

## Characteristics of Patient with Benign Paroxysmal Positional Vertigo in Dr. Hasan Sadikin General Hospital Bandung from 2009–2013

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### Abstract

**Background:** Benign Paroxysmal Positional Vertigo (BPPV) is a vestibular disorder marked by episodes of vertigo and triggered by a change in the head position. It is characterized by short yet severe episodes of vertigo and possibly accompanied by nausea and vomiting. The BPPV is usually idiopathic and found among people aged 46–50 years old. There are pharmacological and non-pharmacological treatment used for BPPV. Non-pharmacological treatment includes Epley, Semont, Lempert, Forced Prolonged Position, and Brandt-Daroff maneuvers and pharmacological onebenzodiazepine and antihistamines. This study aimed to examine the characteristics of patient with BPPV based on their complaint and prescribed treatment.

**Methods:** This was a descriptive-retrospective study conducted on April–June 2014 using secondary data from medical records of patient with BPPV in Dr. Hasan Sadikin General Hospital Bandung from 2009–2013. The variables include gender, age, occupation, accompanying disease, complaints, supporting examinations, and treatment.

**Results:** There were 74 subjects; 66.22% were female and 33.78% were male. Most of patients with BPPV aged around 41–50 years old (39.19%). Furthermore, 93.24% had a major complaint of headache and spinning sensation, and >60% nausea and vomiting. The most prescribed therapy was Betahistine (86.49%). Meanwhile, a maneuver of non-pharmacological treatment was rarely done (8.11%).

**Conclusions:** The BPPV occurs more in older women. The major complaint is headache and spinning sensation affected by the head position and accompanied by nausea and vomiting. Lastly, non-pharmacological treatment is rarely performed in handling patient with BPPV. [AMJ.2016;3(2):275–9]

**Keywords:** BPPV, clinical characteristic, treatment, vertigo

### Introduction

Vertigo is a sensation of rhythmical, unidirectional movement of the surrounding environment or the spinning sensation in the head and body of a person.<sup>1</sup> Vertigo is classified into two types: central and peripheral. Central vestibular vertigo occurs due to lesions in the central nervous system.<sup>1,2</sup> In peripheral vestibular vertigo, there are problems in the semicircular canals in the ear. One of the most prevalent peripheral vertigo types is Benign Paroxysmal Positional Vertigo (BPPV).<sup>3-6</sup>

The BPPV is a vestibular disorder characterized by episodes of vertigo and triggered by the changes in the head position. It occurs in certain head positions, for example when one is sleeping upside down, changes

in sleeping position or a quick wake-up movement. Such an events usually occur in midnight or morning.<sup>1</sup> The BPPV is marked by short yet severe episodes of vertigo and possibly accompanied by nausea or vomitin. These episodes typically last less than 30–40 seconds, but mostly about 15 seconds. The BPPV is usually idiopathic and found among people aged 46–50 year old.<sup>7</sup> The method to diagnose BPPV is Dix-Halpike maneuver. It is used to induce nystagmus which is one of the characteristics of BPPV.<sup>8</sup>

Treatment of BPPV is divided into pharmacological and non-pharmacological therapies. The most frequently used in pharmacological treatments are benzodiazepine and antihistamines. Non-pharmacological treatment is in the forms of

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