Jurnal Farmasi dan Ilmu Kefarmasian Indonesia
Pharmacy and Pharmaceutical Sciences Journal
Published by Faculty of Pharmacy Universitas Airlangga
OPEN ACCESS
E-ISSN 2580-8303
P-ISSN 2406-9388

Jurnal Farmasi dan Ilmu Kefarmasian Indonesia Vol. 10 No. 2 August 2023, 246-256
DOI: 10.20473/jfiki.v10i22023.246-256
Available online at https://e-journal.unair.ac.id/JFIKI/

Perspectives of Pharmacists, Doctors, and Nurses on Collaborative Management of Hypertension in Primary Health Centers

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Submitted: 29 April 2023
Revised: 29 June 2023
Accepted: 21 July 2023

Abstract

***Background**: Puskesmas is a primary healthcare facility that conducts chronic disease management, such as hypertension. The role of pharmacists in team collaboration includes that of managerial and clinical pharmacies. However, doctors and nurses still need to be fully aware of the role of pharmacists, particularly in clinical pharmacies. **Objective**: This study aimed to determine the perspectives of pharmacists, doctors, and nurses on the collaborative management of hypertension in health centres across the Central Lombok Regency. **Methods**: observational qualitative method with a maximum variation sampling technique was used. Data saturation was achieved after interviewing 27 participants between April and June 2023. Participants were pharmacists, doctors, and nurses responsible for managing hypertension in the selected primary healthcare centers. **Results**: Five main themes were identified. The first was a perspective on pharmacists' managerial and clinical pharmacy roles. Almost all participants agreed that pharmacists played more roles in ensuring the availability of hypertension drugs than clinical pharmacies. Four themes were derived from a conceptual framework related to team readiness to collaborate: cognitive, affective/relational, behavioral, and leadership aspects. In general, doctors and nurses need to be made aware of pharmacists' role in the area of clinical pharmacy; meanwhile, pharmacists need to improve their clinical pharmacy knowledge. Meanwhile, team collaboration has not run optimally because each team member works individually rather than as a team member. **Conclusion**: Pharmacists need to improve their clinical pharmacy role, be more involved in team collaborations, and be more engaged in team collaborations; efforts are required to prepare for team collaboration.*

***Keywords**: hypertension, perspective, pharmacist's role, team collaboration*

How to cite this article:
Siregar, N. M., Utami, W. & Puspitasari, H. P. (2023). Perspectives of Pharmacists, Doctors, and Nurses on Collaborative Management of Hypertension in Primary Health Centers. *Jurnal Farmasi dan Ilmu Kefarmasian Indonesia*, 10(2), 246-256. http://doi.org/10.20473/jfiki.v10i22023.246-256

P-ISSN: 2406-9388
E-ISSN: 2580-8303

INTRODUCTION

A Primary Health Center is a community-based primary health service that has existed since 1960 in Indonesia (President of the Republic of Indonesia, 1960). By prioritizing preventive and promotive aspects to improve health in an area, the vision and mission of Primary Health Centers are constantly evolving to realize optimal health status, both individually, as a family, in groups, and in society, and constantly adapt to the needs of the local community. To achieve this vision and mission, Primary Health Centers need a healthcare team consisting of health workers from various health professionals (Indonesian Ministry of Health, 2019). The healthcare team conducts various activities, including the treatment of chronic diseases. Hypertension is a chronic disease that is treated in Primary Health Centers. The treatment of patients with hypertension requires collaboration between team members, consisting of doctors, nurses, and pharmacists (Santschi *et al*., 2021). Collaboration within a team requires mutual trust, mutual knowledge, having the same goals, and working together to achieve common goals (Viani *et al*., 2021).

The involvement of pharmacists in team collaboration can improve patients' clinical, economic, and social outcomes for patients (Shrestha et al., 2022). According to various studies, the involvement of pharmacists in team collaboration can clinically reduce systolic and diastolic blood pressure (Hirsch *et al*., 2015, Smith *et al*., 2017, Margolis *et al*., 2020), improve blood pressure control (Santschi *et al*., 2021, Njonkou *et al*., 2021, Mulrooney *et al*., 2021), increase adherence to long-term therapy (Taylor *et al*., 2018) and reduce unplanned visits to primary care settings (Barreto *et al*., 2022). From an economic perspective, it has been shown to produce cost-effective care (Kulchaitanaroaj *et al*., 2017, Robins *et al*., 2013, Chung *et al*., 2020). From a social perspective, it increases access to care in rural areas through telepharmacy (Litke *et al*., 2018, Taylor *et al*., 2018) and reduces the waiting time for patients to receive hypertension treatment.

Each member of the hypertension care team has a role and activity. Based on several studies, doctors play the most role in determining patient diagnoses and establishing treatment plans (Robins *et al*., 2013, Carter *et al*., 2015, Gums *et al*., 2015, Kulchaitanaroaj *et al*., 2017). Most nurses are in charge of assessing the patient's condition by measuring blood pressure (Gums *et al*., 2015, Bui-Duy *et al*., 2018, Tetuan *et al*., 2019, Santschi *et al*., 2021, Markossian *et al*., 2021), while pharmacists are responsible for making treatment plans, designing disease-related counselling, medication, and lifestyle to patients, and providing education about medication and disease (Robins *et al*., 2013, Carter *et al*., 2015, Hirsch *et al*., 2015, Kulchaitanaroaj *et al*., 2017, Bui-Duy *et al*., 2018, Margolis *et al*., 2020). Even though the roles and activities of each member are different, interprofessional collaboration has the same goal of achieving predetermined blood pressure targets (Schrager, 2020).

According to existing literature, the common problems in interprofessional collaboration are unfavorable sentiments towards the pharmacist's role and the readiness of the team to involve pharmacists in partnership with other health workers in the team. Doctors and nurses consider other health team members less aware of the pharmacist's role, especially in carrying out clinical pharmacy activities. From their perspective, pharmacists are only responsible for drug administration. Regarding communication within the team, pharmacists were considered to have minimal communication with other health workers. Meanwhile, pharmacists consider themselves to lack clinical knowledge (Zielińska-Tomczak *et al*., 2021; Albassam *et al*., 2020, Amin and Mckeirnan, 2022; Kwak et al., 2019). Management of chronic diseases, such as hypertension, requires team collaboration involving pharmacists. This collaboration is expected to achieve the main goals in treating patients with hypertension, one of which is to control their blood pressure. However, pharmacists are not widely involved in the team because of the limited number of personnel (Rachmawati, 2021). In addition, limited time to meet and interact is a problem (Viani *et al*., 2021).

As the most common chronic disease found in Primary Health Centers across the Central Lombok Regency (Central Lombok Health Office, 2021), team-based care is recommended for hypertension management. Although each sub-district in Central Lombok Regency has two to three Primary Health Centers, and each Primary Health Center has a pharmacist, team-based care for hypertension has not been implemented. This study aimed to determine the perspectives of pharmacists, doctors, and nurses on the role and readiness of the team to involve pharmacists in managing chronic diseases, especially hypertension, in Primary Health Centers across Central Lombok Regency. Team readiness for collaboration is assessed based on cognitive, affective/relational, behavioral, and leadership aspects.

P-ISSN: 2406-9388
E-ISSN: 2580-8303

MATERIALS AND METHODS

The research was conducted after receiving a recommendation letter from the National Unity and Politics Agency for Central Lombok Regency number 070/221/IV/R/BKBP/2023, a copy of which was sent to the Head of the Central Lombok Regency Health Office and the heads of Primary Health Centers where the research was conducted. This study also received ethical approval from the Health Research Ethics Commission, Faculty of Pharmacy, Universitas Airlangga (No. 22/L. E./2023). This study used a qualitative method with phenomenological, observational, and descriptive approaches and a purposive sampling technique. The steps of phenomenological research are finding phenomena, determining the subject under investigation and the actual context, collecting data in the field, making notes, analyzing data, and writing reports. Primary health centers were selected on a representative basis based on the year of pharmacist recruitment (2009-2015 and 2016-2018) and the number of hypertension cases handled at primary health centers (<1,000 and ≥1,000). Research locations in nine primary health centers: Mantang, Puyung, Batu Jai, Teruwai, Bonjeruk, Praya, Sengkol, Penujak, and Darek Primary Health Center. Twenty-seven participants represented each pharmacist, doctor, and nurse responsible for hypertension management activities in health centres. Before conducting the interview, we made an appointment by contacting the participants for time and place. The average interview lasted for approximately 50-65 minutes. Data saturation was obtained after interviews with 27 participants. The data collection tool used in this study was an interview guide and a recorder. The interview guide contained a list of questions that asked the participants. The questions were structured around a conceptual research framework that assessed team collaboration readiness (Shomaker et al., 2016). The questions were used to assess the perspectives of pharmacists, doctors, and nurses on the role of pharmacists and team readiness to involve pharmacists in the hypertension management team according to cognitive, affective/relational, behavioral, and leadership aspects. The recorded interviews were transcribed and coded before being analyzed and concluded. Intensive discussions between research team members were then conducted to verify the results of the data analysis and determine themes (Creswell, 2013, Zaenuddin, 2014). The interviews and data analyses were conducted from April to June 2023. The interviews were then transcribed and coded. The data were then grouped, and themes were determined. Verification of data analysis results and determination of themes jointly through intensive discussions between the research team.

RESULTS AND DISCUSSION

Characteristics of participants and research locations

Twenty-seven participants came from nine out of 28 primary health centers in the Central Lombok Regency. Each health worker (pharmacist, doctor, and nurse) in each primary health center was represented by one participant. This study conducted interviews with nine participants from each health worker (pharmacist, doctor, and nurse). The total number of participants in this study was 27 from nine primary health centers in the Central Lombok Regency. The participants' characteristics are listed in Table 1.

All pharmacists were graduates of the pharmacy education program. In addition, all the doctors were general practitioners who had graduated from medical education. Five nurses had completed their last nursing education. Three nurses had a bachelor's degree in nursing and one had a diploma III.

Results by themes

Five main themes were identified based on the interview results. The first theme was perspective on the pharmacist's role in managerial and clinical pharmacies. In contrast, the other four themes followed the conceptual framework related to team readiness to involve pharmacists in the hypertension management team in cognitive, affective/relational, behavioral, and leadership aspects (Shoemaker *et al*., 2016).

Table 1. Participants characteristics

Participants Code	Gender		Age (years)	Duration of Practise (years)
	M	F		
A	2	7	27-49	3-18
D	3	6	29-56	3-27
N	2	7	23-50	5-32

* A, pharmacists; D, doctors; N, nurses; M: Male, F: Female

P-ISSN: 2406-9388
E-ISSN: 2580-8303

Perspectives on the pharmacist's role in managerial and clinical pharmacy aspects

All participants considered that pharmacists played a managerial role in ensuring the availability of hypertension medications at primary health centers. The availability of hypertension medication is essential, considering several programs and activities aimed at treating hypertension at primary health centers, such as the chronic disease Management Program (PROLANIS), integrated Family Service Post (POSGA), and the mobile Health Center (PUSKEL). In addition to these programs, the pharmacist's role is important in ensuring the availability of medicines in daily services at primary health centers.

""""""""""""""""""""""""We are still not involved in team-based care. It is still limited to guaranteeing the availability of the medicine"""." *""""""""""""""""""""""""Yes, (the discussion) is still about availability, availability, and availability (of medicine). We are not thinking about direct involvement in patient care yet, maybe later. Now, we are still focused on our responsibility in ensuring the availability of drugs, which is not easy either.... that (clinical pharmacy) has not yet been implemented"""."* (A4)

"There are various roles (of the pharmacists) such as ensuring the availability of hypertension medication, which is a disease that cannot be referred to a hospital according to the regulations of BPJS." (D5)

Due to the limited number of pharmacists, clinical pharmacy activities tend not to be conducted. The implemented clinical pharmacy agenda includes drug information services (PIO) and counselling. Meanwhile, home care activities do not involve pharmacists. The home care that primary health centers have routinely carried out is a home care program for treating tuberculosis (T.B.) and mental health. Home care activities for patients with hypertension were implemented at one of the primary health centers of the nine study locations.

"The clinical pharmacy that we (pharmacists) have done here (in primary health centres) is drug information service (PIO) both to health workers and the community. In addition, we have also implemented patient counselling (hypertension). Currently, we are focusing on counselling patients with diabetes mellitus and hypertension, considering that these two diseases are the most common. Therefore, we regularly chat with patients with diabetes mellitus and hypertension (for counseling" " " " " " " " " " " " " """)" (A5).

""""""""""""""""""""""""We are also involved in home visits conducted by nurses to hypertension patients whose blood pressure is unstable. We are in charge of preparing the medicines needed... We are responsible for planning the medicines that will be brought by the nurses, including those that will be brought to the mobile health center program... We are working hard given the limited funds which are more distributed to essential programs (stunting). If our planning is poor, it will be very difficult for us to guarantee the availability of the drug in question""" """ """ """ """"""" (D5).

Perspectives on the cognitive aspect

The cognitive aspect includes the pharmacist's ability to collaborate with the team, in terms of both clinical pharmacy knowledge and the ability to provide advice and recommendations to doctors and nurses in the team. Pharmacists assessed their ability to gather information from patients related to the consumption of antihypertensive drugs that have been consumed. Pharmacists are expected to provide advice and recommendations to doctors and nurses. In this case, the doctor delegates the nurse to prescribe the related hypertension drug substitution and the usual dosage information when the doctor is away. This suggestion is still related to the availability of antihypertensive drugs in health centres. Pharmacists are considered reliable and can communicate with doctors and nurses regarding prescription.

Clinical advice regarding drug side effects and the potential for drug-use interactions are also the responsibility of the pharmacist. However, pharmacists in the team did not carry out recommendations and suggestions for evaluating the effectiveness of therapy and assessing the achievement of therapeutic targets such as lowering and controlling blood pressure. If discussions related to this activity were carried out within the team, pharmacists would feel the need to improve their clinical pharmacy knowledge.

""""""""""""""""""""""""When patients experience problems, pharmacists ask more questions to find out if certain drugs have side effects such as captopril (dry cough). We are increasingly losing time to share knowledge of clinical pharmacy, considering that most of our time is spent doing management roles in drug warehouses"""." (A8)

Doctors and nurses are yet to realize pharmacists' potential in clinical pharmacy knowledge, such as the ability to monitor medication adherence and home care. They believed that the pharmacist's role was limited to prescribing antihypertensive drugs, the usual dosage,

P-ISSN: 2406-9388
E-ISSN: 2580-8303

terms, and conditions for drug use, the suitability of the amount of the drug, and the substitution of drugs if the patient experienced drug side effects. Despite this, doctors and nurses consider pharmacists to possess good communication skills.

""""""""""""""""""""""""Pharmacists have excellent communication skills. They can convey drug-related information well to patients. This is not an issue, considering they are used to seeing patients daily. Conversations often revolve around drug dosages (which haven't been done), especially (assess and monitor) medication adherence. Maybe what we can improve is the patient's habit of asking for additional amounts of drugs even though the old ones are still left""""." (N7)

Perspective on affective/relational aspects

The affective/relational aspect refers to pharmacists' participation in team discussions and joint decision-making for the care of hypertensive patients. Pharmacists have considered that collaboration has not been implemented. This is because each team member performed their role individually and did not work together. In addition, joint discussions within the team on therapeutic goals and treatment outcomes have not been conducted. Face-to-face interactions with doctors and nurses occurred, but these interactions did not address the clinical treatment of hypertensive patients but discussed the availability of hypertension drugs.

"*So far the collaboration had not been implemented. Pharmacists did not actively participate. We never hold team discussions. Doctors never asked about our role (pharmacists). At most, they only asked about the availability of drugs.*"" "(A2)

Doctors and nurses noticed problems with team members' interactions. The age difference was not a problem. However, the team's discussions focused only on surface matter and did not cover the therapeutic goal. According to doctors and nurses, this was due to the limited number of pharmacists in primary health centers and time for team discussions.

"We never made a big deal about the age difference. Not that we are seniors, and we can act however we want. It's just that, so far, we haven't touched on (discussed) more fundamental matters such as specific treatment or therapeutic goals. The obstacle to team collaboration is time and effort. We could have held a team discussion, but there were too many patients visiting, and thus the pharmacists were very busy""""." (D2)

Perspectives on behavioral aspects

The behavioral aspect refers to everything that is needed by the team to collaborate well and achieve goals that have been set together. According to all participants, to be able to collaborate, the role of the head of the primary health center is needed to facilitate the provision of media or facilities, such as a particular room where pharmacists, doctors, and nurses discuss with each other to determine the treatment of hypertension patients. Obstacles to the lack of collaboration within the team can be caused by the limited number of pharmacists in Primary Health Centers and incomplete patient data input into the online information system owned by Primary Health Centers. Meanwhile, doctors and nurses considered that collaboration within the team could work if there were more pharmacist personnel, where one could handle drug managerial issues and the other could work on aspects of clinical pharmacy. This response is a recommendation from doctors and nurses, whose primary health centers have only one pharmacist.

""""""""""""""""""""""""We hope that there will be a team of doctors, nurses and pharmacists. As soon as the patient arrives, the doctor conducts an examination assisted by a nurse, while the pharmacist discusses which medication is right for the patient. Regarding the success of therapy, we can all know that by tracking the patient's behavior at home, to see whether the patient is taking the drug correctly or whether the diet is as recommended. We can do that through counseling""""." (A9)

"Maybe hypertension can be a pilot case for implementing this collaboration. For this reason, the addition of pharmacist personnel is mandatory. At least two pharmacists. One pharmacist focuses on drug planning, and the other focuses on monitoring drug adherence and others related to clinical pharmacy""""." (D5)

Perspectives on leadership aspects

The leadership aspect refers to the ability to mobilize a team to carry out its functions in the management of chronic diseases. All the participants agreed that a doctor was the right person to become a team leader. However, in the context of Primary Health Centers, doctors alone are not sufficient to encourage team collaboration. All participants agreed that the heads of Primary Health Centers should also be active in providing directions for any obstacles that exist. This can be done by the heads of Primary Health Centers by issuing a decree on the formation of a hypertension

P-ISSN: 2406-9388
E-ISSN: 2580-8303

handling team, budget allocation for these activities, and a policy to prioritize hypertension management. Meanwhile, the policy to increase pharmacist personnel must first be discussed with the local health office.

"""""""""""""""""""""""Doctors (as team leaders) have power in many ways. Technically, it is the doctor who understands the cause of a disease. Doctors have the necessary knowledge for that. Doctors are also reliable, firm, systematic, and responsive in responding to patient needs even though they are not on duty in Primary Health Centers""""." (A3)

"The pharmacist's involvement in home care must obtain official permission from the head of Primary Health Centers. Apart from that, appreciation (funds) is also needed from Primary Health Centers so that pharmacists are more confident in communicating with the community""""." (D2)

DISCUSSION

This study provides an overview of the perspectives of pharmacists, doctors, and nurses on the role of pharmacists in the managerial and clinical pharmacy aspects of hypertension care in Primary Health Centers. The results showed that the role of pharmacists is to ensure the availability of antihypertensive drugs. If drugs are available, hypertension management programs and daily services can be run well. In terms of clinical pharmacy, due to the limited number of pharmacists, not all clinical pharmacy activities are carried out by pharmacists. The pharmacists in this study only provided drug information services (PIO) and counseling. This study also provides an overview of the perspectives of pharmacists, doctors, and nurses regarding team readiness to involve pharmacists in team care in terms of cognitive, affective/relational, behavioral, and leadership aspects. Even though pharmacists were cognitively considered capable of participating in team discussions and providing advice and recommendations regarding prescriptions, they still needed to improve their clinical pharmacy knowledge. Meanwhile, doctors and nurses are unsure about the ability of pharmacists to monitor medication adherence and home care.

From an affective/relational aspect, team members still tend to carry out their roles individually and do not work together as a team. This may be because of the pharmacist's limited time to actively participate in team discussions. From the behavioral aspect, pharmacists need instructions, media, or facilities to be able to collaborate in a team. From the leadership perspective, the involvement of the heads of Primary Health Centers is crucial to the success of the program. With their authority, obstacles can be overcome. The following is a discussion of the research results that have been obtained.

The role of pharmacists in ensuring the availability of hypertension drugs

Pharmacists play more managerial roles in drug management than in clinical pharmacies. With the existence of the regulation of the BPJS regarding 155 diseases that must be resolved in Primary Health Centers and not referred to the hospital (BPJS, 2014), the responsibility of pharmacists at Primary Health Centers to provide hypertension medication is greater. Pharmacists should be able to guarantee drug availability. In addition, for the success of hypertension management services in Primary Health Centers, pharmacists spend more time providing the needed medicines, such as in the PROLANIS program (BPJS, 2014) and PUSKEL (Indonesia Ministry of Health, 2013). For this reason, pharmacists are focused on providing antihypertensive drugs at Primary Health Centers.

The same case was found in Bandar Lampung, where the availability of antihypertensive drugs in Primary Health Centers greatly influenced treatment success of treatment (Huda *et al*., 2020). This means that hypertensive drugs must remain available to avoid faltering patient treatment. It is becoming increasingly important to note that the shortage of hypertensive drugs in Primary Health Centers often hinders the treatment process (Oktiano *et al*, 2022; Sulistiyono *et al*, 2020). Therefore, pharmacists urgently need to ensure drug availability. Previous research conducted in Madiun, East Java Province, found that pharmacists played an important role in ensuring drug availability. Drug management training, planning, and drug needs analysis can increase drug availability (Prabowo *et al.*, 2016). Based on this study, to support the guarantee of drug availability, the effort that can be made by the health office is to conduct planning and needs analysis training in drug management in Primary Health Centers. This training can be provided regularly to pharmacists in all Primary Health Centers in Central Lombok Regency, and the results of the training can be evaluated by examining the increase in drug availability before and after training. It can be used in collaboration with the health team, especially for planning drug needs in primary healthcare.

P-ISSN: 2406-9388
E-ISSN: 2580-8303

Efforts to increase the role of pharmacists in clinical pharmacy

Unlike drug management, clinical pharmacy activities tend not to be conducted. The pharmacists performed PIO and counseling. This aligns with previous research on the role of pharmacists in hypertension care, where pharmacists are responsible for counseling, medication adjustments, and patient education at Primary Health Centers (Ayu & Syaripuddin, 2019). Conversely, from a review of several studies regarding the involvement of pharmacists in team-based care, more clinical pharmacy activities that can be carried out by pharmacists include reviewing drug dosages, potential side effects of drugs, adjusting and stopping hypertension drugs, counseling about medication and therapy, and lifestyle to patients (Kulchaitanaroaj *et al*., 2017, Taylor *et al*., 2018, Margolis *et al*., 2020, Santschi *et al*., 2021).

The pharmacist's role was to monitor patient treatment. This was also found in a study conducted by primary healthcare units in America and Canada, where pharmacists played a role in monitoring patient medication adherence (Gums *et al*., 2015, Smith *et al*., 2016, Margolis *et al*., 2020). Several attempts to improve adherence to taking medication for patients with hypertension in Primary Health Centers include home pharmacy care, medication reminder tools, and pharmacist counseling (Wibowo *et al*., 2020, Utaminingrum *et al*., 2017).

From this study, pharmacists were able to provide suggestions and recommendations, such as drug substitution, because stocks were not available and advice was given on the usual dosage for the treatment of hypertension. This finding is in line with previous research conducted in primary care facilities in America, where pharmacists were involved in preparing and providing treatment plan recommendations to doctors (Gums *et al*., 2015, Smith *et al*., 2016, Kulchaitanaroaj *et al*., 2017). The recommendations are still related to the availability of drugs in Primary Health Centers. For example, if captopril is not available, the pharmacist may suggest another drug such as amlodipine. Pharmacists were not assigned recommendations regarding the patient's clinical condition.

Clinical pharmacy recommendations that have been carried out by pharmacists pertain to the side effects of drugs experienced by patients. Pharmacists usually make drug adjustments to avoid side effects that may occur due to the combination of two types of hypertension drugs or the use of other drugs at the same time. Furthermore, recommendations from pharmacists can be used to evaluate the effectiveness of treatment and to assess the achievement of therapeutic goals. With recommendations from pharmacists, the therapeutic goals that have been determined for patients with hypertension can be achieved. According to existing research, the role of pharmacists in team-based care has been to help reduce systolic and diastolic blood pressure (Green et al., 2014, Carter *et al*., 2015, Hirsch *et al*., 2015) and control the patient's blood pressure (Ramirez et al., 2015). al., 2020, Mulrooney *et al*., 2021).

Therefore, pharmacists need to improve their clinical pharmacy knowledge. Based on the results of research in Banten province, improving clinical pharmacy knowledge can be achieved by holding clinical pharmacy training, which has been proven to increase pharmacists' knowledge and ability to provide pharmaceutical services regarding antihypertensive drugs in Primary Health Centers (Yusransyah *et al*., 2022). Efforts made by the health office include conducting routine clinical pharmacy training related to hypertension management. This training can be conducted by working together with the Indonesian Pharmacist Association (IAI) branch of the Central Lombok Regency.

Clinical pharmacy services can also be improved by adding pharmacists (Rachmawati, 2021). The lack of pharmacists is an obstacle to pharmaceutical services at Primary Health Centers. A study in Semarang, Central Java Province, recommended adding a budget to hire more pharmacists, along with clinical pharmacy education and training. Pharmacists are also added by coordinating with the health office by proposing and meeting the needs of pharmacists either through official government candidate selection (CPNS) and/or public service agencies (BLUD) (Pratiwi *et al*., 2021).

The suggestion for additional pharmacists in this study came from participants whose Primary Health Centers had only one pharmacist. If the primary health center has two pharmacists, team collaboration can work, and clear assignments can be made to divide the managerial and clinical roles of pharmacists. Thus, pharmacists will be more involved in collaboration, and programs such as PROLANIS, POSGA, PUSKEL, and Homecare will run more successfully.

Adequate provision of pharmacists in Primary Health Centers cannot easily be obtained in a short time. Efforts that can be made to overcome the shortage of pharmacists are to collaborate with community pharmacists to carry out clinical pharmacy activities

P-ISSN: 2406-9388
E-ISSN: 2580-8303

such as home care. This finding is consistent with previous studies showing that adding community pharmacists to the care of hypertensive patients can optimize treatment to achieve blood pressure control by making treatment recommendations to doctors (Mulrooney *et al*, 2021). The same can also be applied to Primary Health Centers in the central Lombok Regency. Primary Health Centers can work with the Central Lombok IAI to help carry out home pharmacies by monitoring medication adherence. This activity can be used as a recommendation for hypertension management teams at Primary Health Centers.

Priority of hypertension treatment in primary health centers

Hypertension is not prioritized over stunting (Indonesian Ministry of Health, 2020). Therefore, Primary Health Centers prioritize funding for stunting management programs for hypertension. Data on the number of stunting cases in Central Lombok Regency in 2020 showed that 27.7% of the 73,965 toddlers in Central Lombok Regency were stunted (Informatics and Statistics Communication Department of West Nusa Tenggara, 2021). This makes the stunting management program a greater priority than hypertension management. This can be seen in the limited budget of Primary Health Centers for treating hypertension.

From the results of this study, it was found that pharmacists were not involved in home care activities for hypertension due to the minimal budget allocated. The same occurred at the Halmahera Primary Health Center, where limited funds prevented home care and PROLANIS programs from being carried out (Rosdiana *et al.*, 2017).

The treatment of hypertension in Primary Health Centers should be a priority, considering the high incidence of hypertension in Primary Health Centers across the Central Lombok Regency (Central Lombok Health Office, 2021). Adequate fund allocation is a supporting factor in creating effective and efficient performance (Sihotang, 2015). Thus, patients with hypertension will receive better services, and the need for additional pharmacist personnel will be fulfilled.

Hypertension management team leader

The team leader plays an important role as the driving force of a team. Leadership has a strong relationship with organizational commitment (Nursyamsi, 2012). Based on the results of this study, doctors are considered appropriate leaders in the technical implementation team to treat patients with hypertension. Professionalism and assertiveness are criteria for team leaders to drive their teams to achieve their goals. However, in the context of health services at Primary Health Centers, the role of the doctor as a team leader was not enough to create team collaboration, and it was considered unable to overcome various obstacles optimally. Based on the results of this study, the heads of Primary Health Centers should be able to overcome every obstacle that exists. Problems such as limited funds for hypertension treatment programs, the limited number of staff, the absence of a collaboration team, and the need for a particular room for chronic disease services at Primary Health Centers can be resolved with the heads.

Previous research has also highlighted that collaboration between hospital directors, doctors, and pharmacists increases the effectiveness of teamwork in hospitals. With the authority of a hospital director as a structural leader, a hospital director can form a clinical pharmacy team and give pharmacists authority to conduct visits, monitor drug levels, engage in team discussions, and provide recommendations on drug use. Structural leadership has a positive and significant effect on employees' organizational commitment. Organizational leaders can inspire work and determine the direction and goals of an organization (Abdulkadir, 2017). In this case, the roles of the heads of Primary Health Centers resemble those of hospital 'directors' in terms of structural authority.

CONCLUSION

Pharmacists need to improve their clinical pharmacy knowledge and be more involved in team collaborations, and efforts are needed to prepare teams to collaborate. The participants involved in this study agreed that pharmacists at primary healthcare centers across Central Lombok Regency focused on managerial aspects, such as ensuring the availability of drugs, rather than clinical pharmacy. This is because of the limited number of pharmacists available at primary healthcare centers. In addition, all participants thought that pharmacists needed to improve their knowledge of clinical pharmacy and their readiness to be more involved in team collaboration. In terms of team leadership, the heads of Primary Health Centers have the authority to overcome various obstacles that may be difficult for doctors, nurses, and pharmacists. The heads of Primary Health Centers can assist in terms of funding, adding more pharmacist personnel, forming a chronic disease management team by issuing decrees, and

P-ISSN: 2406-9388
E-ISSN: 2580-8303

providing facilities, such as a particular room for chronic disease management.

SUGGESTIONS

Here are some suggestions from this study:

1. The heads of Primary Health Centers need to formulate policies that support and prioritize the management of hypertension at Primary Health Centers. This can be achieved by involving pharmacists in team collaboration and giving them more authority in clinical pharmacies. If this instruction is made possible through the policy of the Central Lombok Health Office, technical guidance is needed.
2. The addition of pharmacists to Primary Health Centers can be carried out in coordination with the Central Lombok Regency Health Office. If Primary Health Centers have two pharmacists, then tasks must be divided between them, where one may focus on managerial aspects or clinical pharmacies. Staff shortages can also be overcome by collaborating with the IAI to support the home-care program with additional pharmacists.
3. There is a need for capacity building related to clinical knowledge for pharmacists in Primary Health Centers. This can be achieved by conducting clinical pharmacy training programs for various chronic diseases. Training can be held by the health office in collaboration with Central Lombok IAI. Training should be performed regularly along with evaluation.

Future research can target the heads of Puskesmas as participants. This study aimed to examine the involvement of the head of the Puskesmas in collaboration with pharmacists, doctors, and nurses in managing chronic diseases at the Puskesmas.

ACKNOWLEDGMENT

All authors are grateful to all parties who contributed to the creation.

AUTHOR CONTRIBUTIONS

Conceptualization, N. M. S., W. U., H. P. P.; Methodology, N. M. S., W. U., H. P. P.; Software, N. M. S., W. U., H. P. P.; Validation, N. M. S., W. U., H. P. P.; Formal Analysis, N. M. S., W. U., H. P. P.; Investigation, N. M. S., W. U., H. P. P.; Resources, N. M. S., W. U., H. P. P.; Data Curation, N. M. S., W. U., H. P. P.; Writing - Original Draft, N. M. S.; Writing - Review & Editing, N. M. S., W. U., H. P. P.; Visualization, N. M. S., W. U., H. P. P.; Supervision, W. U., H. P. P.; Project Administration, N. M. S., W. U., H. P. P.

FUNDING STATEMENT

This study was supported by Indonesian Ministry of Health for research funding through the 2021 Agricultural Human Resource Extension and Development Agency Program (BPPSDM).

CONFLICT OF INTEREST

The authors declared no conflict of interest.

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P-ISSN: 2406-9388
E-ISSN: 2580-8303