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GRANDPARENTS-GRANDCHILDREN RELATIONSHIP IN A RURAL COMMUNITY

R.HemaLakshmi*
R.Maruthakutti**

ABSTRACT

This paper examines the mutual contributions, relationships and the joint activities between grandparents and grand children. Data were collected by interview method using interview schedule from 104 young adults in the age group of 13-24 in Annamalaiputhur village of Tirunelveli district. Analysis shows that the grandparents contribute to their grandchildren mostly in terms of problem solving, advice and guidance, giving money and material help. Few of the grandchildren said that there was no contribution from their grandparents because of illness and disability. Most of the Grandchildren involve in such activities with their grandparents as watching television, cooking, discussion and shopping. The relationship between grandparents and grandchildren is mostly found to be affectionate. Affection is high when the grandchildren are young. It is also noteworthy that intimacy with grandparents is more among the granddaughters compared to the grandsons. Thus age and gender play a major role in the nature of relationship between grandparents and grandchildren.

Key Words: Grandparents, grandchildren, grandparental contribution, intergenerational relationship, joint activities.

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INTRODUCTION

It is obvious that the elderly people have lot of life experiences. Along with such experiences they transfer their tradition to the next generations. Even after retirement, they continue to be great contributors in the family. In India traditionally the elderly were treated with great respect because it is part of our value system. However, now it is changing gradually. The relationship between grandparents and grand children has gone down because of new modern value system, taking on of western culture, and the changes in the family system.

Now the family system has undergone serious threats in rural areas. Joint family system is decreasing. There is no suitable care and support given to the elderly nowadays. Younger generation is migrating to other places due to education, occupation and marriage, which creates the gap between them and their family members. The relationship between grandparents with their grandchildren in particular has changed. They do not know the importance of the elder members in their family. Nowadays children have no time to talk and play with their grandparents. Joint engagement between the grandparents and grandchildren is the bridge to connect the generations. It also helps to transfer the traditions from one generation to another generation. It increases the intensity of the relationship among grandparents and the grandchildren.

Many of the elderly people think of old age as a burden to them, because they are not able to do work like when they were young. Many think that the elderly cannot contribute to their family because of decreasing ability to do work. However, they contribute to the family in many ways like taking care of grandchildren and pets, cleaning, shopping, and providing advice and emotional comfort. Familial conflicts are often buffered by the elderly in the family. Their knowledge of tradition and wisdom gained over years can be very valuable to the younger generation, albeit not recognized. Global

level changes in the political, economic and technological spheres certainly have their impact on social relations. Whether they have integrating or disintegrating effect on the bonds across generations, especially between grandparents and grandchildren, is open for research.

Review of Literature

The adolescence and the adult stages are the developmental stage, and grandparents playing main roles that are giving care, developing play behaviors and stimulating them cognitively and emotionally (Clarke Stewart, 1978; Power and Parke 1982).

Grandchildren had established a close relationship with their grandparents during childhood then during adolescence that relationship would likely not change. Relationships between grandchildren and grandparents have been examined through frequency of contact, the length of the exchange, and the types of resources exchanged. Although these strategies of investigation are important for understanding relationships between grandchildren and grandparents (Matthews and Sprey, 1985).

Positive feelings about the grandparent-grandchild relationship do not increase or decrease as one moves through adolescence. Adolescents independently want to visit their grandparents while establishing a close relationship with them (Roberto, 1990).

From grandchildren's perspective, their grandparents influence them in various ways. Grandparents participate in providing support and care, giving them information about the world, they are role models, and they are a source of ideas and reflection about human life. Meanwhile, children are aware of the negative impact their grandparents can have when their attitudes are extremist (Tyszkowa, 1991).

Older grandparents participate in activities that do not require much physical force. Differences related to gender are also observed

such that grandmothers focused on family care activities, community activities and social activities, while grandfathers do more activities outdoors and more task-related activities. Furthermore, granddaughters tend to share more with their grandparents (Kennedy, 1992).

While grandchildren are growing, they spend time with their grandparents. The dyad does different recreational activities together that tend to develop affective links and generate satisfaction. This tends to improve the quality of their relationship and develop long-lasting ties for the duration of the grandparent's life as well as that of the grandchild (Fuentes and Fernandez, 2008; Kennedy 1992).

Sushma Batra and Kakali Baumik (2004) found that the majority of the elderly want to share their life with their children/grandchildren. The relationship between them is determined by the care given by the elder people. Further this study highlights that the relationship between generations is dependent upon the shared activities and the shared respect between them.

Archana KaushikPanda(2004),finding shows that grandmothers actively having shared activities with their grandchildren like storytelling, looking after them after school hours is helping in creating bond between grandchildren and grandmothers in particular.

Grandparents' involvement and joint activities create emotionally close and supportive relationships with grandchildren and enhance their well-being (Attar-Schwartz et al. 2009b; Buchanan 2008).

Brussoni and Boon (1998) have also found that older grandchildren maintain regular contact with their grandparents and that the grandchild/grandparent bond continues with surprising strength into adulthood.

Mueller and Elder 2003;Uhlenberg and Hammill (1998) found that

the distance grandparents live from grandchildren is closely associated with stronger grandchild–grandparent relationships and emotional closeness.

Keeping in mind the various findings given by various studies on the relationship between grandparents and grandchildren, the present paper takes into consideration the grandparental contribution to grandchildren from the view of the grandchildren. It explores the ways the elderly are helpful to their grandchildren and the joint activities normally carried out between grandparents and grandchildren.

Method

The study was conducted in V.K pudhur Taluk, Annamalaiputhur, Oothumalai village, Tirunelveli district. It was decided that those who were in the age group of 13-24 be included in the study. There were 104 persons belonging to that age group in that village. All of them were taken for this study. Interview schedule was used to collect data from the respondents. By using frequencies and percentage, collected data were tabulated.

For measuring the level of joint activities, scores were assigned for activities according to the frequency of activities. The responses and their respective scores are: Always = 4, occasionally=3, Sometimes = 2, Never = 0. For each respondent the scores for the various items are added and the total score would refer to his or her score on joint activities. The lowest and the highest scores obtained were 0 and 11. This range is subdivided into three equal intervals in order to group the respondents into different levels of joint activities. Thus, those who obtained 0-3 were grouped as low; those obtained 4-7 were grouped as moderate; and those obtained 8-11 were grouped as high. To find significance between different groups of persons ANOVA test was used.

respondents get help from their grandparents while going to school. Grandmothers prepare regular food and other eatables for their grandchildren. Few grandchildren state that their grandparents are the reason why they did not sell their properties. The grandparents are acting as the links between the grandchildren and other relatives. More than one fifth (27.9%) of the respondents do not contribute anything because of their disability or distance. But grandchildren feel secure when their grandparents are at home, especially when their parents are away

Relationship

Nearly three fourths (73.1%) of the grandparent's relationship with their grandchildren is marked by love and affection. 18.3 percent of the respondent's grandparents render help. They render help in the form of giving money for school fees, as pocket money, then offering materials such as clothes, jewels during occasions, books and then providing services when they are sick, and while taking bath and eating. Only very few of the grandparents are fault-finding and quarrelsome. More than half of the grandchildren approach their grandparents because their grandparents are taking care of them and loving them. About 67.3 percent of the respondents say that their grandparents are useful to them. For others, their grandparents are too old or sick or living away to provide any help to the grandchildren. Mostly the grandmothers are living in same house with their grandchildren compared with grandfathers. Compared with Paternal grandparents 62.5% of the grandchildren who are in regular contact with their paternal grandmothers. And 58.5% of them are in contact while during occasions like temple festival, family celebrations with their maternal grand fathers.

Table II: Joint Activities

Joint Activities	Never		Rarely		Occasionally		Often	
	F	%	F	%	F	%	F	%
Discussion	45	43.3	34	32.7	17	16.3	8	7.7
Watching T.V	30	28.8	12	11.5	28	26.9	34	32.7
Walking	84	80.8	7	6.7	7	6.7	6	5.8
Cooking	66	63.5	4	3.8	12	11.5	22	21.2
Shopping	68	65.4	4	3.8	24	23.1	8	7.7

Activities jointly engaged between the grandparents and grandchildren are walking, discussions, watching television, cooking, hearing stories and shopping. More than half (53.84%) of the respondents have low level joint activities with their grandparents. 34.62 percent of the respondents have moderate level of joint activities. Only 11.54% of the respondents have high level joint activities with their grandparents.

Only few of the respondents have discussions frequently with their grandparents. One fifth of the respondents have discussions occasionally. Out of 104 respondents, 32.7 percent of the respondents have discussions with their grandparents rarely. About 43.3 percent of the respondents do not have any discussions with their grandparents. 32.7 percent of the respondents watch

television with their grandparents often. 26.9 percent of the respondents are watching television with their grandparents occasionally. About 28.8 percent of the respondents do not have the habit of watching television with their grandparents. Most of the respondents do not have the habit of walking with their grandparents. One-fifth of the respondents often jointly engage in cooking with their grandparents often. Only few of the respondents go for shopping with their grandparents. Two-thirds of the respondents do not go for shopping with their grandparents.

The ANOVA results show that sex and the family size have significant relationship with joint activities between grandparents and grandchildren. Compared with grandsons, the intimacy with their grandparents is higher among granddaughters. The younger grandchildren that are up to 15 have relatively more intimacy with their grandparents. The older grandchildren in the age between 16 and 20 relatively have less intimacy compared with the younger ones (up to 15). Thus we see that when the age of the grandchildren increases, the intimacy between grandparents and grandchildren gets decreased. However the 'F' value is not significant for this difference is not significant. Those who are studying middle school have high intimacy compared with the higher school and college going grandchildren. Family type does not have any significant relationship with level of joint activities. It is found that when the family size increases the intimacy between grandchildren and grandparents also increases.

The relationship between grandchildren and grandparents is largely marked by love and affection. This affection is high when the grandchildren are young. It is also noteworthy that intimacy with grandparents is more among the granddaughters compared to the grandsons. Thus age and gender play a major role in the nature of relationship between grandparents and grandchildren.

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PREVALENCE OF HYPERTENSION AMONG THE ELDERLY: AN EMPIRICAL STUDY IN CUTTACK, ODISHA.

Dr. Tanuja Mohapatra*

ABSTRACT

Ageing is a biological process and experienced by the mankind in all times. It is also a multi-dimensional process. Old age is the closing period of the life of an individual. A person's activities, attitude towards life, relationship to the family and the work, biological capacities and physical fitness are all conditioned by the position in the age structure of the particular society in which he lives. Rapid ageing trends present new challenges to government, families and the elderly themselves.

Geriatric health problem is a growing concern due to increase in absolute number of geriatric people and socio-demographic changes in community. As per the 1991 census the elderly population in India was 57 million as compared with 20 million in 1951. It has been projected that by the year 2050, the number of elderly people would rise to about 324 million. (Ingle GK, and Nath A:2008). India has already acquired the level of "An Ageing Nation" with 7.7% of its population at or over the age of 60 years (Census 2001) and it currently ranks 2nd among the countries of the world for the size of elderly population, next to China since the year 2000.

The elderly, by themselves are a vulnerable group and non-

Keywords: Prevalence, Hypertension, Diabetes, Body mass index, Risk factors, Cardio-vascular diseases.

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communicable diseases (NCDs) like diabetes and hypertension are clearly a major morbidity in this age group. Developing countries, like India, are likely to face an enormous burden of NCDs in future and of these diseases, hypertension is one of the most important treatable causes of mortality and morbidity in the elderly population. Further, high blood pressure (BP) is a modifiable risk factor for cardio-vascular disease (CVD).

Indians are genetically more prone to suffer from cardiovascular diseases and hypertension is already an established risk factor of it. Thus high prevalence of hypertension doubles the dilemma over ageing population. Early identification of chronic geriatric morbidities like diabetes and hypertension should be ensured through periodic screening and regular health checkups.

INTRODUCTION

Every time the human heart beats, it pumps blood to the whole body through the arteries. Blood pressure is the force of blood pushing up against the blood vessel walls. The higher the pressure, the harder the heart has to pump. Hypertension referred to as high blood pressure, is a condition in which the arteries have persistently elevated blood pressure. Hypertension can lead to damaged organs, as well as several illnesses, such as renal failure (kidney failure), aneurysm, heart failure, stroke or heart attack.

According to Medilexicon's Medical Dictionary, hypertension means "*High blood pressure; transitory or sustained elevation of systemic arterial blood pressure to a level likely to induce cardiovascular damage or other adverse consequences.*"

The normal level for blood pressure is below 120/80, where 120 represents the systolic measurement (peak pressure in the arteries) and 80 represents the diastolic measurement (minimum pressure in the arteries). Blood pressure between 120/80 and 139/89 is called pre-hypertension (to denote increased risk of hypertension), and a blood pressure of 140/90 or above is considered hypertension.

Hypertension has been identified as a major risk factor for the development of diabetes. Patients with hypertension are at a 2-3 times higher risk of developing diabetes than patients with normal blood pressure. Hypertension by itself is, of course, a powerful risk factor for cardiovascular morbidity and mortality as established by data from the Framingham cohort more than three decades ago.

Blood pressure, thus, has become a major public health problem for all age groups especially elderly people living in urban area and urban people are facing increased burden from hypertension being overweight or obese. (Aatif Qureshi I. et al. :2013)

Prevalence of sustained hypertension is on the rise in urban area even in younger age groups. Blood pressure is frequently elevated in obese children as compared to lean subjects. This is possibly related to their sedentary lifestyle, altered eating habits, increased fat content of diet and decreased physical activities (Mohan et al., 2004).

Social health always remained a neglected part. Even the National Programme for the Health Care of the Elderly (NPHCE) has not given sufficient importance to this domain. But with the adoption of modern life style and rapid break down of traditional joint family culture of India the social health of elderly people is of immense importance in today's life. With change in lifestyle and evolvement of nuclear families, elderly people often have to live with their spouse only; the scenario becomes more critical if one of the partners passes away. The inability to do normal day to day work for self maintenance often indicates the inability of the person to live rest of his/ her life with at least minimum comfort.

Old age is not a disease in itself, but it makes the aged person vulnerable to various long term medical problems of insidious onset. Hypertension is one such disease. Others are cardiovascular illness, cerebro-vascular accidents, diabetes mellitus and obesity with all of which hypertension is strongly associated.

With the advancement of modern medicines, life expectancy has increased; but it has increased the number of elderly in the community. ***This has ultimately increased the burden of non communicable diseases(mainly diabetic mellitus and hypertension) in the society as a whole.*** These diseases pose immense economic burden on the nation. Hypertension is in the key position among all the non-communicable diseases. Early diagnosis and regular treatment of hypertension can cut down the prevalence of these diseases.

Review of related studies

Hypertension and ageing of the population are two most important problems faced by public health and clinical medicine. Hypertension in the elderly serves as a major risk factor for several disease situations thus leading to a better survival for those with lower values of blood pressure (Strulov et al., 1990). Death and disability from cardiovascular disease are increasing rapidly in developing countries that they rank it as the number one cause of the global burden of disease by the year 2020. The single largest independent risk factor for cardio-vascular disease is elevated blood pressure (Mackay & Mensah, 2004).

Hypertension is a major cause of death among the elderly and probably the most important source of invalidism because of the damage caused in vital organs like brain, heart and kidneys. The detection and control of hypertension in elderly is particularly important to reduce the risk of cardiovascular disease. A cross-sectional survey was carried out in UK stressing the need of detection, treatment and control of hypertension in older British adults. Mortality and morbidity in hypertension are strongly related to the level of blood pressure. Higher the blood pressure, the worse the prognosis. Prevalence of hypertension is considerably higher in the elderly than in younger individuals and risk of cardiovascular disease increases with the age (Fries, 1980).

A study carried out in Spain among the people of 60 years and above showed higher mean blood pressure and greater frequency of hypertension among people of lower socio economic status and the role of education in hypertension prevalence was also assessed (Regidor et al., 2006).

Study conducted in Belgium states that a large number of older hypertensive men are treated with anti hypertensive drug in primary care. But the goal was not achieved in substantial number of patients due to under treatment. Patients with higher risk are

treated more frequently than patients at lower risk, blood pressure itself remains an important factor for the initiation of anti hypertensive drug therapy (Duprez et al., 2002).

The elderly, one of the fastest-growing segments of the US population have the highest prevalence of hypertension. In Framingham study, it has been stated that prevalence and severity of the hypertension increases with the advancement of age (Oparil, 2006.)

A. Chinese study conducted by Jia and others in 2002 has reported that with advancement of age, prevalence of overweight, obesity and its co-morbidities were all elevated. (Jia et al.,:2002).

The prevalence of hyperglycaemia, hypertension and dyslipidemia was two to three times higher among the subjects who had higher Waist- Hip- Ratio (WHR) and Waist Circumference (WC) compared to those with a lower WC and WHR. About one third of the population were more than 60 years of age and higher Body Mass Index (BMI), WC and WHR were related with increased age (Jia et al.:2002).

Overweight and obesity are also the potential risk factors for hypertension and diabetes and different cross sectional studies have clearly shown the association of these factors with hypertension and diabetes. Obesity is a wide spread and growing problem in the world with significant medical, psycho-social, and economical consequences. The prevalence of obesity has been increasing since last few decades and this trend will continue both in developed and developing countries and the obesity has become a major public health problem (Chu, 2005).

Obesity is an important biological risk factor for cardiovascular disease both directly and increasing the risk for other biological risk factors such as high blood pressure, type 2 diabetes, high serum lipid levels. Obesity and low level of education are associated with

other risk factors for CVD (Cardio-vascular diseases) such as high blood pressure and high cholesterol (Anderson et al., 2006).

Wilking et al. (1988) study report of US shows that isolated systemic hypertension is a highly prevalent disorder and its major determinants are: sex, increasing level of blood pressure and obesity in women. A study done on the elderly subjects in Boston has shown the relationship of physical inactivity and obesity in development of diabetes. Weight gain since 20 years and elevated adiposity may contribute significantly to the rise in blood pressure in normo-tensive individual and has emphasized the importance of weight control throughout adulthood (Yang et al., 2006).

The most important effects of overweight are non communicable diseases, non insulin dependent diabetes, cardiovascular disease and hypertension. The relative risk of these diseases increased with obesity is fairly constant throughout the world. However, data indicate that black people have a higher prevalence, particularly those with type 2 diabetes. (Alleyne & Point, 2004).

Family history and genetic factors are associated with both insulin dependent and non insulin dependent diabetes (Wyshak, 2002). A study done in India focusing to elder subject states that a history of hypertension was found to be an independent risk factor for having undiagnosed diabetes along with male sex and increased BMI. A cross sectional study done in urban area of India has shown the prevalence of hypertension 54.5% and associated factors recorded were higher body mass index and older age and an occupation also has some role in hypertension prevalence (Zachariah & Thankappan, 2003). Similarly, study carried out among the Punjabi Bhatia community has shown significant linear relationship of body mass index with the prevalence of hypertension and diabetes in India (Gupta et al., 2004).

Isolated systolic hypertension is the most common form of hypertension in the elderly and also an important predictor of cardio-vascular morbidity and mortality including coronary artery

disease, congestive heart failure and stroke as well as treatment of elderly hypertensive was found challenging due to its greater likelihood of other concomitant diseases (Lakatta et al., 1993).

A study reveals that only half of the patients with hypertension adhere to treatment and about one third only have controlled blood pressure shows the gravity of the problem and this has created the big challenge to the health care provider (Krousel-Wood et al., 2004). The study of Agyemang states that high blood pressure is an important public health problem in both rural and urban settings and effective public health measures are urgently needed to prevent high blood pressure from becoming another public health burden (Agyemang, 2006).

AIMS AND OBJECTIVES

1. To study the prevalence of high blood pressure (Hypertension) among elderly in an urban setup.
2. To study the associated risk factors for hypertension among the elderly.

Inclusion criteria: Elderly of 60 years and above

MATERIALS AND METHODS

Four health camps were organised at different places in Cuttack, Odisha during October 2011 and February 2015 organised by Rotary Club of Cuttack Mid-Town and Rotary Club of Cuttack Millennium. Door to door campaign was arranged and pamphlets were distributed for information of the public as regards to the arrangement of this health camps. The Doctor members of both the clubs were present and conducted the camps The pathological investigations were carried out by experienced technicians of M/S Satyam Diagnostics. Free medicines were also distributed to the needy and poor patients. About 420 elderly (aged ≥ 60 years) attended these camps.

The aged (60 and above) were randomly selected for this study.

The methodology comprised of interview, physical examination, clinical examination and laboratory investigations.

The researcher has attended all these health camps. Data on age, sex, educational status, occupation, family history, literacy status, marital status, personal habits, additional dietary salt intake etc. were collected by the researcher in a well formulated, well structured interview schedule. Also, the information on prevalence of diabetic mellitus, whether on medication or not etc. were collected by the researcher.

The additional dietary salt intake was defined as those individuals who ate more than two pinches of salt per meal excluding the previously added salt to meal during preparation. General physical examination including weight and height, and two Blood Pressure (BP) readings within a gap of 15 minutes was carried out by the physicians. BP was measured using a mercury sphygmomanometer by palpation and auscultation method in right arm in sitting position. Two readings were taken 15 min apart and the average of both the reading was taken for analysis.

Hypertension in this study is defined as systolic BP more than 140 and diastolic BP more than 90 mm of Hg. All subjects on anti hypertension medications or having a prescription of anti-hypertensive drugs were classified as Hypertensive (HT) irrespective of their current BP reading.

Person having systolic BP between 120-139 and / or diastolic BP between 80-89 was labelled to have pre-hypertension. Stage1 hypertension was taken as systolic BP between 140-159 and/ or diastolic BP between 90-99 mmHg. Stage 2 hypertension was taken as systolic BP > 160 and/ or diastolic BP > 100 mmHg. Awareness of hypertension was based on the subjects' report of a prior diagnosis of hypertension made by a health professional.

Current use of prescription medication for lowering elevated blood pressure among hypertensive subjects in the sample was considered as treatment of hypertension; those are under pharmacological treatment, including allopathic or any alternative medicine medications. A patient is in control of hypertension was considered if under pharmacological treatment it was found with an SBP <140 mmHg and a DBP <90 mmHg.

Weight was recorded (to an accuracy of 1 kg) & the height of each subject (to an accuracy of 1 cm.) were measured. Obesity was assessed by calculating Body Mass Index (BMI) using formula ($\text{wt in kg} / \text{ht in m}^2$). Elderly with BMI ≥ 25 were classified as overweight.

Diabetes was diagnosed if the fasting blood glucose was ≥ 126 mg/dL after an overnight fast for at least 8 hours, or if the participant was taking treatment for diabetes. Impaired fasting blood glucose was diagnosed if fasting blood glucose was 110-125 mg/dL.

The awareness status regarding their own diabetes mellitus was defined as having diabetes diagnosed by a health professional with presence of a prescription, or anti-diabetic medicines possessed by the participant. The treatment status was defined as taking any pharmacological treatment for diabetes. Participants who were already diabetic and taking treatment were considered to have control if the fasting blood glucose was <126 mg/dL.

A normal fasting plasma glucose level is less than 110 mg per dL and normal 2hrPPG levels are less than 140 mg per dL. Blood glucose levels above the normal level but below the criterion established for diabetes mellitus indicate impaired glucose homeostasis. Persons with fasting plasma glucose levels ranging from 110 to 126 mg per dL are said to have impaired fasting glucose, while those with a 2hrPPG level between 140 mg per dL and 200 mg per dL are said to have impaired glucose tolerance. Both impaired fasting glucose and impaired glucose tolerance are associated with an increased risk of developing type 2 diabetes mellitus.

Data were analysed through SPSS package. Tests of significance, Pearson's Chi-square test were used to find out the results. P values <0.01 was considered significant for the identified risk factors and outcome variables.

RESULTS

Table-1 shows the prevalence of hypertension among the study sample.

TABLE - 1

Distribution of study subjects according to Age & Sex (n=142)

Subjects	Male		Female		Total	
	NO.	%	NO.	%	NO.	%
Total Subjects	185	44.05	235	55.95	420	100
Known Hypertensive	29	6.90	39	9.29	68	16.19
Newly diagnosed Hypertensive	31	7.38	43	10.24	74	17.62
Total Hypertensive respondents	60	14.29	82	19.52	142	33.81

Out of 420 study elderly, 142 (33.81%) were hypertensive, and among them 60(14.29%) were males and 82 (19.52%) were females. It is also observed that 68 (16.2%) of respondents have been diagnosed to be hypertensive earlier and 74(17.62%) of respondents were freshly diagnosed to be hypertensive.

