Literature Review: Relationship of Chronic Disease Management Program (Prolanis) To Blood Pressure of Hypertension Patients

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ABSTRACT

Prolanis is a program to improve the quality of life, health status, and optimal life expectancy. The program is called to be good if it can improve the quality of life and health status of the prolanis participants, the program activities are medical/educational consultations, home visits, reminder, and prolanis gymnastics. This research aims to explain the relationship of chronic disease management program (prolanis) to blood pressure of hypertension patients. This research is based on a literature review with Scoping Review method. Research articles were obtained through Google Scholar and DOAJ with 10 articles results that match the research topic, which keywords found by 5 (50%) medical/educational consultation articles, 4 (40%) home visits, 4 (40%) reminder articles, and 8 (80%) prolanis exercise articles. Based on the 10 research articles reviewed, there were 4 (80%) medical/educational consultations articles, 3 (75%) home visits articles, 3 (75%) reminder articles, and 8 (100%) prolanis gymnastic articles that related with the blood pressure of hypertension patient’s topic. Meanwhile, there are 1 (20%) medical/educational consultations article, 1 (25%) reminder article, and 1 (25%) home visits article that are not related to the blood pressure of hypertension patients. Based on the research results, it was concluded that there was a relationship between medical/educational consultations, home visits, reminder, and prolanis exercise to the blood pressure of hypertension patients.

Keywords: Medical/educational consultation, home visit, reminder, prolanis exercise, blood pressure

INTRODUCTION

Chronic disease or Non-Communicable Diseases (NCD) is currently becoming a concern because it is a serious health problem and the biggest cause of death in the world. According to data from the WHO in 2018, it is estimated that 41 million people die from non-communicable diseases every year. The data shows that almost 71% of deaths worldwide are caused by non-communicable diseases. Based on data from the Ministry of Health of the Republic of Indonesia, it is estimated that there are at least 1.4 million people die every year due to non-communicable diseases. Most non-communicable diseases are chronic or called chronic diseases (1).

The high number of chronic diseases is caused by one of the risk factors, namely high blood pressure or hypertension. High blood pressure itself is a serious health problem because its unwitting being can cause stroke, heart, and failure kidney function which can lead to death. According to the World Health Organization 2013, hypertension is a blood vessel condition that has high pressure where the systolic is 140 mmHg and 90 mmHg of diastolic (2).

According to WHO data, around 972 million or 26.4% of people worldwide have hypertension, this number is likely to increase to 29.2% by 2025 (3). According to Indonesia Riskesdas data in 2018 the prevalence of hypertension obtained through measurements ±18 years of age people was 34.1% and the highest province prevalence of hypertension in 2018 was in South Kalimantan at 44.1%. Complications of hypertension according to the Ministry of Health 2017, as many as 51% of strokes, 45% of coronary heart disease, and 4% of others suffer from complications of kidney failure and blindness. Riskesdas 2013 data also shows that the prevalence of stroke increased from 7% to 10.9% in 2018. Around 60% of people with hypertension end up having a stroke which affects almost 25% of the world's adult population (4).
Based on hypertension stand still high data, the government has also planned various health service policies for people with hypertension with the aim of improving their health status and quality of life. Health services such as elderly posyandu in the form of elderly exercise are activities that aim to prevent non-communicable diseases such as heart disease, cholesterol, diabetes mellitus, hypertension, and so on. This activity is also accompanied by education related to elderly non-communicable diseases, non-communicable diseases risk factors, prevention, and management control through elderly exercise. However, according to research conducted by Afandi A et al., 2019 Posyandu activities for the elderly in several health centers are still involved in the implementation of posyandu toddlers, so the health of the elderly has not become the main focus. In addition, the direct target of this program is also only shown to the elderly, both the pre-elderly group (45-59 years), elderly age group (over 60 years), and the elderly group with high risk (over 70 years). Hypertension is often identified as a disease of the elderly. However, this concept has changed, hypertension no longer looks over the age because teenagers and adults people can also suffer from hypertension (5).

The government through BPJS Kesehatan attempted a program to overcome these problems through the Chronic Disease Management Program (PROLANIS) purpose for all BPJS Kesehatan participants with chronic diseases such as diabetes mellitus type 2 and hypertension. Prolanis is one of the promotive and preventive strategies implemented by BPJS Kesehatan which aims to reduce or prevent complications of chronic diseases that are suffered by participants and control the cost of health services. Activities in prolanis include medical/educational consultations, home visits, reminder, and club activities (prolanis exercise) (6).

Prolanis is a health service program for people who suffers from chronic diseases, especially hypertension to improve quality of life, health status, and optimal life expectancy. It is expected that with the indicator as many as 75% of registered participants who visit the first level facility have a “good” result on a specific examination of diabetes mellitus type 2 and hypertension according to the prolanis clinical guidebook so that they can prevent disease complications (6).

The program is called to be good if it can improve the quality of life of the prolanis program participants. The way to find out and determine the results of measuring the health status of people with hypertension is to monitor blood pressure. This is done with the aim of knowing the health risks of each person. According to Blum's (1981) theory, the factors that influence a person's health status are determined by 4 factors, one of which is health service factors, including promotive, preventive, care, treatment, disability prevention, and rehabilitation (7). While prolanis is one of the health services in the form of promotive and preventive strategies to reduce or prevent complications of chronic diseases suffered by prolanis participants (6).

Prolanis is one of the chronic disease control programs that can be said to be quite effective and efficient, but there are still many people who have not used this service. According to research conducted by Ginting R et al., 2020 it was stated that based on the prolanis used, respondents who did not prolanis users were as many as 52 people (56.5%) and 40 respondents who prolanis users (43.5%) (6).

Based on the background above, it is necessary to conduct a literature review to find out the relationship of chronic disease management programs (prolanis) to the blood pressure of hypertension patients.

**METHOD**

This study aims to explain the relationship of chronic disease management program (prolanis) to blood pressure of hypertension patients. The method of research uses a literature review with scoping review type. The article selection strategy refers to the PICOT component: Population were patients with hypertension who follow chronic disease management program (prolanis); Intervention is prolanis program to lower blood pressure; Comparison on the participation of management programs Chronic disease (prolanis) has an effect on blood pressure in hypertensive patients; Outcomes on relation to chronic disease.
management programs (prolanis) with the patient's blood pressure hypertension; and time frame from January 1st 2011 to 31 December 2020.

Findings from some databases were limited by inclusion criteria: Indonesian or English, consisting of national and international journals in full text, ISSN and DOI accredited, articles ranging from 2011 to 2020, quantitative observational analytic research, articles linking blood pressure in hypertension patients with PROLANIS.

Table 1. The proportion of the number of articles based on keywords and search engines

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Search engine</th>
<th>(N) Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Konsultasi Medis/Edukasi</td>
<td>Google Scholar</td>
<td>93</td>
</tr>
<tr>
<td>Home Visit</td>
<td>Google Scholar</td>
<td>105</td>
</tr>
<tr>
<td>Reminder</td>
<td>Google Scholar</td>
<td>89</td>
</tr>
<tr>
<td>DOAJ</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Senam Prolanis</td>
<td>Google Scholar</td>
<td>144</td>
</tr>
<tr>
<td>Tekanan Darah Penderita Hipertensi</td>
<td>Google Scholar</td>
<td>870</td>
</tr>
<tr>
<td>Prolanis Gymnastics</td>
<td>Google Scholar</td>
<td>23</td>
</tr>
<tr>
<td>Blood Pressure in Patients with Hypertension</td>
<td>DOAJ</td>
<td>4</td>
</tr>
<tr>
<td>Medical Consultation</td>
<td>DOAJ</td>
<td>1</td>
</tr>
</tbody>
</table>

The keywords used are medical/educational consultation, home visit, reminder, prolanis exercise, blood pressure for hypertension sufferers, prolanis exercise, blood pressure of hypertension patients, and medical consultation. The identification results from the search method on Google Scholar and DOAJ have obtained 1,333 search articles and data results. The period inclusion criteria obtained 1,222 journals. The type and quality of journals inclusion criteria obtained 72 journals were feasibility tests because there were 43 duplicate journals, 561 unmatched variable journals, 250 unavailable full papers, and 296 unaccredited journals. After the journals were screened cause of the unmatched topic and target, 10 match articles were obtained for being reviewed.

Figure 1. Selection of articles

1.333 articles from Google Scholar and DOAJ (Google Scholar: 1323; and DOAJ:10)

1.222 Article titles

72 journals were carried out appropriateness

Exclusion (n=1,150)
- Duplicate (43)
- Unmatched variable (561)
- Not available full paper (250)
- Not accredited (296)

Exclusion (n=62)
- Not on topic
- Not on target

10 full text journals for reviewed
RESULTS AND DISCUSSION

1. Research article based on analytical observational design
   a. Cross sectional
   There were 6 (60%) articles using a cross-sectional research design. According to research, there were I Ketut Indra Wiguna et al., 2018 (14), Pohan A, 2019 (15), I Dayanti, 2019 (9), Andi Ipaljri Saputra, 2019 (16), Meilani N et al., 2020 (17), and Niken Larasati and Nadia Husna, 2019 (18) discussed prolans exercise using a cross-sectional research design. The cross-sectional study aims to determine the correlation between the independent and dependent variables with an observational approach or data collection at one time. This means each research subject is only observed once and measurements were made on the subject variable at the time of the examination. This study article observes the relationship between the independent variable which is prolans exercise with the dependent variable which is the blood pressure of hypertension patients at the same time. Then the data processing and analysis were determined by comparing the prolans exercise with the blood pressure of hypertension patients. There for articles will be obtained evidence with or without the relationship between prolans exercise and blood pressure (9,14,15,16,17,18).

   b. Cohort
   There were 3 (30%) studies using a cohort research design. Based on the research, there were Emi Demiyanti, Ardini S. Raksanagara, and Irvan Afriandi 2018 discussed medical/educational consultations using a cohort research design. This cohort study was classified as a retrospective that the exposure occurred before the researcher started the study. This study used a retrospective cohort study cause this education group had been carried out at the Vita Medika Clinic Prolanis Club Banjar prior to the study. Data collection is done by viewing data from medical records (secondary data) from October 2011 to October 2015. Whilst, this research was conducted at the Pratama Vita Medika Clinic, Banjar, West Java from 2nd January 2017 to 25th January 2017 (13).

   Secondary and data analysis was carried out in stages, the data used included univariate analysis, namely to calculate the frequency distribution and bivariate analysis, to assess the relationship between the independent variable and the dependent variable using the chi square different test, namely to see the relationship between attendance and complete group education 8 modules. The cohort design is based on observing a particular group over a certain period of time. In this case the observed group is a group with 2 specified categories. Participants who are routine and/or participants who are not used to participating in complete group education with 8 modules. The risk factors, in this case prolans, have been identified and then observed continuously to determine the consequences. In this case, in the form of blood pressure in hypertensive patients. So that it can be seen whether or not there is a relationship between risk factors in this case in the form of prolans and the consequences that will be caused in this case in the form of blood pressure in patients with hypertension (13).

   Based on the research of Florentina Sita Murti, Hari Kusnanto J and Wahyudi Istiono in 2019 which discussed medical/educational consultations, home visits, reminders, and prolans exercises using a cohort research design. This quantitative study with a retrospective cohort design was a quantitative study that compared patients who had taken prolans for 1 year before the time of the study with hypertensive patients who had not taken prolans at the Pandak II Health Center. The population of this study were hypertension sufferers in the prolans group which was the research study group and the non-prolans group which was the control group who visited the Pandak II Health Center every month for 12 months from 2016 to 2017. The secondary data used and the instruments used were medical record data derived from the patient's medical history. Medical record data collected includes patient characteristics and blood pressure consisting of systolic blood pressure and diastolic blood pressure. Then repeated measurements of the ANOVA statistical test were used to measure the difference in blood pressure reduction in the prolans and non-prolans groups. (19).

   Based on the research by Firas Farisi Alkaff, William Putera Sukmajaya, Ryan Enast Intan, and Sovia Salamah in 2020 which discussed medical/educational consultations, home
visits, reminders, and prolanist exercises using a cohort research design. This study was an observational retrospective cohort study using secondary data from prolanis reports at the Wates Community Health Center, Mojokerto City, Indonesia. The study population was hypertensive patients who voluntarily joined the program since April 2018 and routinely attended follow-up evaluations every 6 months (October 2018, April 2019 and October 2019), evaluations were carried out again as follow-ups (20).

c. Case control
There are 2 (10%) studies using case control research design. Based on research, there were Frieska Dyanneza, Didik Tamtomo, and Sugianto 2017 discussed medical/educational consultations, home visits, reminder, and prolanist exercise using a case control research design. The samples were 120 hypertensive patients, consisting of 60 controlled hypertension patients in a control group and 60 uncontrolled hypertension patients in a study group. This quantitative study with a retrospective case control design is a quantitative study that compares controlled hypertension patients in a control group and uncontrolled hypertension patients in a study group. Then retrospective measurements were made, in this case, the blood pressure of hypertension patients which was already known before. After the measurements were made, data processing and analysis were carried out by comparing those who routinely followed prolanis and those who did not routinely follow prolanis in the study group with the same proportion in the control group. Then the evidence will be obtained with or without a relationship of prolanis to blood pressure of hypertension patients (11).

2. Factors related to the relationship of chronic disease management programs (prolanis) to blood pressure of hypertension patients
a. Medical/educational consultation
Based on the research results of Frieska Dyanneza, Didik Tamtomo, and Sugianto in 2017 states that there is a relationship between medical/educational consultation on blood pressure of hypertension patients who take prolanis with a value (p=0.020) for diet education and (p=0.001) for physical activity education, using the case control research method. Statistically, the presence of DASH dietary education on the systolic blood pressure of hypertensive patients has 4 mmHg lower systolic blood pressure than hypertensive patients who have a low DASH diet. In addition, statistically, the presence of physical activity education on systolic blood pressure hypertension patients with high physical activity have 0.40 mmHg lower systolic blood pressure compared with low physical activity hypertensive patients (11).

This research is in line with the research of Emi Demiyanti, Ardini S. Raksanagara, and Irvan Afriandi in 2018 which stated that there is a relationship between medical/educational consultations on blood pressure in hypertensive patients who follow prolanis with a value (p = 0.001), using the cohort research method. This group education was carried out by a doctor at the Vita Medika Clinic. The lecture method used is in the form of audiovisual using infocus (power point) and speakers with monthly modules, namely the 1st module is knowledge about hypertension including signs, symptoms, risk factors, complications and treatment, the 2nd module is about diet or eating patterns, the 2nd module 3 on physical activity, the 4th module discusses a healthy lifestyle, the 5th module discusses preventing complications, the 6th module discusses the importance of exercise, rest, and recreation, the 7th module discusses stress management, and the 8th module discusses medication adherence. Modules are taught once a month per module and after the material is delivered, participants are asked questions to find out whether they understand it or not. The presence of prolanis participants during group education and complete 8 modules for 8 consecutive months allows prolanis hypertension participants to obtain information about diseases and pharmacological and non-pharmacological management, so that participants’ knowledge about blood pressure control will increase compared to those who do not routinely attend 8 modules in full, which means that following group education has an effect on blood pressure control in hypertensive patients (13).
This research is in line with the research of Florentina Sita Murti, Hari Kusnanto J and Wahyudi Istiono in 2019 stating that there is a relationship between medical/educational consultations on systolic and diastolic blood pressure in patients with hypertension who take prolanis with a value \( p = 0.0001 \), with using the cohort research method. The average value of systolic pressure in the prolanis group was 140.57 mmHg. Meanwhile, the non-prolanis group had an average systolic pressure value of 148.56 mmHg. The average value of diastolic pressure for the prolanis group was 87.49 mmHg. While the non-prolanis group the average value of diastolic pressure was 91.16 mmHg (19).

On the other side, there is one research article that was no relationship between medical/educational consultation on blood pressure of hypertension patients who take prolanis. It is a study by Niken Larasati and Nadia Husna in 2019 with a value \( p \)-value = 0.111, using a cross sectional research method (18). Based on the research by Niken Larasati and Nadia Husna in 2019 it showed that the number of respondents who routinely attended medical consultation/educational prolanis programs and controlled blood pressure was 52 respondents (58.43%) and uncontrolled were 27 respondents (30.34%). Meanwhile, the number of respondents who did not routinely attend medical consultation/educational prolanis programs whose blood pressure was controlled were 4 respondents (4.49%) and 6 respondents (6.67%) whose blood pressure was not controlled (18).

Based on the 4 research articles reviewed, it can be concluded that there is a relationship between medical/educational consultation on the blood pressure of hypertension patients who take prolanis. The benefits of providing medical /educational consultation for prolanis participants increase the patient's knowledge about their illness which will improve their health status. This is in accordance with the theory of Notoatmodjo S, 2003 which states that the benefits of providing education for patients increase patient knowledge, awareness, and skills in an effort to maintain and improve health, also increase patient satisfaction with health services and prevent disease complications (9).

b. Home visit

Based on the literature review, there are 4 research articles (40%) that discuss home visits. As many as 3 research articles (75%) stated that there was a relationship between home visits and blood pressure in patients with hypertension who took prolanis. In addition, as many as 1 research article (25%) stated that there was no relationship between home visits to blood pressure in patients with hypertension who took prolanis (18).

A study by Frieska Dyanneza, Didik Tamtomo and Sugiarto in 2017 stated that there was a relationship between home visits and blood pressure in patients with hypertension who attended prolanis with a value \( p = 0.030 \), using a case control research method. Hypertensive patients who make home visits have systolic blood pressure 22 mmHg lower than hypertensive patients who do not make home visits (11).

This research is in line with the research of Florentina Sita Murti, Hari Kusnanto J, Wahyudi Istiono in 2019 which stated that there is a relationship between home visits to systolic and diastolic blood pressure in patients with hypertension who take prolanis with a value \( p = 0.0001 \), using the method cohort research. The mean value of systolic pressure in the prolanis group was 140.57 mmHg. Meanwhile, the non-prolanis group had an average systolic pressure value of around 148.56 mmHg. The average value of diastolic pressure for the prolanis group was 87.49 mmHg, while the non-prolanis group the average value of diastolic pressure was 91 (19). This research is in line with the research of Firas Farisi Alkaff, William Putera Sukmajaya, Ryan Enast Intan, and Sovia Salamah in 2020 which stated that there is a relationship between home visits to systolic and diastolic blood pressure in patients with hypertension who take prolanis with a value \( p = 0.043 \) for systolic blood pressure and \( p=0.046 \) for diastolic blood pressure, using the cohort study method (20).

On the other hand, there is 1 research article that does not state the relationship between home visits to blood pressure in patients with hypertension who take prolanis. Study by Niken Larasati and Nadia Husna in 2019 \( p=0.007 \), using a cross-sectional research method. Based on the results of the analysis of the relationship analysis of the prolanis program home visit participants with controlled blood pressure, it showed that the number of
respondents who routinely received prolanis program home visits and controlled blood pressure was 11 respondents (12.36%) and there were no respondents whose blood pressure was not controlled. While the number of respondents who did not routinely get home visits to the Prolanis program whose blood pressure was controlled was as much as 45 respondents (50.56%) and 33 respondents (37.04%) whose blood pressure was not controlled. Home visit is a service activity for visiting Prolanis participants’ homes to provide information/education on personal and environmental health for Prolanis participants and their families (18).

In the results of Niken Larasati and Nadia Husna’s research in 2019, it was found that as many as 45 respondents (50.56%) had blood pressure under control, although they did not routinely get home visits. This is because the target of Prolanis home visits has criteria such as newly registered participants, not routinely attending Health Center visits for 3 consecutive months, participants with GDP/GDPP below 12 standards for 3 consecutive months, uncontrolled blood pressure based on medical records for 3 consecutive months, and participants after hospitalization. So that not all participants get home visit services, this service is only for participants with certain criteria. So that prolanis participants who did not meet the home visit criteria chose other activities that could manage their hypertension. One way to control blood pressure is to adhere to antihypertensive medication. In addition, facilities and infrastructure are still limited, such as the means of transportation used to cover the distance of Prolanis participants and the unavailability of a budget for implementing home visits, considering that the distance between the participant’s house and the FKTP is quite far, plus most of the participants are elderly (18).

Based on the 3 research articles reviewed, it can be concluded that there is a relationship between home visits and blood pressure of patients with hypertension who take prolanis. It is because patients who receive home visits from medical workers are 2.15 times more obedient to take their medicines. During home visits, health workers will carry out health monitoring, such as blood pressure checks, education and health consultations with health workers, also therapy services. Participants who received regular home visits had better control of their blood pressure than irregular home visit participants. There is a difference in systolic and diastolic blood pressure between participants who had a home visit and participants who did not get a home visit (11).

c. Reminder

Based on the results of Niken Larasati and Nadia Husna’s research in 2019, it was stated that there was a relationship between reminders and blood pressure in people with hypertension who took prolanis (p = 0.002), using a cross-sectional research method. At the Gamping 1 Health Center, this reminder service utilizes the WhaatsApp application. The WhatsApp application at this time, especially in Indonesia, is a means of communication that is widely used by the public, because when using this application, it provides easy access for users. So that the Gamping 1 Health Center can carry out prolanis activities easily, namely monitoring the health of prolanis participants and motivating them to take medicine regularly (18).

This research is in line with the research by Firas Farisi Alkaff, William Putera Sukmajaya, Ryan Enast Intan, and Sovia Salamah in 2020 which stated that there is a relationship between reminders for systolic and diastolic blood pressure in patients with hypertension who take prolanis (p = 0.043) for systolic blood pressure and (p-value=0.046) for diastolic blood pressure, using the cohort study method. The use of reminder services to increase compliance shows that the use of reminder services has cost effectiveness and is more innovative. It is easier to use reminder service applications to increase medication adherence and control blood pressure (20).

On the other hand, there is 1 research article that does not state the relationship between reminders and blood pressure in patients with hypertension who take prolanis. Study by Frieska Dyanneza, Didik Tamtomo and Sugiaro in 2017 (p=0.085), using a case control research method. Even though the reminder is working well, it doesn't make the patient comply in controlling his blood pressure. Problems in hypertension therapy include patient
non-compliance with pharmacological and non-pharmacological therapies. This problem is caused by several factors, including lack of knowledge and communication between prolansis patients and prolansis health workers (11).

Based on 3 of the 4 research articles reviewed, it can be concluded that there is a relationship between reminder and blood pressure of hypertension patients who take prolansis. A reminder is the most optimal prolansis activity to do so that the community understands and remembers when the schedule for prolansis activities is held. A reminder is a representation that health care workers are concerned or care about improving the health status and life quality of patients. Using short message reminders will improve the obedience to treatment and management of hypertension. Sending messages as a reminder and motivation for hypertension patients has a positive influence on behavioral changes in hypertension patients to improve obedience and systolic diastolic blood pressure control (18).

d. Club activities (prolanis exercise)

Based on the results of the literature review conducted, there are 8 articles (80%) of research that discuss club activities (prolanis gymnastics). As many as 8 research articles (100%) stated that there was a relationship between club activity (prolanis gymnastics) on blood pressure in patients with hypertension who took prolansis.

Based on the results of research by Frieska Dyanneza, Didik Tamtomo and Sugiarto in 2017, it was stated that there was a relationship between club activity and blood pressure in people with hypertension who took prolansis with a value (p-value = 0.021), using a case control research method. Hypertensive patients who do club activities (prolanis gymnastics) 2-3 times a month have systolic blood pressure 3 mmHg lower compared to hypertensive patients who do club activities once a month (11).

This research is in line with the research of I Ketut Indra Wiguna Cakra, Ni Made Sri Nopiyani, and I Made Ady Wirawan in 2018 which stated that there is a relationship between club activity (prolanis gymnastics) on blood pressure of hypertensive patients who take prolansis (p <0.01), using a cross-sectional study method (36). Pohan A's research in 2019 also stated that there was a relationship between club activity (prolanis gymnastics) and blood pressure in people with hypertension who took prolansis with a value (p=0.004), using a cross-sectional research method. A sample of 30 respondents who took part in gymnastics, namely with the majority of blood pressure <150 mmHg, totaling 22 people (15).

This research is in line with I Dayanti's research in 2019 which stated that there is a relationship between club activity (prolanis gymnastics) and blood pressure in people with hypertension who take prolansis (p = 0.000), using a cross-sectional research method (39). Another study conducted by Andi Ipaljri Saputra and Isramilda in 2019 also stated that there was a relationship between club activities (prolanis gymnastics) and blood pressure in patients with hypertension who took prolansis (p = 0.000), using a cross-sectional research method (41). This research is in line with the research of Florentina Sita Murti, Hari Kusnanto J and Wahyu Istiono in 2019 which stated that there is a relationship between club activity (prolanis gymnastics) on systolic and diastolic blood pressure in patients with hypertension who take prolansis (p = 0.0001), using the cohort research method. The mean value of systolic pressure in the prolansis group was 140.57 mmHg. Meanwhile, the non-prolanis group had an average systolic pressure value of around 148.56 mmHg. The average value of diastolic pressure for the prolansis group was 87.49 mmHg, while the non-prolanis group the average value of diastolic pressure was 91.16 mmHg (19).

This research is in line with research by Meilani N et al, in 2020 which stated that there is a relationship between club activity (prolanis gymnastics) on systolic and diastolic blood pressure in patients with hypertension who take prolansis (p = 0.001), using a cross-sectional research method. The results showed that out of 40 respondents who routinely did gymnastics, there were 36 respondents (90.0%) with 35 respondents (97.2%) controlling hypertension and 1 respondent (2.8%) not doing hypertension control.). Meanwhile, there were 4 respondents (10.0%) who did not routinely exercise and 2 respondents (50.0%) controlled hypertension and 2 respondents (50.0%) did not exercise hypertension. The routine of participating in prolansis exercises and controlling hypertension is something that must be
done by prolanis participants with hypertension. The health center has carried out prolanis exercises at the study site to reduce the blood pressure of hypertensive prolanis participants. However, even though gymnastics has been carried out by the public health center, there are still prolanis participants who do not do gymnastics regularly (17).

This research is in line with the research of Firas Farisi Alkaff, William Putera Sukmajaya, Ryan Enast Intan, and Sovia Salamah in 2020 which stated that there is a relationship between club activity (prolanis gymnastics) on systolic and diastolic blood pressure in hypertensive patients who take prolanis p =0.043 for systolic blood pressure and p=0.046 for diastolic blood pressure using the cohort research method (20).

Prolanis exercise is a type of low impact aerobic exercise with a low load on the joints in every movement. It uses the muscles throughout the body through dynamic and simple movements accompanied by music. The duration of the prolanis exercise should be 20-60 minutes. In every for 20 minutes, it will increase 20% of total energy. Fat in the body will be burned, thereby reducing the workload of the heart. Prolanis exercise increases the use of oxygen and glucose. The need for oxygen increases almost 20 times. Body cells need oxygen and glucose to form ATP. Prolanis exercises can be done 2-4 times a week to get good results (9).

Based on the 8 research articles reviewed, it can be concluded that there is a relationship between club activity (prolanis exercise) and blood pressure of hypertension patients who take prolanis. This is because exercise is associated with the management of hypertension, regular exercise can reduce peripheral load which will lower blood pressure. Prolanis exercise activities cause a physiological response that will increase blood flow to the whole body and relaxes the body so relaxing the muscles and improving the health quality of hypertension patients (11).

CONCLUSION AND RECOMENDATION

Based on the 10 articles reviewed result, there is a relationship of chronic disease management programs (prolanis) to blood pressure of hypertension patients, which results from this review indicate that there is a relationship between medical/educational consultation, home visit, reminder, and prolanis exercise to blood pressure of hypertension patients. The suggestions from the author to hypertension patients are expected to be knowledgeable about the relationship of prolanis to the health status of hypertension patients as well as more regularly in participating in the program in order to achieve a better health status. Future research is expected to be able to use this research as literature and continue this research even better with different variables, types, and methods as well as cover the entirety of this program. Then, the public health study program is expected to hold further research to expand and find out the more clearly causal mechanism of prolanis relationship to blood pressure of hypertension patients. The result of this study is also expected to be used as beneficial study material for the learning and teaching process. As prolanis program workers are expected to be able to improve and maintain their role as motivators, educators, counselors and facilitators, and more innovators in managing programs for participants in order to achieve the goal of making program hypertension participants get a better health status.
REFERENCES