Non Adherence to Anti Hypertensive Medications among Hypertensive Elderly Patients in Outpatient Geriatric Clinic

Thesis

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List of Abbreviations

Abb.	Full term
ACE	*Angiotensin-Converting Enzyme*
ADL	*Activities of Daily Living*
ARBs	*Angiotensin II Receptor Antagonists*
ARMS	*Adherence to Refills and Medications Scale*
BMQ	*Brief Medication Questionnaire*
BP	*Blood Pressure*
CGA	*Comprehensive Geriatric Assessment*
COPD	*Chronic Obstructive Pulmonary Disease*
DASH	*Dietary Approaches to Stop Hypertension*
DBP	*Diastolic Blood Pressure*
DGAC	*Guidelines Advisory Committee*
GDS	*Geriatric Depression Scale*
HBP	*High Blood Pressure*
HBS	*Hill Bone Scale*
IADL	*Instrumental Activities of Daily Living*
MAQ	*Medication Adherence Questionnaire*
MARS	*Medication Adherence Rating Scale*
MMSE	*Mini-Mental Status Examination*
SAH	*Systemic Arterial Hypertension*
SEAMS	*Self-efficacy for Appropriate Medication Use*

Abstract

Antihypertensive medications are long term medications that need continual replenishing. One of the barriers in adherence to medications is the cost which hinders the continuity of treatment for patients with low incomes.

Poly pharmacy and chronic medical diseases are of highly statistical significance with Hill Bone Scale, DM with HTN is the common chronic medical disease patients present in this study and showing significance of non adherence to anti hypertensive medications.

Geriatric domains (cognition, psychological, functional) were of statistical significance with adherence to antihypertensive medications using the Hill Bone Scale.

Keywords: Comprehensive Geriatric Assessment - Guidelines Advisory Committee

INTRODUCTION

The term medication adherence is defined as the extent to which a person's behavior agrees with the agreed medication regimen from a health care provider ***(Leporini et al., 2014).***

The term adherence is often used transposable with compliance. Adherence is defined as the ability and willingness to persist and tolerate by a prescribed therapeutic regimen ***(Inkster et al., 2006).***

Recently, the term "concordance" is also suggested to be used. Compared with "compliance", the term concordance makes the patient the decision-maker in the process and points to patients-prescribers approval and harmony ***(Vermeire et al., 2001).***

Addressing the issue of adherence in hypertensive patients focuses on three major issues: effective measurements of adherence, prevalence and predictors of adherence, and effective strategies for improving adherence ***(Hovstadius, 2011).***

Reasons for non adherence can be broadly classified into patient factors, medication factors, health care provider factors, health care system factors, and socioeconomic factors ***(Sabaté, 2003).***

Hypertension prevalence increases with age, and is a readily treatable risk factor for the most common causes of morbidity and mortality in older age: stroke, ischemic heart disease, renal insufficiency and dementia ***(Ferri et al., 2011).***

Hypertension is the leading risk factor for mortality and the third cause of disability world wide. By the year 2025, it is estimated that there will be 1.65 billion patient with hypertension ***(Ezzati et al., 2002).***

Normal BP is defined as <120/<80 mm Hg; elevated BP 120-129/<80 mm Hg; hypertension stage 1 is 130-139 or 80-89 mm Hg, and hypertension stage 2 is ≥140 or ≥90 mm Hg, it is important to use an average based on ≥2 readings obtained on ≥2 occasions to estimate the individual's level of BP ***(American college of Cardiology, 2017).***

It is widely accepted that there are relationships between poor blood pressure control and patient's lack of adherence to anti hypertensive treatment as well as lack of effectiveness to antihypertensive treatments ***(Espinosa et al., 2012).***

Potential causes for Non-Adherence include Complex medication regimens,Convenience factors (eg, dosing frequency), Behavioral factors, treatment of asymptomatic conditions, affordability, Side effect profiles of medications, Severity of the problem, Patient disagreeing with therapeutic plan ***(Munger et al., 2007).***

Poor adherence may have a major effect on clinical outcome, lead to notable worsening of disease, increased health care costs and even death ***(Pasina et al., 2014).***

AIMS AND OBJECTIVES OF THE STUDY

Assess prevalence of non adherence to anti hypertensive medications among hypertensive elderly patients in outpatient geriatric clinic and risk factors affecting it.

Chapter 1

MANAGEMENT OF HYPERTENSION IN ELDERLY

Aging is a global phenomenon. The proportion of individuals aged ≥60 is increasing more than any other age range. With population aging, there is an increase in the prevalence of non-transmissible chronic diseases, among which systemic arterial hypertension (SAH) is the most prevalent one. The aging process is dynamic and progressive and causes several changes in the human body. It involves the development of atherosclerosis in arteries and arterioles, decreasing their elasticity. The walls of vessels get stiff, which tends to increase blood pressure (BP), mainly systolic blood pressure. Consequently, with the installation of SAH, there is increased risk of comorbidities such as acute myocardial infarction, chronic renal failure and stroke ***(Dias et al., 2015).***

Aging is also associated with an increase in total resistance and left ventricular mass index, and a decrease in cardiac output, heart rate, stroke volume, intravascular volume, renal blood flow and plasma renin activity. There is a progressive decline in the ability of the kidneys to excrete salt loads efficiently, resulting in higher blood pressure levels ***(Kithas et al., 2010)***.