

Vol 3 Issue 6 March 2014

Impact Factor : 2.1002 (UIF)

ISSN No : 2249-894X

*Monthly Multidisciplinary
Research Journal*

*Review Of
Research Journal*

Chief Editors

Ashok Yakkaldevi
A R Burla College, India

Flávio de São Pedro Filho
Federal University of Rondonia, Brazil

Ecaterina Patrascu
Spiru Haret University, Bucharest

Kamani Perera
Regional Centre For Strategic Studies,
Sri Lanka

Welcome to Review Of Research

RNI MAHMUL/2011/38595

ISSN No.2249-894X

Review Of Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Horia Patrascu Spiru Haret University, Bucharest, Romania	Mabel Miao Center for China and Globalization, China
Kamani Perera Regional Centre For Strategic Studies, Sri Lanka	Delia Serbescu Spiru Haret University, Bucharest, Romania	Ruth Wolf University Walla, Israel
Ecaterina Patrascu Spiru Haret University, Bucharest	Xiaohua Yang University of San Francisco, San Francisco	Jie Hao University of Sydney, Australia
Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Karina Xavier Massachusetts Institute of Technology (MIT), USA	Pei-Shan Kao Andrea University of Essex, United Kingdom
Catalina Neculai University of Coventry, UK	May Hongmei Gao Kennesaw State University, USA	Loredana Bosca Spiru Haret University, Romania
Anna Maria Constantinovici AL. I. Cuza University, Romania	Marc Fetscherin Rollins College, USA	Ilie Pinte Spiru Haret University, Romania
Romona Mihaila Spiru Haret University, Romania	Liu Chen Beijing Foreign Studies University, China	
Mahdi Moharrampour Islamic Azad University buinzahra Branch, Qazvin, Iran	Nimita Khanna Director, Isara Institute of Management, New Delhi	Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai
Titus Pop PhD, Partium Christian University, Oradea, Romania	Salve R. N. Department of Sociology, Shivaji University, Kolhapur	Sonal Singh Vikram University, Ujjain
J. K. VIJAYAKUMAR King Abdullah University of Science & Technology, Saudi Arabia.	P. Malyadri Government Degree College, Tandur, A.P.	Jayashree Patil-Dake MBA Department of Badruka College Commerce and Arts Post Graduate Centre (BCCAPGC), Kachiguda, Hyderabad
George - Calin SERITAN Postdoctoral Researcher Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, Iasi	S. D. Sindkhedkar PSGVP Mandal's Arts, Science and Commerce College, Shahada [M.S.]	Maj. Dr. S. Bakhtiar Choudhary Director, Hyderabad AP India.
REZA KAFIPOUR Shiraz University of Medical Sciences Shiraz, Iran	Anurag Misra DBS College, Kanpur	AR. SARAVANAKUMARALAGAPPA UNIVERSITY, KARAIKUDI, TN
Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur	C. D. Balaji Panimalar Engineering College, Chennai	V.MAHALAKSHMI Dean, Panimalar Engineering College
	Bhavana vivek patole PhD, Elphinstone college mumbai-32	S.KANNAN Ph.D , Annamalai University
	Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust), Meerut (U.P.)	Kanwar Dinesh Singh Dept.English, Government Postgraduate College , solan

More.....

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net



ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES IN THE MANAGEMENT OF HYPERTENSION AMONG ELDERLY MEN AND WOMEN

Roopa, K. S. and Rama Devi, G.

Department of Human Development and Research Centre, Smt.V.H.D. Central Institute of Home Science,
Bangalore University , Bangalore , Karnataka

Abstract:

Hypertension is a major problem that will most certainly grow with increase in the number of older people as the population continues to age. Its complications have estimated reduction in life expectancy and number of Quality of life years. The aim of the study was to study the Knowledge, Attitude, Practice (KAP) in the management of hypertension among old age people. Purposive random sampling technique was adapted for the study. The total sample constituted 1200 elderly with hypertension residents of urban Bangalore, of which 600 were men and 600 were women between the age group of 65-76 years. The tool used for the study was Structured Interview Schedule (SIS) developed by the investigators on demographic profile and on KAP in the management of hypertension and the tool was administered to 1200 old age people. The obtained data was subjected to statistical analysis by applying percentage mean, and 't' test. The findings revealed that the scores on the knowledge segment indicated a moderate to good knowledge among the respondents. The mean scores on attitude indicated that the groups showed a fair and healthy attitude towards hypertension. The mean scores on practice showed a moderate level to cope with hypertension.

KEY WORDS:

Hypertension, Assessment, Practices, Elderly, Knowledge, Attitude.

INTRODUCTION:

Old age consists of ages nearing or surpassing the average life span of human beings and thus the end of the human life cycle. Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person.

Ageing is the progressive and generalized impairment of functions resulting in the loss of adaptive response to stress and in increasing the risk of age-related diseases. Old people have limited regenerative abilities and are more prone to disease, syndromes, and sickness than others.

Hypertension is a condition characterized by an increase in the blood pressure. Though it is usually a disease of the old age, it can affect even children and adolescents also. Hypertension over a period of time can affect various organs in the body. It can cause arteriosclerosis, left ventricular hypertrophy, heart failure, stroke, renal damage, retinal damage and cognitive decline. It is basically classified in to primary and secondary hypertension. Primary hypertension is usually diagnosed in persons of old age as their arteries become less elastic and thus increasing the blood pressure. On the other hand secondary hypertension can affect even children and is due to various causes. Irrespective of the type of hypertension,

the treatment includes salt and fluid restriction and taking appropriate drugs.

About 95% of the cases of hypertension are due to primary hypertension. Primary hypertension is usually diagnosed during old age and there is no identifiable cause. Approximately 30 % of cases of essential hypertension are attributed to genetic factors. These individuals have increased resistance at the arteriolar levels. Most of the people with uncomplicated hypertension remain asymptomatic. Hypertension is detected incidentally in them. People with severe hypertension like malignant hypertension may have symptoms like severe headache, nausea, visual symptoms, dizziness, and sometimes renal failure. Hypertension can affect almost all the vital organs of the body. People with complicated hypertension may have symptoms related to the organ affected. Some of the symptoms include palpitations, fatigability, impotence, blurring of vision, weakness, dizziness, angina pectoris and dyspnea.

The available literature suggests that being Indians, at least they should not be in the notion that prevalence of hypertension is declining. With the prevalence comparable to other countries like U.S., which have the highest figures and being the country with second largest population, we are probably having one of the largest numbers of hypertensive persons. In any case, in thirty years our population will overcome China and even at the current rate of hypertension we will have the largest number of people with hypertension in the world. One more label – Hypertension capital of world! The targeted strategy should be directed at people who already have a high normal level of BP, have a family history of hypertension, are overweight, consume an excessive amount of salt or too little potassium, are physically inactive, or consume three or more alcoholic drinks per day. There is an urgent need to address this problem. The research project was taken up to study the knowledge, attitude and practises in the management of hypertension among older persons.

OBJECTIVES

1. To study the existing Knowledge, Attitude and Practice (KAP) in managing hypertension among old age people.
2. To assess and compare the KAP in managing hypertension among elderly men and women.
3. To assess and compare KAP in managing hypertension among the two age groups of elderly viz; 65-70years and 71-76 years.

Hypothesis

1. There will be significant differences in the knowledge, attitude and practices to manage hypertension among men and women.
2. There will be significant differences in the KAP in the management of hypertension among the two age groups of elderly, namely 65-70 years and 71-76 years.

Sample

A total of 1200 men and women in the two age groups with hypertension were selected randomly from thirty selected areas from urban Bangalore, thus constituting 300 in each cell with 600 each of men and women and 600 each from two age groups. Table -1 gives the number of men and women with hypertension in the two age groups.

Table:1 – Schematic breakup of the sample

Age Groups In Years	Old Age People		
	Men	Women	Total
65-70	300	300	600
70-76	300	300	600
Total	600	600	1200

Tool

A Structured Interview Schedule (SIS) was developed by the investigators for the collection of data on demographic profile and knowledge, attitude and practices (KAP) with regard to hypertension. It

consists of two parts. Part – A deals with basic data and Part – B deals with specific data on hypertension categorized under (KAP).

Procedure of study

The study involves co-operative action research aimed at a survey or an exploration of knowledge, attitude and practices in the management of hypertension among old age people. As the study focuses on the elderly with hypertension the cross section of the society hypertensive old age people belonging to the two age groups namely 65 to 70years and 71-76 years among the residents of urban Bangalore were identified. Purposive random sampling was adopted for the study. The study was carried out by administering the questionnaire for old age people fixing the convenient date and time. Both the English and Kannada versions of the questionnaires were used for data collection according to the requirement. The investigator was always alert and utilized the opportunity to the maximum in order to collect valid data and information under the existing circumstances.

RESULTS AND DISCUSSION

Knowledge items included statements on the nature, causes, symptoms, consequences, control and dietary requirements of hyper tension. Attitude items contained statements indicating the attitude towards the disease, its effects and practices one need to maintain. Practice items were basically on the exercises the people do, the diet they follow or the regularity of the medical tests they undergo. The responses provided by the respondents yield a score each on K, A, and P. The mean and standard deviation of score on each segment for different groups were calculated. The scores thus obtained for the four sub groups and the calculated values of 't' are given in table-2.

Knowledge about Hypertension:

The mean scores on the knowledge segment of hypertension varied from 45.9 to 69.8 and indicated a moderate level of knowledge about hyper tension. The SD of scores varied from 26.6 to 31.1. Wide individual differences in scores within groups were noticed especially among women and the younger group of aged. These differences were comparatively less in the older group of men.

Table - 2. Mean score and standard deviation on KAP regarding hyper tension and the 't' ratios for a comparison of four sub groups

Group	Age (years)	N	Knowledge		Attitude		Practice	
			Mean	SD	Mean	SD	Mean	SD
Men	65-70	300	45.9	27.8	60.2	29.9	50.8	23.3
	71-76	300	56.0	26.6	63.3	26.2	58.3	19.6
't' Value			4.55*		2.66*		4.29*	
Women	65-70	300	69.8	29.1	79.9	26.5	63.8	21.2
	71-76	300	48.4	29.4	56.7	33.6	49.2	25.0
't' Value			8.96*		9.39*		7.71*	
Men		600	50.9	27.7	63.2	28.2	54.6	21.8
Women		600	59.1	31.1	68.3	32.4	56.5	24.3
't' Value			4.82*		2.91*		1.43 NS	
65-70 years		600	57.9	30.9	70.0	29.9	57.3	23.2
71-76 years		600	59.2	28.3	61.5	30.5	53.8	22.9
't' Value			3.33*		4.87*		2.63*	

*Significant at 5% Level, NS : Non-Significant

The mean scores on knowledge segment also showed that older men and younger women scored significantly more than the other groups that is, younger men and older women among the aged. In general, women scored significantly more than men and older group more than the younger group of aged.

The anxiety about the disease may be one of the reasons for a better knowledge of the older group or it may be due to sheer experience with the existing condition.

During the interview it was noticed that the knowledge of the elderly was limited with regard to

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES IN THE MANAGEMENT.....

major cause of hypertension. Many elderly were of the opinion that age factor leads to hypertension. They had limited knowledge that even obesity, stress, diet, lack of physical activity and use of high salt in the diet could be the causes and risk factors for hypertension.

Many elderly women reported drowsiness, excessive sweating and irregular heartbeats as the symptoms of hypertension. Both elderly men and women were not aware that blood pressure if it not controlled leads to kidney problem. All the groups had limited knowledge with regard to low sodium content vegetables and fruits.

Respondents lacked sufficient knowledge of the influence of physical exercise on cholesterol and hypertension, which supports the findings of Pinaar, P.E. et.al., (2004).

ATTITUDE TOWARDS HYPERTENSION:

The mean scores on the attitude segment of hypertension vary from 60.2 to 79.9 and indicated a fair and healthy attitude towards hypertension. Again a more favourable or healthy attitude was shown by older men and younger women among the aged. Here also women and the younger group scored higher than men and the older group.

Majority of men agreed that high cholesterol causes hypertension and hypertension is a risk factor for stroke. Many elderly people disagreed with the statement that reducing weight lowers blood pressure. However, cent percent of them agreed that knowing more about hypertension will help in better management.

PRACTICES FOLLOWED TO MANAGE HYPERTENSION:

In the practice segment of the Structured Interview Schedule on hypertension, the scores vary from 49.2 to 63.8. The mean scores suggest a moderate level of practice maintained by the respondents to cope with hypertension.

The SD of scores varies from 19.6 to 25.0 for different groups. Wide individual variations within groups were noticed. Here also the older group of men and younger group of women among the aged showed healthy practices in the care of hyper tension. In general, women and younger group of respondents showed significantly more healthy practices in the care of hypertension.

Men respondents as compared to women reported that after knowing that they are hypertensive, they practiced going for exercise and doing meditation. Few women practiced laughter yoga. With regard to food habits they reported that sometimes they avoided salted foods and included low fat milk. Cent percent of elderly had the practices of drinking plenty of water.

Hypertension control is an important public health priority and Indian Medical Association has recently decided to develop guidelines for hypertension assessment and treatment. Whether development and dissemination of these guidelines translate into better treatment status is unknown. Population-based prevention and high-risk approach – based control measures are urgently needed in India to halt the spread of the epidemic of hypertension and achieve a population-wide decline in BP levels.

In summary, two of the hypotheses set for verification that: i) there will be significant differences in the knowledge, attitude and practice in the management of hypertension among men and women, as well as ii) there will be significant difference in the KAP in the management of hypertension among the two age groups of elderly, were confirmed in this study with one exception. There existed no significant difference in the scores on practice items on hypertension between men and women. The assumptions underlying these hypotheses was that the incidence of hypertension is more among men than women. As such men are more prone to receive information about the conditions and develop healthy attitudes and practices to cope with these conditions. As age advances among the elderly, the natural processes to cope with these conditions decline. Hence one has to adopt life style changes to lead a near normal life.

SYSTEM OF MEDICINE FOLLOWED

The choice of the system of medication in terms of frequency as indicated by the four sub groups are given in table- 4. Here also, chi-square values were calculated to see the statistical significance of variations in the choice of responses by the four sub groups or the association between the choice of responses and the four sub groups.

Table -3: Frequency of different systems of medication preferred by the four sub groups and the chi-square values in the management of hypertension

Aspects	Men				Women			
	Age Group (in Years)				Age Group (in Years)			
	65-70		71-76		65-70		71-76	
	N	%	N	%	N	%	N	%
Allopathic	177	59.0	112	37.3	120	40.0	107	35.7
Homoeopathic	47	15.7	82	27.3	38	12.7	66	22.0
Ayurvedic	63	21.0	82	27.3	35	11.7	76	25.3
Nature cure	43	14.3	44	14.7	33	11.0	53	17.7
Others	12	4.0	9	3.0	4	1.3	15	5.0
χ^2 Value	26.80* Between Men				21.14* and Women = 2.09 NS.			

*Significant at 5% level

As noticed in table- 3, allopathic system of medicine was preferred by 35.7 to 59 per cent of respondents in the different groups. This was followed by ayurvedic, homeopathy and nature cure systems. The number reporting different systems differ between the younger and older groups of aged suggesting an association between age and the medicine system followed with a significant chi -square for both men and women.

While the younger group of men and women follow allopathic medicine more often as compared to the older group of aged, the older group followed ayurvedic and homeopathic medicine as well as nature cure more often than the younger group of aged. There was not much of a variation in the choice pattern of men and women. Both groups followed similar trends as indicated by a statistically non- significant chi-square.

Brent, et. al., (2003), found that 34% reported alternative therapies and 28% reported prevention strategies. Limited awareness of systolic hypertension emerges as a greater barrier to BP control than cost of medications in Americans 50 years or older. Many older Americans also prefer to integrate traditional, complementary, and alternative strategies as noticed in this study.

CONCLUSION

The mean scores on the knowledge segment of hyper tension indicated a moderate level of knowledge about hyper tension. The mean scores on the attitude segment of hypertension indicated a fair and healthy attitude towards hypertension. The mean scores suggest a moderate level of practice maintained by the old age people to cope with hypetension.

University Grants Commission funded Major Research Project

REFERENCES

- 1.Al-Kandari and Yagoub. (2011). Relationship Of Strength Of Social Support And Frequency Of Social Contact With Hypertension And General Health Status Among Older Adults In the Mobile Care Unit in Kumai,Journal Of Cross Cultural Gerontology, Shwiek, Kuwiat,Vol- -26(2),P:175 – 187(13).
- 2.Brent M.E.,Lackland D.T.(2003). Awareness,Knowledge and Attitudes of Older Americans Among High Blood Pressure,Arch Interm Med, Vol-163,pp:681-682.
- 3.Burka,V., Beilin,L.J., Grosskopf,S., Ritchie,J., Puddy,I.B., Rogers,P. (1992). Association of Life Style and Personality Characteristics with Blood Pressure and Hypertension: A Cross-Sectional Study In The Elderly, Journal of Clinical Epidemiology. Perth, Australia, Vol-45(10), pp: 1061-1070.
- 4.Feng-Hwa Lu., Tang Shiung-Janp., Wu Jin-Shang. (2000). Hypertension in Elderly Persons : Its

- Prevalence and Associated Cardiovascular Risk Factors in Tainan City, Southern Taiwan, *Journal of Gerontology, Medical Sciences*, Vol-55A, No.8, M463 – M468.
5. Jiang Lin., Huining Lei., and Fang Liu. (2008). Hypertension Knowledge in urban elderly patients: comparison between adherents to traditional Chinese medicine and Western medicine, *Journal of Geriatric Cardiology*, Vol-5, No-2, pp: 74 – 78.
6. Jose, R.B., Esther, L.G., Auxiliadora, G., Pilar, G.C., Juan, L.G., Jordi, A., and Fernando, R. (2007). Relationship between Obesity, Hypertension and Diabetes and Health-Related Quality of Life Among The Elderly, Madrid, Spain. Vol-14, pp: 456-462.
7. Margaret, Mc Donald., Robin, P.H., Alan, N.U., and Michael, B.L. (2009). Prevalence, Awareness And Management Of Hypertension, Dyslipidemia And Diabetes Among United States Adults Aged 65 and Older. *Journal Of Gerontology Bio Medical Science*, Vol-- 64A (2), P: 256-263.
8. Pereira, M., Azevedo, A., and Barros, H. (2010). Determinants of awareness, treatment and control of hypertension in a portugese population. *Portugal journal of cardiology*, Vol- 29, 1779-1792.
9. Pienaar P.E., Swart M.D., Roos H., (2004). Physical activity Knowledge, attitudes and practices of the elderly in Bloemfontein old age homes, Vol--46, No-8, pp: 17 – 19.
10. Porappakkham, Y., Pattaraarchachai, and Arkplakorn, W. (2008). Prevalence, Awareness, Treatment And Control Of Hypertension And Diabetes Mellitus Among The Elderly: The 2004 National Health Examination Survey III, Thailand, *Singapore Medical Journal*, Vol- 49(11), pp: 868 – 873.
11. Singh, V.B., Nayak, K.C., Kala Arvind., and Tundwal Vijaya. (2005). Prevalence of Hypertension in Geriatric population. A Community based Study in North-West Rajasthan, *Indian Journal of Gerontology*, Vol--19, No-2, India, pp: 135-146.
12. Sprafka, J.M., Bender A.P., Jagger, H.G. (1988). Prevalence of Hypertension and associated risk factors among diabetic individuals. The Three-city Study, *American diabetes association*, Vol- 1, P: 17-22.
13. Susan A.O., Chen R.S., and McCarthy, B.D. (2005). Hypertension Knowledge, Awareness and Attitudes in a Hypertensive Population, *Journal of General Internal Medicine*, Vol-- 20(3), pp: 219-225.
14. Swamia, H. M., Bhatia, V., Gupta, S. P. S., and Sood, A. (2001). Population based study of hypertension among the elderly in northern India. *Journal of public health*, Vol- 116, Issue 1, pp: 45-49.
15. Teo, C.W., W.L., Chung, C.R., Khaw, and Rashid, A.R., (2011). Hypertension and Diabetes Mellitus among the residents of an old folks home in North Malaysia; *Internet Journal of Geriatrics and Gerontology*, Vol- 6, pp: 1
16. Thoenes, M., Spirk, D., Bihm, M., Mahfoud, F., Thevathasan, L., and Bramlage, P., (2013). Treatment of hypertension in the elderly: data from an international cohort of hypertensive treated by cardiologists, *Journal of Human Hypertension*, Vol-27, pp: 131-137.
17. Xiping Zhanga., Minmin Zhu., Dib H.Hs. (2008), Knowledge, Awareness, Behaviour (KAB) and control of hypertension among urban elderly in Western China, Vol--18, Issue 10, pp – 1146-1148.

Publish Research Article
International Level Multidisciplinary Research Journal
For All Subjects

Dear Sir/Mam,

We invite unpublished research paper.Summary of Research Project,Theses,Books and Books Review of publication,you will be pleased to know that our journals are

Associated and Indexed,India

- * International Scientific Journal Consortium Scientific
- * OPEN J-GATE

Associated and Indexed,USA

- DOAJ
- EBSCO
- Crossref DOI
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Review Of Research Journal
258/34 Raviwar Peth Solapur-413005,Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.isrj.net