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Penggunaan Amilum Suweg (*Amorphophallus campanulatus* Bl.) Sebagai Bahan Penghancur pada Formula Tablet Amoksisilin

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Peningkatan Bioavailabilitas Ibuprofen dalam Sistem Dispersi Padat dengan PEG 4000

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Uji Aktivitas Penangkapan Radikal Bebas Ekstrak Etanol dan Fraksi Dietil Eter Hasil Hidrolisis Ekstrak Etanol Daun Bayam Duri (*Amaranthus spinosus*, L) dengan Metode DPPH

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## QUALITY OF LIFE IN ELDERLY PATIENTS WITH HYPERTENSION IN PKU MUHAMMADIYAH HOSPITAL, YOGYAKARTA

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### Abstract

Elderly population in Indonesia is going increase. Among elderly people who were related with multipathology, chronic disease and disability, psychosocial outcome measures become important in evaluating the effectiveness of the intervention or care programs. Hypertension is one of the diseases which has high prevalence in elderly population. This study is aimed to know the quality of life as psychosocial outcome in elderly patients with hypertension. We conducted a prospective-observational study with hospitalized hypertension elderly patients as the subjects. We used SF-36 (Short Formulary with 36 questions) questionnaire as quality of life instrument. The study was done during April to May 2008 in PKU Muhammadiyah hospital Yogyakarta from April until May 2008 in PKU Muhammadiyah hospital. We observed from the 30 consecutive elderly patients with hypertension. The patients quality of life score in eight scale were still lower than the United States population. Most of the patient have good quality of life in mental health, but still lower in the physical role and emotional role. The patient with the low number of medications had a high quality of live in physical function, mental health and social function. Whereas, the patients with more than 5 medications have low quality of life in general scales.

**Keywords :** Elderly, hypertension, quality of life, SF-36.

### Introduction

Hypertension is a worldwide health problem and also the leading disease in almost of every countries, especially in elderly population (Andra, 2007). In 2007, the number of hypertension patients in PKU Muhammadiyah hospital was 343 patients with

174 patients among them were elderly (Anonim, 2008).

Cardiovascular diseases, including hypertension, are the most common cause of morbidity in this group of age (Antonelli et al, 2009). Perspectively, psychosocial outcomes (quality of life) become important in evaluating

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the effectiveness of therapy or intervention (Wong et al, 2004). Indeed, although physical outcome measures may be unchanged, psychosocial measures may show improvement for certain intervention programs (Lee et al, 2002).

The study of Croog et al (1986), showed that antihypertensive therapy with methyldopa and propranolol induced the expected frequency and severity of side effects and the corresponding negative effects on quality of life. The response to captopril, however, was surprising. Global measures of quality of life and many of the individual components of this measurement actually improved from base line during the study. Subsequent studies raised the interesting possibility that captopril had a positive influence on a number of central nervous system functions that are immediately relevant to quality of life (Croog et al, 1987;Steiner et al, 1990; Levine et al, 1987; Sudilovsky et al, 1989; Handa et al, 1991;Barnes et al,1989)

Therefore it would be important to have available tools for the measurement of psychosocial aspects in the elderly population. The aim of this study is know the quality of life as psychosocial outcome in elderly patients with hypertension. We used Indonesian version of Short Formulary-36 (SF-36) as a tool to measure the psychometric outcome in the elderly patients with hypertension.

## Methods

### Study Populations

A sufficient number of hospitalized elderly patients with hypertension was observed during 1 month (April to May 2008). We collected the persona data such as age, gender, education, occupation, complicated diseases and the number of medications. We asked the patients to fill in the questionnaires by themselves or with our assistances.

## Data Analysis

The data were analyzed in descriptive way. The quality of life will be concluded in eight scale of physical health and well being score. These scales are physical function, physical role, bodily pain and general health as physical health, also vitality, social function, emotional role and mental health as mental health. The mean score of the scales will be compared with the same study which was done in United States (Ware, 2009)

## Result and Discussion

The characteristic of patients are shown in table I. Generally, more of them were men, in category young old of age and worked as farmers. These patients had low education, so they needed some assistances from researchers in filling out the questionnaire.

**Tabel I. Patients' characteristics**

		N	%
Gender	Male	16	53,3
	Female	14	46,7
Age	Young old (60-74)	14	46,7
	Old old (75-84)	13	43,3
	Oldest old (=85)	3	10,0
Occupation	Farmer	13	43,3
	Retired	6	20,0
	Housewife	6	20,0
	Own bussines	2	6,7
	Not identifies	3	10,0
Education	Farmer	4	13,3
	Retired	7	23,3
	Housewife	2	6,7
	Own bussines	5	16,7
	Not identifies	2	6,7
Diagnose	Hypertension	15	50,0
	Complicated hypertension	15	50,0

The mean comparison of SF-36'scales in this study and Unites States population are shown in table II.

Tabel II . Mean comparison of SF-36'scales

8 skala RAND SF-36	Mean scales	
	<i>This study</i>	<i>United States population</i>
Physical Function	42,5	84,2
Physical role	18,3	81,0
Emotional role	25,5	81,3
Vitality	44,2	60,9
Mental health	68,9	74,7
Social Function	49,2	83,3
Bodily Pain	38,2	75,2
General health	43,5	72,0

Overall, the eight functions in this study population were lower than those in United states population. Andra (2007) suggested that one-third of hypertension patients were living in developing countries and the rest of them were living in developed countries, including Indonesia. This fact can be a reason for this scales of quality of life. The facilities, good service and good information to the hypertension patients from the health practitioners in developing countries can increase the patients' quality of life. The better quality of life can support the medications or interventions to the diseases.

The other reason for the low score of the eight scales are the low educated people in this study. Most of the patients were farmers and they were low educated. Farmers feel that they did not need high education to work in the field. They need more assistances to fill out the questioner because they did not much understand about the meaning of the question.

The percentage of patients with good quality of life are shown in table III. Most of patients have good quality of life in mental health. We can describe that the development of disease did not have much effect to the mental health, but hypertension can limited the patients

physical activity, especially when they were hospitalized.

Table III. Percentage of patients with good quality of life

	Good quality of life	
	N	%
Physical Function	1	3,3
Physical Role	0	0
Emotional Role	0	0
Vitality	3	10
Mental health	9	30
Social Function	4	15,4
Bodily Pain	5	16,7
General Health	5	16,7

We also describe the patients quality of life based on the number of medication that they were consumed. There were one patient with the low number of medications (1-2 medications) have a high quality of live in physical function, mental health and social function. Whereas, there were 5 patients with more than 5 medications have low quality of life in general scales. Martono (2002) also suggested that the patients with more than one medications experienced the decrease of their quality of life.

This study have some limitations, especially in filling out the questionnaires. The patients were hospitalized, in generall, they need some assistances. The elderly patients also had different perspective about the questions. In overcoming this problem, this study need to be confirmed with a larger sampel size and complicated statistical analysis to support to conclusion.

## Conclusión

The patients quality of life store in eight scale were still coger than the United States population. Most of the patient have good quality of life in mental health, but still lower in

the physical role and emotional role. The patients with the low number of medications have a high quality of life in physical function, mental health and social function. Whereas, the patients with more than 5 medications have low quality of life in general scales.

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### Conflict of Interests

The authors have no conflict of interests.

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