



**Research Article**

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## A study to assess the effectiveness of STP on knowledge regarding DASH diet in controlling blood pressure among hypertensive patients in uni-care hospital at Rajkot

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### Abstract

The research design adopted was pre experimental one group pre-test post –test design. The conceptual framework for this study was based on Wiedenbach’s clinical nursing practice theory (1964). The study has been conducted in Unicare hospital, Rajkot. Purposive sampling technique has been adopted to select the desired sample. The sample size was 40. The collected data were analyzed by using both descriptive and inferential statistical methods. Paired t test was used to assess the effectiveness of STP. The obtained ‘t’ value for the level of knowledge was 18.91 that was highly significant at  $p < 0.001$  level. The findings of the study reveals that most of the hypertensive patients had inadequate and moderate level of knowledge in pre test and they improved to moderate and adequate level of knowledge in post test. This shows the imperative need to understand the purpose of the STP regarding improving the knowledge about DASH diet in controlling blood pressure.

**Keywords:** Purposive, Sampling, t value, DASH, STP.

### INTRODUCTION

Health is the primary of all the functions of human being. Health is the most important thing for a best life. An individual with a healthy body and mind is an asset to the family and the society. But health is not a commodity to purchase; Health can be destroyed by various disorders. To stay healthy it is important to have a balance diet for everyone. The population in the rural area are prone to get deficiency diseases. This could be largely due to poor hygienic condition and socio-economic condition. In urban area because of the lifestyle changes & sedentary activities the population are more prone to develop disease like diabetes mellitus, obesity and hypertension. Among this hypertension is the most common important risk factor for death in industrialized countries [1].

Globally around 22% of adults aged 18 and above has reported high blood pressure and it was the main leading cause of death of 7.5 million people in 2014. Hypertension is an important risk factor for cardiovascular complications accounting for 60% of heart failure deaths, 40% end stage renal, 75% of myocardial infarction deaths and 41% of stroke deaths in an autopsy report [2].

Hypertension is sustained elevation of Blood Pressure. The diagnosis of hypertension is confirmed in the adult, when the average of two or more resting blood pressure measurements on at least two different visits reveals a systolic blood pressure of 140 mmHg or greater or a diastolic blood pressure of 90 mmHg or above [3-5].

The management of hypertension is basically categorized into pharmacological and non-pharmacological interventions. Various classes of drugs are used in the treatment of hypertension such as diuretics, B-blockers, calcium channel blockers, centrally acting drugs, ACE inhibitors and alpha adrenoceptor blockers. The non-pharmacological measures involve lifestyle modification. Lifestyle changes are important for both treatment and prevention of high blood pressure, and they can be as effective as a drug treatment. Salt restriction, Moderation of alcohol consumption, High consumption of vegetables and fruits and low-fat, Reducing weight and maintaining it, Regular physical exercise and avoidance of smoking and the dietary management. The ideal dietary management of HTN involves; DASH DIET. In fact, the USDA recommends the DASH diet as an ideal eating plan [6-8].

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DASH stands for Dietary Approaches to Stop Hypertension. The US National Heart Lung and Blood Institute recommends the DASH diet for people with high blood pressure [8]. The study showed that participants with hypertension on the DASH diet saw falls in blood pressure within two weeks of starting their diet. DASH is a flexible and balanced eating plan based on research studies sponsored by the institute, which says the diet: Lowers high blood pressure, Improves levels of blood lipids (fats in the bloodstream), reduces the risk of developing cardiovascular disease [6].

The DASH diet was promoted by the National Heart, Lung, and Blood Institute for patients with hypertension to control their blood pressure. The DASH diet encourages the dieter to consume less sodium (salt) and increase his/her intake of magnesium, calcium and potassium in order to help lower blood pressure. The DASH diet includes plenty of fruits, vegetables, low-fat dairy products, and whole grains, as well as some legumes, poultry and fish, plus small amounts of red meat, fats and sweets. It is low in saturated fat, total fat and cholesterol. It includes intake of typical 2,000 calorie per day.<sup>12</sup>Based on the evidence of the action of DASH diet in controlling hypertension, a structured teaching programme regarding DASH diet may help the patient to improve the knowledge of DASH diet and to practice it to control the hypertension [7].

**NEED FOR THE STUDY**

In general, it is assumed that patient education, by increasing knowledge, may change the behaviour and lifestyle and promote health. In this context it is surprise that knowledge and awareness about hypertension and DASH diet is poor. General knowledge about HTN is reasonable but there is still room for improvement in elderly people's knowledge and awareness regarding HTN as well as DASH diet [7].

The investigator during their clinical experience has come across the hypertensive patients with inadequate knowledge regarding dash diet in controlling blood pressure. It was noticed that knowledge regarding diet can be easily improved by educating the patients. From the findings of literature, the researchers realized the importance of having knowledge regarding on knowledge diet in controlling blood pressure and designed a study to assess the effectiveness of STP on knowledge regarding dash diet in controlling BP among hypertensive patient.

**MATERIAL AND METHODS**

**Research approach:** Quantitative approach.

**Research design:** Pre experimental one group pretest posttest design.

**Target population:** Hypertensive patients.

**Accessible population:** Hypertensive patients admitted in unicare hospital.

**Sampling technique:** non probability purposive sampling technique

**Sample size:** 40

**Data collection procedure:** Structured questionnaires

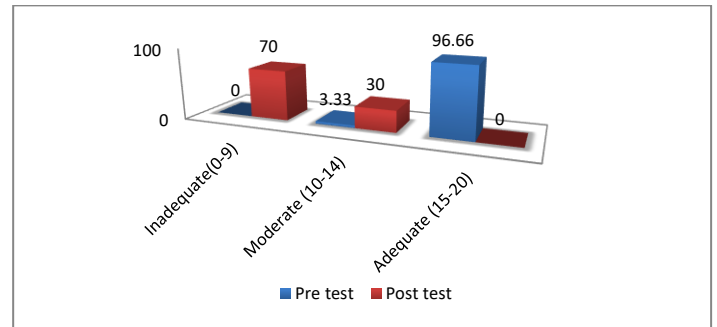
**Data analysis:** Descriptive statistics and Inferential statistics

**Criteria measure:** Knowledge on DASH diet

**RESULT AND DISCUSSION**

1. To assess the knowledge of DASH diet among hypertensive patients.

Study shows that pre test level of knowledge among selected 30 samples of hypertensive patients, reported 29 (97%) Inadequate knowledge, 1 (3%) Moderate knowledge and there was nil reported on adequate knowledge.



**Figure 1:** Percentage distribution of knowledge regarding DASH diet in Pre test and Post test among Hypertensive patients

**B. Finding related to Effectiveness of STP on knowledge regarding DASH diet among hypertensive patients.**

With regard to effectiveness of STP on knowledge regarding DASH diet among hypertensive patients, the obtained 't' value for the level of knowledge was 18.91 that was highly significant at p<0.001 level.

**Table 1:** Mean, Standard Deviation and 't' value of knowledge of DASH diet among hypertensive patients

Sr. No.	Variables	Mean	Mean difference	Standard deviation	't' Value
1.	Pre-Test	6.63	8.7	1.66	18.91*** df = 29 p= 3.66
2.	Post-Test	15.33		1.92	

**C. Findings related to association between demographic variables and post test.**

With regard to association between the level of knowledge with their selected demographic variables such as Educational status and Occupation had significant association found. The study shows that the calculated Chi-square value is more than the tabulated value at the level of 0.05 for these demographic variables. This shows there is a significant association between the effectiveness of STP and knowledge regarding DASH diet and selected demographic variables.

**CONCLUSION**

The main conclusion from this present study is that most of the hypertensive patients had inadequate and moderate level of knowledge in pre test and they improved to moderate and adequate level of knowledge in post test. This shows the imperative need to understand the purpose of the STP regarding improving the knowledge about DASH diet in controlling blood pressure among hypertensive patients and it will improve the practice of DASH diet to control the blood pressure.

**Conflict of Interest**

Nil

**Source of Funding**

Self

### **Ethical Clearance**

Human rights has been protected. Ethical clearance taken from the ethical clearance committee of Saurashtra university as well as the institution.

### **REFERENCES**

1. Brunner. Suddharth. Text Book of Medical Surgical Nursing. 12th edition. New York. Volume I. Lippincott Williams & Wilkins Publication;2010,855–858.
2. GHO: global incidence of hypertension (online). Available from:www. Who.int./en/ (assessed on 2014).
3. Joyce M. Black. Medical Surgical Nursing. 8th edition. Volume 2. New delhi. Elsevier indiapvt ltd,;2012,1290-1306.
4. Olalekan A. What is hypertension?. Available from:http://www.who.int/features/qa/82/en/.(assessed on august 2015).
5. Lewis. Medical-Surgical nursing, Assessment of clinical problem. 4thedition;Haryana. Elsevier India pvt ltd. 2010,864-882.
6. Editorial. Hypertension: uncontrolled and conquering the world. Lancet journals. Aug2007; 9,587(370);539.
7. George Bakris. Merck Manual.Overview of hypertension.(online). Available on http://www.msdmanuals.com(accessed 22 June 2015).
8. Bethesda. What is high blood pressure? (online). Available from:http://www.nhlbi.nih.gov/health/health-topics/topics/hbp. (assessed 22 June 2015).