## Hypertension Treatment and Control in Older Adult at Tanjung Sari Public Health Center

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## **Abstract**

**Background:** Hypertension is considered as a major health problem in Indonesia, especially in older adult population because of its prevalence increases by age. Treatment strategy and control management of hypertension in Public Health Center (Pusat Kesehatan Masyarakat, Puskesmas) as primary health care should be enhanced to overcome this issue. This study aimed to describe the pattern of antihypertensive agent in older adults.

**Methods:** This was a descriptive study with total sampling method for data collection. Data were collected from medical record of older adult patients with diagnosis of hypertension at Puskesmas Tanjung Sari from January to December 2013. The variables observed were gender, number of visits, the degree of hypertension, types of antihypertensive drug, combinations of antihypertensive drugs, and blood pressure control.

**Results:** The number of older adults with hypertension was 180 people. Some of which, 120 women (66.7%) participated, 152 (84.4%) had hypertension stage 2, 100 (55.6%) had just one visit, and 80 (44.4%) had more than one visit. Among 80 participants with more than one visit, 8 had achieved target blood pressure. There were 166 participants (92.2%) who received single antihypertensive agent (captopril was given the most), and 14 participants (7.8%) who received the combination of two antihypertensive agent (combination of captopril and HCT (hydrochlorothiazide)) were given the most).

**Conclusions:** More than 75% of older adult with hypertension have stage 2 hypertension and are treated by single antihypertensive agent. Ninety percent of the patient have uncontrolled blood pressure. [AMJ.2016;3(1):17-21]

**Keywords:** Antihypertensive agent, hypertension, older adult, public health center

## Introduction

Increased life expectancy in few past century causes a continued increase of older adult population. The population of older adult in the world will increase from the estimated 810 million in 2012 to 2 billion in 2020.1 The population of older adult in Indonesia is also expected to increase from 9% in 2012 to 25% in 2050. Most of the causes of death in older adult in Indonesia are non-communicable diseases such as heart disease, stroke, and diabetes. Hypertension is a disease that increases the risk of heart disease, stroke, and kidney disease and its prevalence increases by age. Hypertension causes death of 8 million people worldwide each year and is included as

one of the 10 major causes of death in the older adult in Indonesia.<sup>2,3</sup>The percentage of older adult who are treated in Public Health Center (Pusat Kesehatan Masyarakat, Puskesmas) is 29.31% in 2012.<sup>2</sup> The Ministry of Health made a policy aimed for Puskesmas as a primary health care to improve control and treatment management of hypertension in Indonesia.<sup>5</sup>

The characteristics of older adults include multi morbidity and physiological changes in various organs that can affect the pharmacokinetics and pharmacodynamics of drugs, hence, older adults are at high risk of drug accumulation.<sup>6-8</sup> It contributes to the modification and influence the selection of drugs in the older adults.<sup>8</sup> Since the hypertension is one of the 10 major causes

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