

## Difficulties faced by the care taker while cooking and serving in a family with hypertensive patient in rural community of south Kerala

<sup>1</sup> KrishnaBabu S, <sup>2</sup> Abishek.R, <sup>1</sup> Praseeda.B.K, <sup>2</sup> Soumya Gopakumar, <sup>3</sup> Ramla Beegam.M

<sup>1</sup> Post graduate, Department of Community medicine, Dr.S.M.C.S.I Medical College, Kerala, India.

<sup>2</sup> Assistant professor, Department of Community medicine, Dr.S.M.C.S.I Medical College, Kerala, India.

<sup>3</sup> Professor & Head, Department of Community medicine, Dr.S.M.C.S.I Medical College, Kerala, India.

### Abstract

**Introduction:** Hypertension is managed by both lifestyle changes and pharmacological means. Nonpharmacological interventions plays a major role in both hypertensive and non-hypertensive individuals. Dietary modifications are important for prevention and treatment of hypertension. But most of the hypertensive patients and families are unaware of importance of dietary modifications. Here is an attempt to capture the difficulties faced in a family while cooking.

**Objective:** To assess the difficulties faced by group of rural women of Kunnathukal panchayath while cooking in a family with hypertensive patient.

**Methods:** This is a community based cross sectional study. Total 150 people selected for study. Out of 21 wards of Kunnathukal panchayath, five wards were selected by simple random method and 30 houses from each ward/cluster were selected. House to house visit was carried out and people interviewed with semi structured questionnaire.

**Results:** The study subjects were of age group 22-75 years. In this 56% and 48% of the family decreased salt and oil intake respectively. About 10% cook separate food for hypertensive. No dietary modification in 37.3% of family. By doing focused group discussion, we were able to find out that there was difficulty for the other members of the family without hypertension especially children when the salt is adjusted for the common recipes.

**Conclusion:** Majority of the households with hypertension faced hardships such as cooking separately and managing different levels of salt in the recipes. When the subject themselves becomes patient, most often there is no one to monitor the dietary changes.

**Keywords:** Diet, Hypertension, Focused group, Family

### Introduction

Hypertension is emerging as a major public health problem in both developing and developed countries. Hypertension is responsible for around 12.8% of total deaths and 4.4% disability adjusted life years globally [1]. In India, the prevalence of Hypertension in urban area is 25% and in rural area it is reported as 10% [2]. Around 57% of all stroke death and 24% of Coronary artery diseases are caused by hypertension in India<sup>3</sup>. Prevalence of hypertension among Kerala's population was found to be 38.9% in preliminary analysis of data collected by Kerala chapter of Cardiology Society India [4].

Hypertension is managed by both lifestyle changes and pharmacological means. Lifestyle changes includes mainly dietary interventions, weight reduction and exercise [5]. Nonpharmacological methods have an important role in both hypertensive and non-hypertensive individuals. Dietary modifications are mainstay for prevention and treatment of hypertension. But most of the hypertensive patients and families are unaware of importance of dietary modifications. Here is an attempt to capture the difficulties faced in a family while cooking.

### Aim & Objectives

To assess the difficulties faced by group of rural women of South Kerala while cooking in a family with hypertensive patient.

### Materials & Methods

The present study was a Community based cross sectional study. The study was conducted in kunnathukal panchayath, which is situated in the Thiruvananthapuram district of southern Kerala. This panchayath has a total population of 37,469 with 19,143 men and 18,326 women. There is a total of 21 wards in the panchayath and the average number of dwelling houses was between 400 to 600 houses per ward. Five wards selected by simple random method. A pilot study was conducted in another area of Thiruvananthapuram District and 20% people were reported as making dietary changes for their family member with Hypertension. Sample size calculated by using the formula,

$$N = Z_{1-\alpha/2} \sqrt{\frac{P_0(1-P_0)}{P_a-P_0}} + Z_{1-\beta} \sqrt{\frac{P_a(1-P_a)}{(P_a-P_0)^2}}$$

Where,  
 $P_0$  – population proportion  
 $P_a$  – Sample Proportion  
 $\alpha$  – significance level  
 $1-\beta$  - power

And it was calculated as 146 and rounded it as 150. Thus the study population included 150 women who cooks in the family with a family member diagnosed to have hypertension. Study period carried out between July to August 2015.

Dependent variable was cooking difficulties. Independent variables collected were Age, Social Economic Status, Education, Occupation, Number of family members and Duration of hypertension.

A semi-structured questionnaire was tested for its Construct, criterion and content validation was carried out by presenting before a group of experts in our department and modifications were done according to their suggestions. House to house visit was carried out and people interviewed with the questionnaire.

As the difficulties couldn't measure by the quantitative method alone, Focused group discussion was carried out in a ward for 8 housewives with a known hypertensive family member.

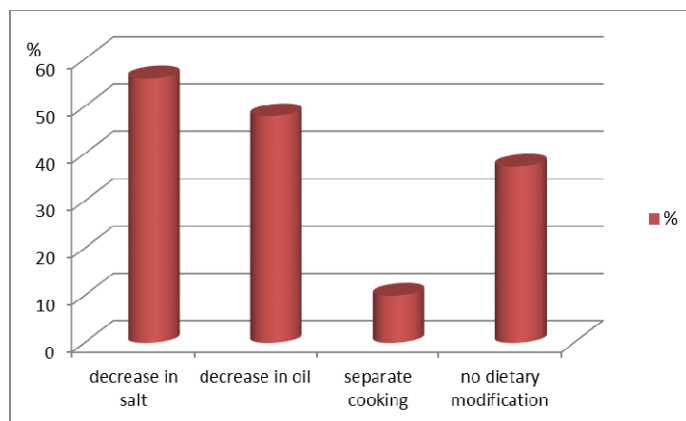
### Results and Discussion

The study subjects were of age group 22-75 years. In which 72.7% were housewives and 60.7% were above poverty line. Decreased salt and oil intake was carried out by 56% and 48% of the study subjects respectively. Separate cooking for the hypertensive patients were carried out by 10% women. Around 38% of the women were not making any dietary modifications.

By doing focused group discussion, it was revealed that there was difficulty for the other members in the family, especially children to adjust low salt food. When the cooking personnel itself was the patient, they refused to do dietary modification as the other family members had to suffer for that. But when the man in the house was affected with the disease, they were doing better dietary management in the family. Results from other studies also revealed women's blood pressure control measures are worse than men. [6,7, 8]

**Table: 1** Selected Socio Demographic Variables of study subjects

|                             |           |
|-----------------------------|-----------|
| <b>Mean age</b>             | 49.4years |
| <b>Education</b>            | %         |
| No Schooling                | 3.3       |
| 1-7 standards               | 28.0      |
| 8-10 standards              | 41.3      |
| Pree degree/ degree         | 27.3      |
| <b>Occupation</b>           | %         |
| Housewives                  | 72.7      |
| Unskilled worker            | 16.7      |
| Clerical / Semiskilled      | 2.0       |
| Professional                | 8.7       |
| <b>Socioeconomic status</b> | %         |
| APL                         | 60.7      |
| BPL                         | 39.3      |



**Fig 1:** Dietary modifications by study subjects

### Conclusion

Majority of the households with hypertension faced hardships such as, cooking separately and managing different levels of salt in the recipes. When the subject themselves becomes patient, most often there is no one to monitor the dietary changes.

### Recommendations

There should be co-operation from other members of the household for cooking and serving, more so when there is a hypertensive patient.

More care should be taken by other members when the chief chef is the patient.

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