

Knowledge and Practice on Hypertension among the Rural Community With A View To Implement Need Based Interventional Package

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Abstract: Life style diseases are the major causes of mortality and morbidity in the present world. During the earlier days we thought that these killer diseases principally cramped in urban communities but statistics shows that it also be the foremost problem in the rural communities .In Kozhikode district among the people residing in the rural areas there is a sweeping increase in cerebrovascular and cardiovascular mortality and morbidity now a days and moreover 40-50% of the peoples were hypertensive .So the present study was done to assess the knowledge and practice on hypertension among the rural community in Kozhikode district with a view to implement need based interventional package.248 citizens with the diagnosis of hypertension were selected from Olavanna panchyath of Kozhikode district and the knowledge and practice were assessed with knowledge and practice questionnaires Among the rural communities only 5.2% of participants had adequate knowledge and merely 4% had adequate practice on hypertension . Among the participants 134 subjects had known history of hypertension but 114 subjects were newly diagnosed hypertension. 11.3% of the samples had history of cardiovascular diseases, 12% of the subjects had the history of cerebrovascular diseases. The study findings shows that the knowledge and practice of people those who are residing in the rural areas were inadequate ,so they require an interventional package based on their needs to perk up their knowledge and practice level on hypertension ,it may also reduce the cerebrovascular and cardiovascular mortality and morbidities in the rural locale.

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I. Introduction

Communicable and Non-Communicable diseases are really a threat for the health status of the society. But nowadays the burden of the non-communicable diseases increases significantly and become the leading cause of mortality and morbidity in the present world. According to WHO, the burden of non-communicable diseases may twice over by the year of 2030.

Among the non-communicable diseases, Hypertension is a silent slayer and it is an important public health confront in both economically developing and developed counties. According to WHO, about 62% of cerebrovascular diseases and 49% of ischemic heart disease burden worldwide are attributed to suboptimal blood pressure levels. According to The “ Global burden of disease study has anticipated that cardiovascular and cerebrovascular diseases as the principal cause of mortality the world by the year of 2020.Hypertension is an iceberg could be described as “resting snake”-which bites when it is wakeup. High blood pressure is estimated to cause 7.1 million deaths .Annually accounting for 13% of all deaths globally.

Momentous number of individuals with hypertension are unaware of their condition and unfortunately among those who are having diagnosis hypertension, treatment is frequently poor. Actions were required at each level of health care system in order to prevent development of hypertension and improve the awareness of people regarding hypertension.

A study conducted by Zachariah MG etal regarding awareness ,treatment and adequacy of control of hypertension among the middle aged urban people in Kerala shows that only 29% of the subjects having good awareness and 10% of the subjects taking adequate treatment for hypertension .

The awareness of hypertension in USA is reported as 70%, 59% are receiving treatment and only 34% of these are reported to be controlled (SBP \leq 140 mmHg and DBP \leq 90 mmHg) blood pressure.

In India, the awareness of having high blood pressure has been reported as 7-8% in Jaipur rural study, 11-16% in Jaipur (urban) study 13, 26.3% in Haryana rural (Chandigarh) study 26, 37.3% in Chennai urban population study 15, and 49.5% in Delhi urban study12. In a study conducted in Kerala, it was 45% in the elderly community.

According to the various study reports, ageing of population, socioeconomic conditions that favoring changes in life style, unhealthy habits etc. may increase the incidence of hypertension in the rural as well as urban communities. But the low awareness and practice rates reported mainly in the rural areas than that of the urban areas might be due to competing health priorities with new communicable diseases and MCH services. Availability, accessibility and lack of sound health care service and the silent nature of the problem may also add up the low awareness and practice of the rural population.

Lower socioeconomic status, health perception and low level of educational status may also influence the awareness level of the public. So, in this context hypertension will need a keen attention from the health care organizations .Hypertension can be amenable to control both pharmacological and non-pharmacological methods. The investigator thought that a proper assessment of knowledge and practice of individual on hypertension, helpsto prevent, control and necessitate to adopt a healthy life style. The need of the communities may differ other, this observation facilitates the investigator to assess the knowledge and practice of the rural community primarily and to develop a need based interventional package exclusively for them. A stringent interventional package needed to strengthen the knowledge and practice of the rural population regarding hypertension.

II. Material And Methods

A community based cross-sectional survey was conducted in the selected rural areas .A stratified random sampling procedure was used to select the study subjects .In the initial phase of study the subcentres under the Primary health centers were identified and every third sub Centre from each area was picked from the pool by using systematic random sampling. In the next phase of the study door to door survey was carried out in the selected areas and pulled out those who are above 18 years of age, present at the time of survey and willing to participate in the study were included. In the third phase of the study chosen the subjects those who having diagnosis hypertension were selected and intended to assess their knowledge and practice regarding hypertension was assessed and in the closing phase a need based interventional package was formulated.

After getting the permission from the institutional research and ethical committee, formal permission from the medical officer of primary health Centre, Olavanna, the investigator conducted a pilot study in order to find out the practicability of the study a pilot study was conducted in 30 samples and it found to be feasible .These samples were excluded from the main study. An informed consent was obtained from all the subjects before data collection and the confidentiality of the data was ensured.500 samples were drawn from the area and blood pressure was measured with standardized sphygmomanometer. The demographic data were obtained prior to the screening through a structured interview schedule with help of a Performa. Two readings was taken with an interval of 15 minutes and based on the average reading. The subjects with average blood pressure reading SBP >130 mm of Hg and DBP > 85 mm of Hg were drawn for knowledge and practice assessment. The knowledge and practice were assessed using a structured knowledge and practice questionnaire. It consists of three parts; Part A-Socio –demographic data, Part B-knowledge Questionnaire and the Part C consists of questions to assess the practice of the study population. Knowledge questionnaire consists of 20 items carrying a total score of 20 and the practice questionnaire consist of 6 items having maximum score of 20.

The questionnaire was developed by the investigator based on the literature review and the tool was validated by the experts from the field of nursing, medicine and the public health. The reliability of the tool was treated by test –retest method and it seems to be reliable. The data collected were analyzed using descriptive and inferential statistics.

III. Result

Table no 1: Distribution of subjects based on socio demographic profile .N= 248

Socio demographic data	Frequency	Percentage
Sex		
Male	103	41.5
Female	147	59.3
Age		
15-25 years	01	0.04
26-35 years	58	23.3
36-45 years	86	34.6
Above 45 years	103	41.5
Unhealthy Habits		
Beatal nut Chewing	18	7.3
Smoking	30	12
Alcoholism	42	16.9
Betal nut chewing and smoking	02	0.08
Betal nut chewing and alcoholism	0	0
Smoking and alcoholism	42	16.9
Betalnut chewing smoking and alcoholism	1	0.04

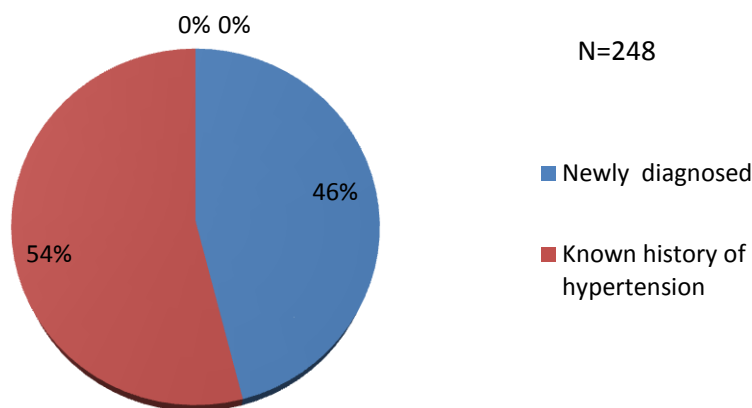


Figure 1: Distribution of subjects based on the diagnosis of hypertension

Figure 1 shows that 134 subjects had known history of hypertension but 114 subjects were newly diagnosed cases.

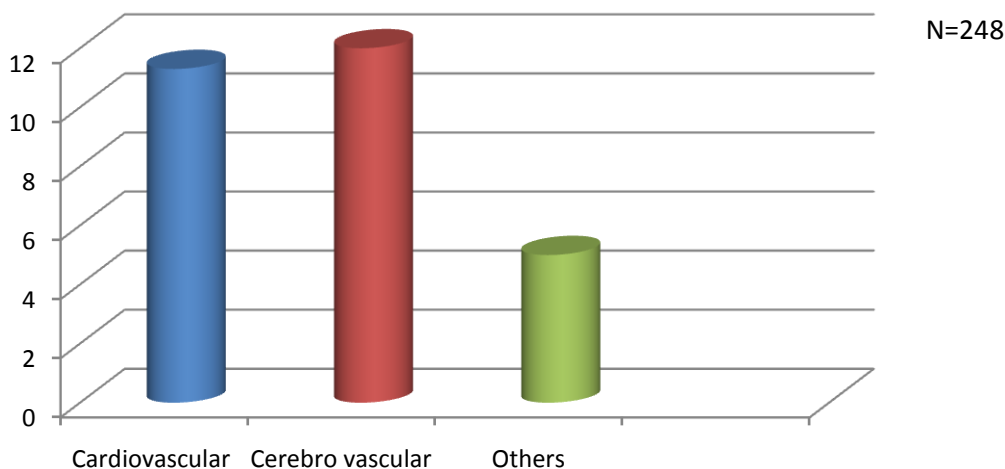


Figure 2: Distribution of subjects based on the history of systemic illnesses

Figure 2 illustrates that 11.3% of the samples had history of cardiovascular diseases, 12% of the subjects had the history of cerebrovascular diseases and 5% samples included in the category of other systemic illnesses. 71.7% of subjects were free from systemic illnesses.

Table 2: Distribution of subjects based on level of knowledge regarding hypertension N=248

Level of knowledge	Frequency	Percentage
Adequate (score between 75-100)	13	5.2
Moderate (score between 50-74)	93	37.5
Inadequate (score between 0-49)	142	57.3

Table 1 depicts that 57.3% of the subjects had inadequate knowledge regarding hypertension, 37.5% of samples had moderate level of knowledge and remaining 5.2% had adequate knowledge regarding hypertension.

Table 3: Distribution of subjects not having any life style illnesses based on level of practice regarding the prevention and control hypertension N=177

Level of knowledge	Frequency	Percentage
Adequate (score between 75-100)	10	5.6
Moderate (score between 50-74)	25	14.1
Inadequate (score between 0-49)	142	80.2

Table 2 illustrates that 80.2% of the subjects had poor practice regarding the prevention and control of hypertension, 14.1% of samples had moderate level of practice and remaining 5.6% had adequate practice regarding the prevention of hypertension.

IV. Discussion

Hypertension is foremost public health problem in the current world. In most of the developing countries hypertension is escalating in trend both in urban and rural communities. Various studies conducted across India estimated that prevalence of hypertension increases in urban as well as in the rural areas.

In the present study, during the screening phase, investigator diagnosed as 46% of the subjects had hypertension and this was categorized under newly diagnosed. This is in tune with the findings of the study conducted by ICMR–INDIAB Collaborative Study Group reported that prevalence of undiagnosed hypertension is high in India.

The awareness of the rural population regarding hypertension in this study were very low (57.3% of the samples had inadequate knowledge). In another study conducted in the Kerala state by Zachariah et al., it was 39% in the urban middle aged population and 45% in elderly community based sample in a study conducted by Thankappan KR et al.

A study conducted by the Division of Community Studies, National Institute of Nutrition, Indian Council of Medical Research, Hyderabad, awareness among adult tribal population of Kerala Regarding hypertension indicates that overall, only 10% (n=164) of the adult population was aware of hypertension status, and about 8% (n=129) were on regular treatment. This is in tune with the findings of the present study shows that 87% of the subjects had poor practice regarding the prevention and control of hypertension.

Yuvaraj BY, Nagendra Gowda MR, and Umakantha AG conducted a study Prevalence, Awareness, Treatment, and Control of Hypertension in Rural Areas of Davanagere reveals that Only 33.8% of the samples were aware of their hypertensive status. Hypertensives of 32.1% were on treatment, and 12.5% adequately controlled their BP. This also holds up the findings of the present study that the awareness and practice of the samples regarding hypertension is very low compared to other Indian studies conducted in the rural areas.

Meshram, N Arlappa, N Balkrishna, KM Rao, A Laxmaiah and GNV Brahmam Prevalence of hypertension, its correlates and awareness among adult tribal population of Kerala state, concludes that prevalence of hypertension was higher among tribal adult population of Kerala and was associated with age, gender, education, physical inactivity, alcohol consumption, and overweight/obesity. In the present study samples 21.6% had the habits of alcohol consumption and smoking.

V. Conclusion

From this study it is evident that, hypertension is not only the concern of the urban communities but also a major apprehension of rural communities. In the rural communities most of the peoples having inadequate knowledge regarding hypertension and also their practice is poor regarding the prevention and control of hypertension. Consequently hypertension generates an iceberg phenomenon of diseases.

Hence a rigorous effort from the health care fraternity is needed to contain the ill effects of hypertension on the rural communities. So an appropriate interventional package is needed for them in order to save the peoples from the murkiness of hypertension. By keeping this mission in mind investigator constituted an interventional package that includes a training module for the local leaders and health education campaign for the rural peoples regarding early detection, control and preventive aspects of hypertension, that will help the people to strengthen their knowledge and practice regarding hypertension. Local self-governments also have to play a vital role in the containment of non-communicable diseases such as hypertension.

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