Hypertension

INTRODUCTION

The incidence of hypertension continues to increase and even causes serious complications and requires large treatment costs because various diseases arise as a result of hypertension. Basic health research (Riskesdas) in 2018 showed the prevalence of hypertension in Indonesia increased by 34.1% compared to Riskesdas data in 2013. One of the efforts to reduce the prevalence and incidence of hypertension is to improve the quality of services for hypertensive patients, especially patients seeking
treatment at the community health center as a first-rate health facility. In the Minister of health regulation No. 75 of 2014, it is stated that community health centers are health service facilities that organize public and individual health efforts at the first level that prioritize promotive and preventive efforts to achieve the highest public health status in their working areas. Community Health Center as a health service unit is the vanguard in the field of basic health. Community health center is expected to provide quality, satisfying, and following professional standards and ethics. Quality service at the community health center means providing services to patients based on quality standards to meet the needs and desires of the community. Increasing public awareness about health and health services encourages health service organizations to provide quality services. The quality of services provided by community health center is important and must be assessed from the point of view of consumers as users of health services. Azrul Azwar (1996) suggests that the quality of health services is a health service that can satisfy every user of its services following the level of satisfaction of the average population where its implementation must be carried out under professional standards and codes of ethics.

Pohan states that the quality of health services plays an important role in health care organizations. This is because the application of the health service quality assurance approach will make health care organizations produce services that are following the expectations and needs of patients. In addition, health service quality assurance will make the organization more efficient in its performance because the resources in the organization work well. The quality of health services will also make health care organizations respectable and well known where the tasks in it are carried out properly so that it will foster job satisfaction, commitment and increase the morale of the health care profession. Donabedian argues that quality can be seen from the perspective of the structure, process and end result includes material and human resources. The quality of health services are degrees of health services according to the standard of a profession and service standards using the resources available. An organization, including a health care organization, can be said to be successful in its service if the organization knows what the customer or patient wants and how to fulfill it. Patients will judge that the services provided have good quality if the services provided are under their wishes or expectations. The prevalence of hypertension in North Sulawesi in 2018 based on doctor's diagnosis was known to reach 13.5%, while the prevalence based on blood pressure measurements was almost close to 34.1% where this percentage increased compared to previous years. It is predicted that by 2025, the prevalence of hypertension will continue to increase sharply where around 29% of adults worldwide suffer from hypertension. Hypertension is one of the highest causes of death in the world where the number of people with hypertension in Indonesia continues to increase every year and causes so many impacts, both for individual patients and families and socio-economic families. Therefore, it is necessary to strengthen the quality of health services, especially the quality of community health center services in its function to prevent the increase in hypertension in the community and to improve the health status of the community. Based on the initial data obtained, hypertension is a non-communicable disease with the highest number of cases of the ten most diseases in the South Bolaang Mongondow Regency. The number of hypertension cases in 2018 was 6577 cases. The number of cases continues to increase from year to year. Thus, strengthening health services, especially in the first service facility, namely community health center, is needed to prevent the increase in the number of cases of hypertension and the impact of hypertension. The purpose of this study was to determine the relationship between service quality and patient satisfaction with hypertension at Adow health center, South Bolaang Mongondow Regency.

**METHODS**

This research is an analytical survey research with a cross-sectional design. This research took place at the Adow health center, central Pinolosian Sub District, South Bolaang Mongondow Regency from June until October 2021. The population and sample in this study were hypertensive patients who were treated at the community health center. The sample in this study amounted to 100 patients who were taken by purposive sampling technique. The independent variable in this study is the dimension of the quality of health services which consists of variables of physical evidence, reliability, responsiveness, assurance, and empathy. Meanwhile, the dependent variable in this study is the satisfaction of hypertensive patients.

**Statistical analysis**

The data collection instrument for this study was a questionnaire in which the data were analyzed using SPSS. Data analysis was carried out by univariate analysis to get an overview of each variable and bivariate analysis using chi-square test to determine the relationship between the dimensions of health service quality and patient satisfaction.

**RESULTS**

Based on (Table 1), it is known that 67 out of 100 patients stated that the tangible at the Adow community health center was good, but 33 patients stated otherwise or less well. A total of 53 patients stated that they were satisfied with the dimensions of tangible at the Adow community health center, while 47 patients stated that they were not satisfied. The results of the bivariate analysis for the p-value on this dimension is 0.000 which indicates that there is a relationship between tangible and satisfaction of hypertensive patients at Adow community health center.
On the reliability dimension, 50 patients stated that this dimension was good and 50 patients stated that the reliability dimension was not good. A total of 21 people stated that they were satisfied with the reliability dimension and 79 people stated that they were not satisfied.

The results of the bivariate analysis for the p value is 0.000 which indicates a relationship between the reliability dimension and the satisfaction of hypertensive patients. Based on the results presented in (Table 3), most of the patients or 88 patients stated that the response at the Adow community health center was good, while 28 patients stated that they were still not good. Satisfaction with this dimension was felt by 53 patients, while 47 patients stated that they were still not satisfied.

### Table 1: Relationship between physical evidence with patient satisfaction.

| Tangible | Patient Satisfaction |  |  |  |
|----------|---------------------|---|---|---|
|          | Satisfaction        | Dissatisfaction | Total | P value |
|          | N  %                | N  %             |       |         |
| Good     | 48  71.6            | 19  28.4         | 67  100 | 0.000   |
| Not good | 5   15.2            | 28  84.8         | 33  100 |         |
| Total    | 53  53              | 47  47           | 100 100 |         |

### Table 2: Relationship between reliability with patient satisfaction.

| Tangible | Patient Satisfaction |  |  |  |
|----------|---------------------|---|---|---|
|          | Satisfaction        | Dissatisfaction | Total | P value |
|          | N  %                | N  %             |       |         |
| Good     | 9   18              | 41  82           | 50  100 | 0.000   |
| Not good | 12  21              | 38  76           | 50  100 |         |
| Total    | 21  21              | 79  79           | 100 100 |         |

### Table 3: Relationship between responsiveness with patient satisfaction.

| Tangible | Patient Satisfaction |  |  |  |
|----------|---------------------|---|---|---|
|          | Satisfaction        | Dissatisfaction | Total | P value |
|          | N  %                | N  %             |       |         |
| Good     | 53  60.2            | 35  39.8         | 88  100 | 0.000   |
| Not good | 0   0               | 12  100          | 12  100 |         |
| Total    | 53  53              | 47  47           | 100 100 |         |

### Table 4: Relationship between assurance with patient satisfaction.

| Tangible | Patient Satisfaction |  |  |  |
|----------|---------------------|---|---|---|
|          | Satisfaction        | Dissatisfaction | Total | P value |
|          | N  %                | N  %             |       |         |
| Good     | 45  62.5            | 27  37.5         | 72  100 | 0.002   |
| Not good | 8   28.6            | 20  71.4         | 28  100 |         |
| Total    | 53  53              | 47  47           | 100 100 |         |

### Table 4: Relationship between empathy with patient satisfaction.

| Tangible | Patient Satisfaction |  |  |  |
|----------|---------------------|---|---|---|
|          | Satisfaction        | Dissatisfaction | Total | P value |
|          | N  %                | N  %             |       |         |
| Good     | 52  56.5            | 40  43.5         | 92  100 | 0.017   |
| Not good | 1   12.5            | 7   87.5         | 8   100 |         |
| Total    | 53  53              | 47  47           | 100 100 |         |
not satisfied with the assurance dimension. The results of the bivariate analysis stated that the p value for this dimension was 0.002. These results indicate that there is a relationship between assurance and satisfaction of hypertensive patients. The patient's assessment of the empathy dimension showed that 92 patients felt that empathy at the Adow community health center was good where 53 of them were satisfied with the empathy dimension. The results of the bivariate analysis showed that the p value for this dimension was 0.017. This means that the empathy dimension has a relationship with the satisfaction of hypertensive patients at the Adow community health center.

**DISCUSSION**

Service quality is an indicator of the success of health services that will have an impact on patient satisfaction. Improving the quality of health services in health care facilities will provide satisfaction for patients who use these health services. The results of the univariate analysis as presented in table 1 revealed that 67 patients stated that the tangible was included in the good category. This is supported by the respondent's answer stating that the examination room is neat and clean. Likewise, the condition of the registration place is neat and comfortable, the availability of equipment for a complete examination, a comfortable waiting room, the appearance of health workers who are clean and tidy. Tangible in this case is related to the infrastructure and appearance of health workers and is the initial impression when a patient comes to the community health center to get health services. The p value obtained in table 1 for the tangible dimension is 0.000 which indicates a relationship between physical evidence and patient satisfaction. The results of this study are in line with research conducted by Hutagalung and Wua where in their research it was stated that tangible affects the quality of service for hypertension sufferers at the Rantang Medan Petisah health center. Another study by Taekab et al obtained the same findings, where physical evidence is closely related to outpatient satisfaction at the Leyangan health center Semarang district.

The patient's assessment of the reliability dimension showed that some patients stated that the reliability at the Adow health center was good, but some patients stated that it still needed to be improved again. This is reflected in the patient's answers stating that the patient admission procedure is carried out quickly, the opening hours of the community health center are on time, health workers who come on time, doctors who act quickly, communication with patients goes well, and easy administrative services. However, there were still some patients who stated that the procedure had not been carried out properly, there were still health workers who did not arrive on time to the community health center and still encountered difficulties in administrative services. Gobel et al in their research suggest that reliability is related with interest to reusing service at Teling public health center. Based on the bivariate analysis that has been carried out, it was found that reliability was related to the satisfaction of hypertensive patients as evidenced by the p value of 0.000. Reliable health workers will certainly carry out their duties following the standards and this will provide satisfaction for patients who seek treatment at health care facilities. The results of this study are in line with research conducted by Farida et al which found a relationship between reliability and patient satisfaction at the general polyclinic health center of Beruntung Raya community health center. The results of the analysis on the dimensions of the responsiveness of health workers to services at the Adow community health center showed that 88% of patients said they were good. This is supported by the patient's answer stating that health workers always ask for patient complaints, provide information about the patient's illness and the actions and treatments that will be given to the patient, respond quickly to patient problems and complaints, and fast waiting times. The results of the bivariate test found a relationship between responsiveness and satisfaction of hypertensive patients at Adow community health center.

The assurance of health services at Adow community health center is good (Table 4). This is as stated by 78% of patients who became respondents who stated that health workers are skilled and maintain patient confidentiality, the treatment given is following patient expectations, especially in terms of treating patients. The results of this study are supported by research conducted by Setiawan et al which obtained findings in the form of a relationship between the responsiveness of health workers and the level of patient satisfaction and research by Mernawati et al which found a relationship between responsiveness and outpatients patient at Lemper public health center.

The assurance of health services at Adow community health center is good (Table 4). This is as stated by 78% of patients who became respondents who stated that health workers are skilled and maintain patient confidentiality, the treatment given is following patient expectations, especially in terms of treating patients. The results of this study are supported by research conducted by Setiawan et al which obtained findings in the form of a relationship between the responsiveness of health workers and the level of patient satisfaction and research by Mernawati et al which found a relationship between responsiveness and outpatients patient at Lemper public health center.

Empathy is concerned with how one understands what another person feels. The empathy of a person can be different from the empathy of others. The results of this study found that the empathy shown by health workers was good. Empathy is assessed from how health workers listen carefully to patient complaints, calm anxious patients, and comfort, and encourage patients to recover quickly. The empathy of health workers is also reflected
in the time of consultation being fulfilled, providing services without discriminating against the patient's status, and being well-behaved so that patients feel safe and comfortable with the actions given. The correlation test found a relationship between empathy and patient satisfaction. Empathy is closely related to patient satisfaction. Various references and research results found that empathy from health workers is an important factor in efforts to improve service quality and patient satisfaction. The results of this study are supported by research conducted by Nusantara et al about the empathy of nurses at Balung hospital, Jember Regency. In Nusantara's research, it was found that there was a relationship between nurse empathy and satisfaction levels of inpatients at Balung hospital, Jember Regency.15 Mumu et al in their study found a relationship between empathy and patient satisfaction at the outpatient clinic of internal medicine department of RSUP Prof. Dr. R. D. Kandou Manado.16 Service quality will affect the level of patient satisfaction. Everyone has a different view of service quality following the characteristics and views of each individual on the services provided. Good quality services will provide satisfaction to patients. In this case, the patient will assess the quality of the services provided if the services provided are following the wishes or expectations of the patient.4 The results of the study on patient satisfaction showed as many as 53% of respondents were satisfied with the quality of service at the Adow community health center. This patient satisfaction is reflected in the patient's statement that patient registration is open on time with satisfactory service from the registration officer. Doctors and other health workers listen to patient complaints and provide good information about the patient's illness. However, based on the results of this study, it was still found that there were patients who were not satisfied with the quality of service at the Adow community health center. Patient dissatisfaction is related to medical devices that are felt to have not met the needs, incomplete medicines, and the lack of routine assistance from nurses during doctor's examinations. The results of this study are in line with research from Chakraborty et al which time to spend with doctors, facilities, quality of service influence patient satisfaction.16

Limitations

Limitations of current study were; since the study was conducted during a pandemic so that patients visiting health services tend to be lower. There have been various changes in health services which can also be one of the factors that affect patient satisfaction.

CONCLUSION

Based on the results of the study, the quality of health services for hypertensive patients at the Adow health center which was assessed based on the dimensions of physical evidence, reliability, responsiveness, assurance, and empathy was included in the good category. It was found that there was a relationship between physical evidence, reliability, responsiveness, assurance, and empathy with the satisfaction of hypertensive patients at the Adow health center.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

ACKNOWLEDGMENTS

Authors would like to thank the head of the Adow Health center, central Pinoselan Subdistrict, South Bolaang Mongondow Regency who has allowed us to conduct the research. Authors are also grateful for the respondents who have been willing to fill out the questionnaire and the chairman of the institute for research and community development of Sam Ratulangi University who helped in carrying out current research.

REFERENCES

1. Ministry of health of the republic of Indonesia. Regulation of the minister of health number 75 of 2014 concerning community health centers. Available at: http://regalkes.kemkes.go.id/informasi_alkes/Regulasi%20Lisensi%20Produk.pdf. Accessed on 20 October 2021.
2. Ministry of health of the republic of Indonesia. Regulation of the minister of health number 75 of 2014 concerning community health centers. Available at: http://regalkes.kemkes.go.id/informasi_alkes/Regulasi%20Lisensi%20Produk.pdf. Accessed on 20 October 2021.
3. Yogyakarta HS. Management of hospital health services. Indonesia: Goysen Publishing; 2016:71-82.
4. Jakarta PI. Quality assurance of health services: basic definition and application. Indonesia; ECG Medical Book Publisher: 2006.
5. Buchbinder SB, Shanks NH. Health Service Management. Indonesia; ECG Medical Book Publisher: 2006;64-5.
6. Fakta dan Angka Hipertensi - Direktorat P2PTM (kemkes.go.id). Available at: http://p2ptm.kemkes.go.id/kegiatan-p2ptm/subdit-penyakit-jantung-dan-pembuluh-darah/fakta-dan-angka-hipertensi. Accessed on 20 October 2021.
7. South Bolaang Mongondow Regency in Figures. Available at: https://bolselkab.bps.go.id/publication/2019/08/16/11ec613e602fb95953dc28ac/kabupaten-bolaang-mongondow-selatan-dalam-angka-2019.html. Accessed on 20 October 2021.
8. Hutagalung F, Wau H. Factors affecting the quality of health services in patients with hypertension at the Medan Petisah community health center in 2019. J Nurs Physiother. 2019;2(1):45-9.
9. Taekab AH, Suryawati C, Kusumastuti W. Analysis of patient perception on the quality of public health services and its relationship with outpatient...
satisfaction at Leyangan Health Center Semarang Regency in 2018. J Commu Health. 2021;7(1):45-9.
10. Gobel SR, Kolibu FK, Mandagi CKF. Relationship the quality of health service with interest in reusing teling public health center. Public Health J. 2019; 8(7):52-9.
11. Farida N, Asrinawaty A, Anwary AZ. The correlation between health service quality and patient satisfaction in the general poly public health center of Beruntung Raya Health Center. Public Health J. 2020;4(6):25-9.
12. Setiawan Y, Asmuji I, Komaruddin I. The correlation between responsiveness of health workers with patient satisfaction levels in inpatient rooms at balung hospital, Jember Regency. J Commu Health. 2017; 4(7):25-9.
13. Mernawati D, Zainafree I. Analysis factors related to satisfaction level of outpatient patients at lemper public health center district Semarang South Semarang City. Public Health Perpect J. 2016;1(1):80-8.
14. Matondang MR, Madjid TA, Chotimah I. Factors Associated with the quality of health service at karadenan public health center District Cibinong Bogor Regency. Promotor. Public Health Student J. 2021;2(4):276-84.
15. Asmuji NF, Komarudin A. The correlation between nurse empathy and satisfaction levels of inpatients at Balung Hospital, Jember Regency. Health Perpect J. 2020;4(5):25-9.
16. Chakraborty SN, Bhattacherjee S, Rahaman MDA. A cross-sectional study on patient satisfaction in an urban health care centre of siliguri municipal corporation, Darjeeling, West Bengal. Med J DY Patil Univ, 2016;9(3):45-9.

Cite this article as: Kolibu FK, Kawatu P, Tucunan A. Factors associated with the quality of health services for hypertension patients at adow community health center, Central Pinolosian Sub District South Bolaang Mongondow Regency. Int J Community Med Public Health 2022;9:559-64.