



A CROSS SECTIONAL STUDY TO MEASURE THE PREVALENCE OF THE ORTHOSTATIC HYPOTENSION AMONG HOSPITALIZED PATIENTS IN SELECTED HOSPITALS IN GUJARAT

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ABSTRACT **BACKGROUND OF THE STUDY:** Orthostatic hypotension is also called as a postural hypotension. Meaning of orthostatic or postural hypotension is fall down or decreased blood pressure when person standing up from laying or sitting. The dropping of blood pressure may down suddenly after a few or 3 minutes.
OBJECTIVES: 1) To measure the Blood pressure in sitting position, laying down position & standing position. 2) To determine the association of systolic blood pressure in sitting position, laying down position & standing position. 3) To determine the association of Diastolic Blood pressure in sitting position, laying position and standing up position. 4) To determine the prevalence of the orthostatic hypotension.
METHODOLOGY: A cross sectional study was carried out by 300 hospitalized patients through non-probably convenient sampling technique. Demographic data was collected by questionnaire method and through the sphygmomanometer Blood pressure was measured. Results: comparison between the sitting, laying and standing position shows that SBP, mean total of standing position is higher than mean total of sitting, laying position. In DBP, mean total of standing position is higher than mean total of sitting position, laying position. Prevalence of orthostatic hypotension. (2%).
CONCLUSION: only 2% prevalence rate of orthostatic hypotension was found in hospitalized patients.

KEYWORDS : Prevalence, Orthostatic Hypotension, Blood Pressure.

INTRODUCTION:

Orthostatic hypotension is also called as postural hypotension. OH means falling down blood pressure when person stand up from laying or sitting position. The dropping of blood pressure may down suddenly or few minutes.¹

Orthostatic hypotension is defined as a SBP is falling down at least 20 mm/hg and DBP is falling down at least 10 mm/hg when person assume standing position.²

Orthostatic hypotension is a prognosis & syndrome Based on the particular cause, its extremity & the distribution of its autonomic and non autonomic connection. Patients who are diagnose with the cerebral disorders (multiple system atrophy, Parkinson disease) and extra pyramidal. The advance and more sever connection of the autonomic nervous system, the poorer the prognostication.²

Ageing is the common cause of the OH and others including dehydration, bleeding, medication, immobility, heart diseases. Symptoms of orthostatic hypotension may including fever, lightheadness, blur vision, fainting, nausea, vomiting, and syncope. Complications including falling over as reason for losing consciousness and which can may cause of many injuries. Diagnosis including head up tilt test will be the body's position. Blood tests, echocardiogram, USG and stress test. Treatment and prevention drinking more water, fluid therapy avoid heavy activities and sleep with the slide head up position and compression stroking can prevent fluid from the pulling.³

Orthostatic hypotension is treating by the some changes in daily life style. And another method is treating with the certain medication and dosage of medication. In life style changes including, Drink more fluids, avoid alcohol because alcohol cause dehydration, avoid cross leg position while changing position, stand up slowly when getting out of chair or bed, if the person staying long time for the medical condition advise to the person sitting up and change the position for the short duration, do isometric exercises like a rubber ball exercise and squeezing exercise. Because of the such kind of exercises will increase the blood pressure or may be prevent a drop in blood pressure, also person can use the compression stockings which are useful for the maintaining blood circulations, avoid long time standing. In certain medication are useful for the orthostatic hypotension. Such as fludrocortisone (erythropoietin, procrit, midodrine, florinef) these drugs works for the increasing blood circulation or blood volume by

constricting or narrowing of blood vessels.⁴

METHODOLOGY

The study was carried out by using quantitative research approach with cross sectional research design. 300 hospitalized patients was selected for the population of the study. Participants were selected by calculating power analysis. non probably convenient sampling technique was used for the data collection. Demographic variables including age, gender, hospital admission date, medical diagnosis, ward, length of present stay, history of HTN, Drug addiction, other than hypertensive drug, present complaints. blood pressure was measured by the sphygmomanometer. Measurement of the blood pressure in three position. (sitting, laying and standing position). pilot study was conducted at civil hospital nadiyad. Main study was conducted at selected hospitals in Gujarat. The data was analysed and interpretation by using statistics analysis.

RESULTS:

Data analysis for measurement of blood pressure in sitting, standing & laying position in SBP, average of standing position was 122.0, in laying position was 119.4 & in sitting position was 116.4. in DBP average of standing position was 79.4, in laying position 77.0 & in sitting position 74.2. Findings between sitting, laying and standing position in different diagnosis average total of laying position is less than average of sitting & standing position in systolic blood pressure & in Diastolic also blood pressure also average of laying position is less than average total of sitting & standing position. Prevalence of the orthostatic hypotension. (2%).

Table: 1

Blood Pressure	Position	Mean
Systolic	Sitting	116.4
	Laying	119.4
	Standing	122.0
Diastolic	Sitting	74.2
	Laying	77.0
	Standing	79.4

CONCLUSION:

The study concluded that mean total of standing position is higher than mean total of sitting, laying positions. 2 % prevalence of orthostatic hypotension was found.

ETHICAL CLEARANCE:

The study was approved by the research committee, IEC-10/05/2019-ARIP/IEC/19/17 and formal written permission was granted from the hospitals.

STATEMENT OF INFORMED CONSENT

Informed consent was obtained from the participants.

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