ORIGINAL RESEARCH PAPER

Medical Surgical Nursing

PREVALENCE AND FACTORS CONTRIBUTING TO NONCOMPLIANCE TO LIFE STYLE MODIFICATION IN HYPERTENSIVE PATIENTS.

KEY WORDS: Hypertension ,Iceberg Phenomena, Noncompliance, Blood pressure, HB-HBPCS

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ABSTRACT

Hypertension is denoted as the silent killer" because it often has no symptoms and is not discovered until a serious complication develops. Hypertension can be termed as an "iceberg disease". The submerged portion of the iceberg represents the hidden mass of the disease, while floating tip denotes the signs and symptoms It is estimated that 30% of those with hypertension do not know they have it. United States with hypertension, 59% are being treated but only 34% are considered to be in control. This is unfortunate because it is believed that hypertension can be controlled in most people.1 World Health Organization (WHO) defined Hypertension is a condition of systolic blood pressure higher then 140mmHg or diastolic blood pressure higher than 90 mmHg. Hypertension is a major risk factor for stroke, myocardial infarction (heart attack), heart failure, aneurysms of the arteries, peripheral arterial disease & is a cause of chronic kidney disease. Dietary and life style changes can improve blood pressure control & decrease the risk of associated health complication. This study reviews the prevalence of noncompliance as a risk factor in the management of chronic diseases with a specific focus on hypertensive therapy. Factors leading to increased incidence of noncompliance to antihypertensive drugs therapy among hypertensive patients. The findings of the study will provide direction to the health care providers to help the clients Compliance can be enhanced if adequate information about the disease process and the importance of regular treatment is emphasized along with constant support and reinforcement, based on their learning needs and problems.

INTRODUCTION

Nicknamed the "silent killer", hypertension (HTN) is asymptomatic in most individuals. According to Ostchega, Yoon, Hughes, and Louis (2008), about seven percent of adults with hypertension go undiagnosed each year. Since hypertension presents with an increased risk for cardiovascular diseases and complications, adults with hypertension require early and accurate diagnosis, prompt treatment and instructions from healthcare professionals. Most of the time, hypertension can be controlled with lifestyle changes and/or medications. Carefully controlled blood pressure can decrease the risk of stroke by 35 to 40-percent, coronary heart disease by 20 to 25 percent, and heart failure by 50 percent.

Hypertension is denoted as the silent killer" because it often has no symptoms and is not discovered until a serious complication develops. Hypertension can be termed as an "iceberg disease". The submerged portion of the iceberg represents the hidden mass of the disease, while floating tip denotes the signs and symptoms It is estimated that 30% of those with hypertension do not know they have it. United States with hypertension, 59% are being treated but only 34% are considered to be in control. This is unfortunate because it is believed that hypertension can be controlled in most people.

The World Health Organization (WHO-2014) has said that high blood pressure affects 600 million persons. According to WHO (2016) findings, adults who work for more than 40 – 50 hours a week particularly clinical or unskilled workers were more likely to have high blood pressure than those who work for 40 hours or less a week. Researchers link the high risk for workers doing work for longer hours to unhealthy Eating, less exercise, more stress, anxiety, less sleep. Across WHO regions, researchers indicate that about 62% of strokes & 49% of heart attacks are caused by hypertension.

A recent report indicates that nearly 1 billion adults had hypertension in 2005 and this is predicted to increase to 1.56 billion by 2025. According to WHO (2005) in cardio vascular disease prevention and control estimated 600 million people affected with hypertension worldwide. WHO (2005) reports that hypertension causes 5 million with hypertension worldwide. WHO (2005) reports that hypertension causes 5 million premature deaths each year worldwide, causing 13% of global fatalities. This leads to numerous micro/macro vascular complications such as damage to the heart, blood vessels, kidneys, brain, and eyes, increased after age 50 years. As blood pressure rises, So does the risk of heart attack, heart failure, stroke, kidney disease, and blindness. Subjects with hypertension are known to have a two-fold higher risk of developing Coronary artery disease, four times higher risk of congestive heart failure and seven times higher risk of cardiovascular disease compared to normotensive subjects.

Cardiovascular diseases account for a large proportion of all deaths and disability worldwide. Global Burden of Disease Study reported that in 1990 there were 5.2 million deaths from cardiovascular diseases in economically developed countries and 9.1 million deaths from the same causes in developing countries. However, The situation in India is more alarming. It was reported that of a total of 9.4 million deaths in India in 1995, cardiovascular diseases caused 2.3 million deaths (25%). 1.2 million deaths were due to coronary heart disease and 0.5 million due to stroke. It has been predicted that by 2025 there would be a 111% increase in cardiovascular deaths in India.

Dietary and life style modification plays a crucial role in both patients who are suffering from hypertension, as well as those who are in healthy states. Weight loss by diet can reduce BP, for instance, restriction in salt intake by avoiding excessive amount of salt in food and in cooking.

Other restriction are also taken into consideration during person suffering from hypertension like moderate alcohol consumption (1-2 drinks per days) while on other hand increase in potassium intake can be effective against lowering of BP by taking rich diet in fruits, vegetable and beans. Vegetarian diet also shows beneficial impacts against BP. Physical exercises play an important role in reducing BP (yoga and medication). Thus by adopting these restriction and implementations of such type of non-pharmaceutical methods the BP and heart disorders can be effectively controlled.

Thus, it concludes that Hypertension is one of the common causes of the global disease burden.

OBJECTIVES OF THE STUDY

Primary Objectives:

1. To assess the prevalence of non-compliance to life style modifications in hypertensive patients.
2. To identify factors contributing to non- compliance to life style modifications in hypertensive patients.

Secondary objectives:

1.To associate the factors affecting life style modification score, in hypertensive patients with their selected demographic variable.

2.To associate the factors affecting life style modification score, in hypertensive patients with their selected demographic variable.

Hypothesis

H_0-There will be no significant association between noncompliance with demographic variable at 0.05 level.

H_1-There will be a significant association between noncompliance with demographic variable at 0.05 level.

H_2 –There will be no significant association between factors affecting life style modification with demographic variable at 0.05 level.

H_3 -There will be a significant association between factors affecting life style modification with demographic variable at 0.05 level.

ASSUMPTIONS

1.Hypertensive patients may have some knowledge regarding the lifestyle modifications on hypertension.
2.Hypertensive patients will give free and frank response and will be co-operative.

RESEARCH METHODOLOGY:

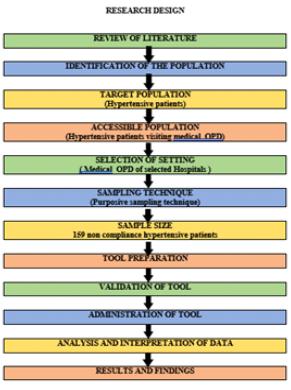


FIGURE 3: SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

The exploratory descriptive approach was used to illicit data because it is most suitable for the study as investigator was interested in obtaining information regarding the current status of the hypertensive client's compliance to the prescribed drugs and to identify the reasons for noncompliance of the same if present.

Purposive sampling technique was adopted for sample selection of the subjects. The samples consisted of 159 noncompliance hypertensive patients attending the medical OPD of the selected hospitals in Mumbai. The samples were selected on a Purposive convenience basis, as per the criteria laid down for the study.

Structured interview technique was used for data collection as the information could be elicited on a personal interaction (face to face) with the client. Hill-bone high blood pressure compliance scale was used for labeling patients as compliance or noncompliance and in that those patients are noncompliance to hypertensive therapy are taken as sample and further structured questionnaire was introduced to them only. The administration of questionnaire took 10 – 15 minutes each patients. The tool and questionnaire were validated by expert in the field of nursing and medicine.

MAJOR STUDY FINDINGS:

The collected data was analysed in terms of the objectives of the using descriptive and inferential statistics. It was found that 30.82 per cent were compliance to life style modifications in hypertensive therapy whereas 69.18 per cent were noncompliance to life style modifications in hypertensive therapy.

Univariate analysis

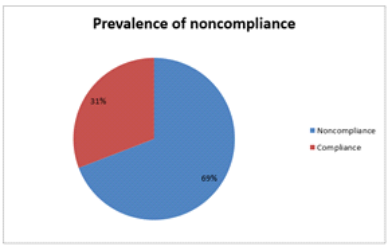
Univariate analysis showed no correlation between compliance and noncompliance in socio demographic and personal family factors like age, gender, family income, type of family, don't like medicine daily, medicine easily available etc. Conversely, a significant correlation was observed between compliance and noncompliance to life style modifications like marital status (unmarried P= 0.0083), education with comparison of primary (Secondary P = 0.0709), Alcohol consumption (P= 0.0417), consume junk food (P = 0.0034), Consume non vegetarian food (every day, P = 0.0479), Fear of effect (P = 0.0065). The variable which has P valve < 0.1 the consider of multivariate analysis.

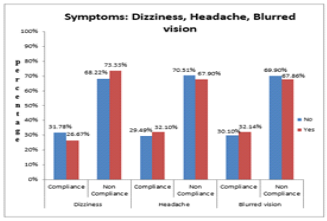
Multivariate logistic regression analysis

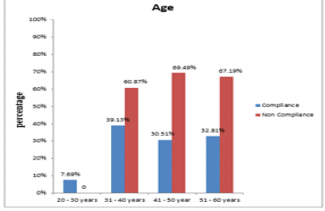
From Univariate analysis the variable which has P valve < 0.1 the consider of multivariate logistic regression. risk factors for prevalence of noncompliance like marital status (unmarried P= 0.0476 with odd ratio= 10.3936), Secondary education (P= 0.0287 with odd ratio=0.2461), Eat junk food (every day P= 0.0422 with odd ratio =5.1999), Consume non vegetarian (every day P=0.03491 with odd ratio=2.2818), Fear of effect (P=0.0185 with odd ratio= 0.0185 with odd ratio 0.0365. demonstrated in the univariate analysis were incorporated into the logistic regression analysis. The results showed that all factors listed above were more likely to be associate with noncompliance to life style modifications in hypertensive patients.

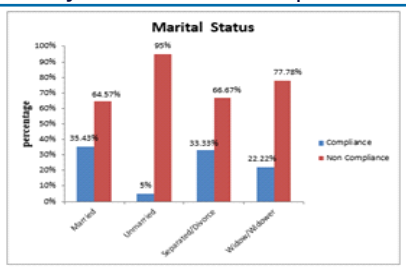
DEMOGRAPHIC DATA:

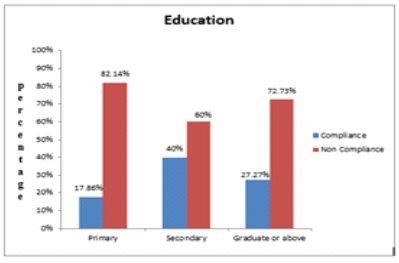
This section deals with the distribution of data in relation to demographic data, medical data and others factors data of the subjects.

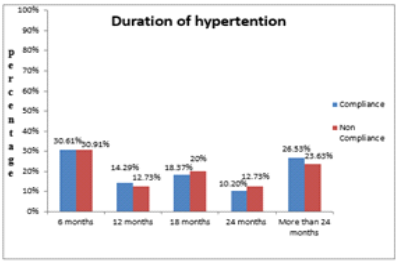


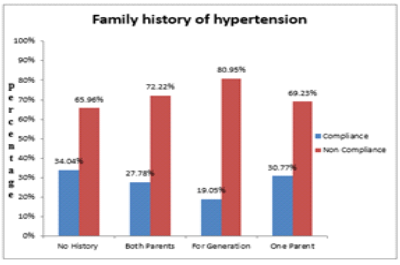


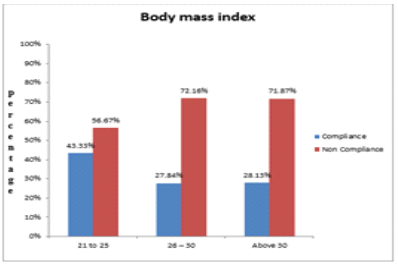


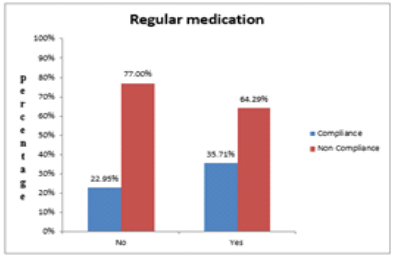


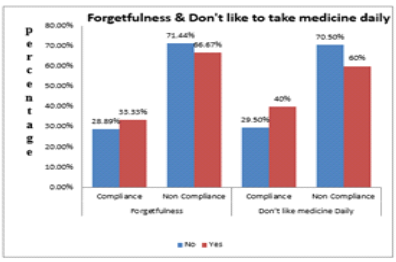


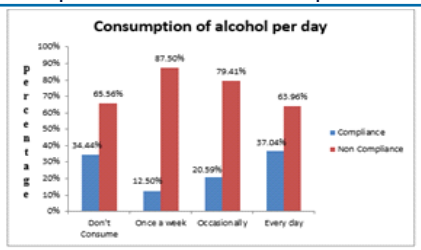


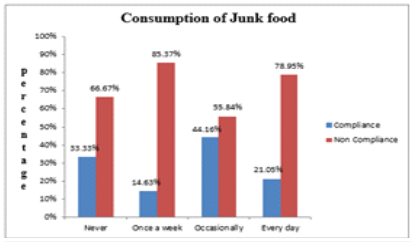


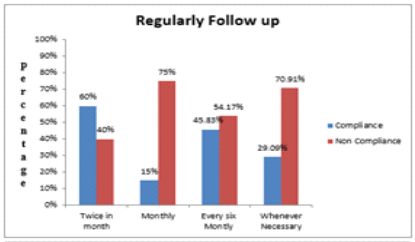


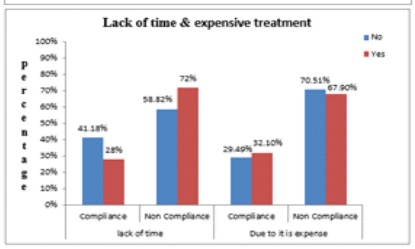












CONCLUSION

Patient noncompliance is a universal significant risk factor for cardiovascular disease, thereby requiring a comprehensive intervention approach. For many patient population, dynamic communication between the healthcare team and patient is a key factor in fostering compliance with long- term life style modification with medication regimens. The reasons for non-compliance to life style modification with medication regimens elicited can be taken care of by the health care providers. Compliance can be enhanced if adequate information about the disease process and the importance of regular treatment is emphasized along with constant support and reinforcement provided to the patients on an individual basis.

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