

# The Effectiveness of the use of a Pocket book in Sufferers in the Control of Hypertension in Teladan Medan Community Health Center

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**Abstract:** *The prevalence of hypertension has always increased every year resulting in hypertension as a cause of death number three after a stroke. Based on the initial survey in Teladan Medan Community Health Center found in 2015 as much as 1750 case. This suggests that hypertension is always ranked top five in terms of the biggest disease in Medan with the number of sufferers is very unpredictable. This research uses a quantitative approach with a true experiment method pretest and posttest control group design. The population was sufferers of hypertension in Teladan Medan Community Health Center as much as 53 people. This research uses the technique of total population. Research results from 53 respondents who researched the Wilcoxon test results indicate that there is an influence of the giving pocket book control of knowledge of respondents with sig p 0.022  $\alpha < 0.005$ . Conclusion: there is a difference of knowledge before and after the granting of a pocket book in sufferers of hypertension control. Advice so that health workers can provide control pocket book as an attempt to overcome hypertension.*

**Keywords:** effectiveness of a pocket book, lose control of hypertension sufferers

## 1. Introduction

Hypertension is one of the diseases that are common throughout the world which occurs in humans and is a major risk factor for the occurrence of stroke, myocardial infarction, vascular disease, chronic kidney disease and even lead to death if not detected quickly and not treated appropriately (James, et al., 2014). Hypertension is a situation where an increase in blood pressure are abnormally and continuously on several times the examination of blood pressure caused by one or more risk factors that do not run properly in the maintain normal blood pressure (Wijaya, 2013). Hypertension is often referred to as the dark assassin (silent killer) because of deadly diseases including, without any symptoms first as a memorial to the victims. Symptoms of hypertension varies in each individual and almost identical to the symptoms of other diseases (Sustrani et al. 2005).

Hypertension can invade virtually all societies around the world. The number of sufferers of hypertension increased from year to year. Data from the World Health Organization (WHO) 2010 stating that hypertension is a disease of the number eleven the highest cause of death in the world that is as much as 1,153,308 inhabitants. In Indonesia the problem of hypertension tends to increase from year to year. According to Kementerian Kesehatan Republik Indonesia (2008), hypertension is a leading cause of death number three after a stroke (15.4%), and tuberculosis (7.5%), with the presentation reach (6.8%) of the population of death in all age in Indonesia (Arifet, al, 2013). Figures for the incidence of hypertension based on basic health Research (Riskesmas) Department of health the year 2013 shows a trend of the prevalence of hypertension by as much as 9.5% this result was higher than the year 2007 as much as (7.6%)(Riskesmas, 2013).

According to the Health profile of Medan City Year 2011, hypertension ranked second out of ten biggest diseases in the

city of Medan with a number of sufferers as much as 60,628 people. This suggests that hypertension is always ranked top five in terms of the biggest disease in Medan with the number of sufferers is very unpredictable number (Medan City Health Office, 2011). Based on the initial survey in TeladanMedanCommunity Health Center was discovered in 2015 i.e. 1750 case.

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Until recently, hypertension remains a problem because of the prevalence of hypertension is increasing, many patients untreated hypertension and did not get therapy adequat (Yogiantoro, 2007). Along with the increase in cases of hypertension and complications that can occur if hypertension is not handled properly, then the serious handler needs to be done to control the disease. There are two therapies are performed to treat hypertension i.e. pharmacological therapy and non pharmacological therapy. Pharmacological therapy with the use of drugs that are proven antihipertensi can lower blood pressure, whereas non pharmacological therapy or also known as lifestyle modifications that include stopping smoking, reducing excess weight, avoid alcohol, diet modification and that includes reducing stress among others psychic, exercise, and rest (Kosasih& Hassan, 2013; Muhammadun, 2010).

Besides hypertension sufferers should also have the knowledge and attitude of submission to hypertension treatment can adjust in life everyday (Willy, 2007). For Indonesia's own awareness and knowledge about the disease

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of hypertension is still very low it is evident from the lifestyle of the community prefer fast food that is generally low in fiber, high fat, high sugar, and contain a lot of salt. A less healthy diet this is the trigger for the disease of hypertension (Austriani, 2008). High blood pressure sufferers, teryata around 90-95% has yet to be explained the mechanisms occurring disease appropriately. It is not known for sure how they got exposed to the disease high blood pressure (Hembing, 2001).

Based on preliminary interviews with some sufferers of hypertension in Teladan Medan Community Health Center obtained information that sufferers of hypertension less attention on the information and knowledge about the disease they have experienced. For those who consume drugs is important and hope disease hypertension experienced could be healed. For it to be done one way for sufferers of hypertension has information and knowledge about the disease of hypertension experienced. One of the media of communication and learning that can be used to increase awareness of patients about health, knowledge and influence change in attitude, behavior and changes in decision-making is a paperback book. Pocket Book (Pocket Book) according to Poerwadarminta (2006) is a small-sized books can fit in your pocket and easy to carry everywhere. Pocket Book is one of the tools that can be used in the learning process. The same opinion was also expressed by Ewles (1994) stating that a paperback book is a tool of information made the size of the bag/Pocket that can be brought everywhere and can be read at any time. The intent of establishing a paperback book is to exert influence in terms of the knowledge, attitude and behavior of hypertension patients in Teladan Medan Community Health Center. Expected with increased knowledge about prevention and treatment, the patient's attitude in the above-mentioned and also the behavior, can control the disease of hypertension patients.

Based on a wide range of facts and figures, researchers interested in conducting a study of how the effectiveness of the use of a pocket book in sufferers in the control of hypertension in Teladan Medan Community Health Center.

## 2. Research Methods

This research uses a quantitative approach with a true experiment method and pretest posttest control group design. True experiment with a pretest-posttest control group design is one form of research experiments using a measuring instrument at the time of pretest and posttest to know there is not a result of something that is given to a sample of research with some of the requirements, i.e. There is a group who were given the treatment and comparison groups are enabled. Before the second treatment groups are in the same condition and the second group can avoid the side effects that affect the research results (Shaughnessy & Zechmeister, 2012; Sandjaja, 2006). The description of the experimental design study was as follows:

Control group design. True experiment with a pretest-posttest control group design is one form of

EG	R	01	X	02
CG	R	01	-X	02
Description				
EG : Experimental Group	X: Treatment	R: Random	01: Pretest	
CG: Control Group	-X: no treatment		02: Postest	

Experimental research on the above draft describes the process of research the research sample by dividing into two groups, the experimental group (EG) and control group (CG) of random/random (R). In this case the random (random placement) are used to form groups that can be compared to equate characteristics-the characteristics of the subject or individual differences on all conditions of the manipulation of the independent variable ( Shaughnessy et al., 2007).

Previously these groups were given pretest (01) is now about hypertension to gauge the extent of knowledge of the subject of the disease of hypertension. Next the Group wants (EG) given a pocket book for controlling hypertension (X) while the control group not given the pocket book for controlling hypertension (-X). After a week and then the two groups were given the now about hypertension (postest). Research carried out at Teladan Medan community health centers. The population examined in this study is an existing hypertension sufferers at Teladan Medan community health centers as many as 53 people. Sample by using the total population of respondents as many as 53 people. Data analysis with Paired Sample T-Test test. data analysis performed using SPSS program with the help of a confidence level of 95% and  $\alpha < 0.05$

## 3. Results and Discussion

### 3.1 Demographics

Teladan Medan community health centers have population of as many as 37.554 people with the male population as much as 18,490 people and the population of women as much as 19.064 people. Health Efforts in community health centers include:

- 1) Health promotion Efforts
- 2) Environmental health Efforts;
- 3) The efforts of the maternal and child health/family planning;
- 4) Community nutrition improvement efforts;
- 5) Disease prevention and Eradication Efforts;
- 6) Treatment efforts;
- 7) Recording and reporting Efforts

### 3.2 Characteristics of the Respondents to the Sufferers of Hypertension

**Table 3.2:** Characteristics of Respondents Hypertension in Teladan Medan Community Health Centers

No	Characteristics	Intervention		Control	
		Total	Presentase	Total	Presentase
1	Age				
	38-40	2	3,77	8	15,09
	>40	51	96,22	35	66,03
2	Education				
	Basic	16	30,18	16	30,18
	Medium	26	49,05	26	49,05
	High	11	20,75	11	20,75

From table 3.2 . It can be noted that based on the age of the majority of the respondents in the intervention group: at age 40 > (96%) and educational level of the majority of the secondary education (49%).In the control group, at the age of 40 years (> 66%) and the educational level of the majority of higher education (43%).

**Table 3.3:** Frequency Distribution of Knowledge of Hypertension Sufferers in the Intervention Group and the Control Group

Intervensi Group			Control Group		
No	Category	n	%	n	%
1	Good Knowledge	43	81,13	36	67,92
2	Sufficient Knowledge	10	18,86	14	26,41
3	Less Knowledge	0	0	3	5,66
	n	53	100	53	100

From table 3.3 above, it can be seen that the level of knowledge of respondents who were given control of the pocket book is good knowledge (81.1%) and enough knowledge (18.8%). Level of knowledge of respondents who are not given a pocket book on categories knowledge of good control (67%), and enough knowledge (26.4%).

**Table 3.4:** Distribution of Mean Average Knowledge of Hypertension Sufferers in the Intervention Group and the Control Group

No	Variabel	MEAN	SD	LEVEN'S'S	
				TEST	SIG
1	Knowledge Intervention	31,13	2,279	0,015	0,000
2	Knowledge Control	27,85	3,521	0,010	0,000

From table 3.4 above, it can be seen, on the assessment of knowledge turns out to be relatively homogeneous data or assumptions different variations (sig 27.85 >  $\alpha$  0.05) and test results different from the average turns out sig 31.13 > 0.05 then  $\alpha$  is not homogeneous accepted means there is a difference in average After given a pocket book for controlling hypertension. The results show that the Pocket Book effectiveness in increasing knowledge of hypertension sufferers.

### 3,5Test The Normality Of Variables

The Shapiro Wilk Normality test with indicates that the data is not Gaussian with sig  $\alpha < 0.05$  unbiased so proceed with test t. to know the influence of the use of a pocket book for controlling hypertension to knowledge with the test Wilcoxon.

**Table 3.5:** Test Normality of Variables

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pretest Knowledge	0,185	53	0,000	0,949	53	0,024
PostestKwonledge	0,140	53	0,011	0,935	53	0,007

Wilcoxon test results indicate that there is an influence of the giving Pocket Book control of knowledge of respondents with sig 0.022 0.005  $\alpha <$ . Wilcoxon test can be seen: a. The average knowledge after the average knowledge < before = 7; b. Average knowledge after > average knowledge before = 21; c. Knowledge after the average = average knowledge before = 25

### 3.6 Sistole Blood Pressure, Siastole, Pretest and Post test on sufferers of Hypertension

**Table 3.6:** Frequency Distribution the Average Sistole Blood Pressure,Siastole, Pretest and Postest on Sufferers of Hypertension

	Systole Pre	Diastole Pre	Sistole Post	Diastole Post
Valid N	53	53	53	53
Missing	0	0	0	0
Mean	147.17	85.28	133.58	84.91
Median	140.00	90.00	130.00	80.00
Std. Deviation	10.986	9.115	11.451	7.238

On the basis of table 3.6 above there is a difference in average blood pressure in people with hipretensi before and after and can be seen from the standard deviation.

### 3.7 Distribution knowledge of Hypertension sufferers before and after the granting of a paperback book About hypertension blood pressure control, weight loss, exercise, and consumption of Salt

**Table 3.7:** Distribution Knowledge of Hypertension Sufferers Pretest and Postest the Granting of Paperback Book About Hypertension Blood Pressure Control, Weight loss, Exercise, and Consumption of Salt

	N	Pre Test				Post Test			
		Min	Max	Mean	SD	Min	Max	Mean	SD
Hypertension Blood Pressure	53	7	10	9.11	0.954	7	10	9.51	0.869
Weight loss	53	3	10	7.45	1.119	4	9	7.19	0.900
Exercise	53	0	10	6.89	1.836	5	10	7.26	1.077
Consumption of Salt	53	0	10	6.75	2.065	4	10	7.25	1.285

Based on table 3.7 above there is a difference in average knowledge of respondents about blood pressure, weight loss, exercise, and salt is seen from the standard deviation.

## 4. Discussion

From the results of research conducted there is the influence of the increased knowledge of sufferers with the giving Pocket Book control in people with hypertension. The research is in line with the opinion of Gunawan, 2007. The age increase would have led to an increase in blood pressure. Age affects resource capture and the mindset of a person, the more increased the age will be more developed and capture power mindset so that the knowledge given is getting better. At the age of Vice, the individual will be more active role. Getting old would be wise, and much of the information in the encounter and the many things that has been working on adding knowledge. Hypertension tends to occur to someone in the category of basic education. Education affects the role of learning, higher education a person makin it easy the person receiving the information. Will higher education tend to be easier to get information, either from others or from the mass media.Information a lot then knowledge about good health.Knowledge closely with education where someone with higher education then the more extraordinary knowledge. It needs to be emphasized that an educated person is low does not mean absolute knowledge is low. Increased knowledge is not absolute in get with formal education, but can also be obtained in formal education is



not. Strauss (2004) found one of the factors that affect the knowledge on health is education. An educated person will be capable of thinking towards an issue included in the knowledge about hypertension. The information will provide an influence on a person's knowledge, even if someone has a low education, but getting good information from the book or the extension will increase the knowledge. The work environment can make a person gained experience and knowledge both directly and indirectly. The environment influence on the process of entry into the knowledge of individuals who are in the environment. This occurs due to the interaction of reciprocal or not responded to complaints that as knowledge by individuals.

To obtain an information can speed up a person to acquire new knowledge. The experience is an event that someone ever experienced in interacting with its environment. There is a tendency of less good experience and fun experience psychologically will develop a very deep impression and imprint in the emotions of the soul, and can also form a positive attitude in life.

Less knowledge of hypertension sufferers of the ability to recall knowledge about hypertension ever heard time extension. Customs and traditions do people without going through reasoning what do good or bad. Individuals will increase his knowledge though not doing. One's economic status will also determine the availability of a facility that is required for a particular activity, so that socio-economic status this will affect a person's knowledge.

## 5. Conclusions and Suggestions

### Conclusion

- 1) There is the influence of the giving pocket book knowledge control of hypertension sufferers with sig  $0.022 < \alpha 0.005$
- 2) There is a difference in average blood pressure sistole diastole deliveries and pre and post on sufferers of hypertension

### Advice

- 1) It is expected that all the existing health workers in community health centers improve the knowledge Field Example to control hypertension.
- 2) It is expected that any sufferers of hypertension should improve knowledge of controlling hypertension.
- 3) It is expected that every sufferer hypertension plays an active role for health kePusat health checked people nearby.

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