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GENDER WISE DIFFERENCES IN HEALTH COMPLICATIONS AMONG ELDERLY OF RURAL VARANASI, UTTAR PRADESH

Bhanu Priya Singh[1], T.B. Singh[2]

ABSTRACT

Aging is an evitable biological phenomenon. The proportion of elderly person is increasing world wise. In developing countries including India the aged population ration is growing up due to increase in economic status, new inventions in medical sciences, availability of affordable health services etc. The longevity in life is also increasing the health complications. **Objective:** The Objective of this study was to assess the burden of various health problems among study subjects and (ii) to find out the gender wise differences in various problems. **Material and Materials:** The findings of this study were based on 290 rural elderly subjects residing in Varanasi district of eastern Uttar Pradesh. Multi stage cluster sampling was used with cross sectional study design. Data were collected through schedule method regarding their socio demographic and health problems. The findings were presented in number, percent and z test was applied to find out gender wise differences in these complications. **Result:** Age related health problems were observed in both the genders. One third elderly suffered with cough and cold, 66.20 % elderly had the problem of vision and 63.10% had joint pain. More than half (54.10%) had the problems of forgetting/ dementia. Maximum study subjects had the problems of co-morbidities. **Conclusion and recommendation:** From this study it is concluded that social, economic and mental and health care provider supports are required to uplift the life of the elderly either through Government/ non-Government or family/ relatives/ societies/ communities.

Key Words : Elderly health complications, Gender health difference

INTRODUCTION:

Ageing is a natural inevitable biological phenomenon. Population ageing is pervasive since it is creating humanitarian, social and economic problem in many countries of the world including India. There are changes in the social, cultural and traditional family support system for elderly in India which have placed significant strain in inhabitants. By 2030, about 17 per cent of the world population will be aged more than 60 years, which was 11.1 per cent in 2010. China and Japan would have over a quarter of their population over 60 + by 2030.[1] The elderly in India, whether rich or poor, literate or illiterate whether residing in rural or urban are subject to abuse from near or dear ones. Most of the elderly in India are not aware of the real meaning of abuse and those who are aware do not share among friends or clinicians to avoid disrespect from society. The abuse in elderly has a very bad impact on their health status.[2]

Health care professionals often feel uncomfortable addressing spiritual and existential questions from dying individuals. Health care professionals such as chaplains, nurses, social workers and psychologists feel the problems to help older adults facing into their deaths. What strategies are particularly useful to address issues of meaning and purpose and help these individuals resolve troubling issues, enabling them to die in peace?[3].

1 Medical Social Worker, National Programme for Health Care of Elderly, Division of Geriatrics, IMS, BHU
2. Professor, Division of Biostatics, Department of Community Medicine, IMS, Banaras Hindu University -211005

"Old age is an incurable disease", but more recently, Sir James Sterling Ross commented: "You do not heal old age, you protect it, you promote it, and you extend it".[4] As expectation of life increases, the problem of aged females also increases such as: repair of prolapsed of virginities, ovarian tumours, psychic aberrations and sexual problems. A new invention in medical sciences and improved socio-economic conditions during past few decades has increased the life span of man. The age composition of the population in the developed countries has so grown that the numbers of aged persons is continuously on the increase. This trend is also appearing in the countries where medical and social services are well developed and having high standard of living.

According to health action 2004, it was estimated that 605 million people were in the world, about two third (400 million) are living in low income countries. It is projected that the number of aged population of the world would be more than 1.2 billion by 2025. In India the percentage of aged persons among total population is about 7.5 as per SRS estimates of 2012 which is low in comparisons of developed countries (Italy 16.7% and Japan 16%).[5] The 'biological age' of a person is not identical with his 'chronological age'. Years wrinkle the skin, but worry, doubt, fear, anxiety and self distrust wrinkle the soul. Certain changes take place in an organism with passage of time. The major disabilities among elders are cataract, Glaucoma, deafness, osteoporosis, mental disorders etc. The chronic diseases are degenerative changes of heart and blood vessels, cancer, accidents, diabetes, diseases of locomotors systems, respiratory illness, complaints of genitourinary system, mental changes, sexual adjustment, emotional disorders etc.[6]

The Government of India announced a national policy on older persons in January 1999. On 19th November 2007, the Indira Gandhi National Old Age Pension Scheme was launched to provide monthly pension to people over 65 year and living below poverty line. In India, HelpAge India is the largest voluntary organization working for the cause and care of the disadvantaged older people. It supports the following programmes to make life easier for older people : (a) Free Cataract Operations, (b) Mobile Medicare Units, (c) Income generation and micro-credit, (d) Old age homes and Day care centres, (e) Adopt-a Gran (grand parant), and (f) Disaster mitigation. The **aim of the study** was to assess the age group and gender wise current health complications among the elderly residing in rural background.

MATERIAL AND METHODS:

Study design: A descriptive cross sectional study was conducted on a house hold survey basis during the month of May, 2014.

Study Population: The person of age 60 years and above living in rural areas of Varanasi district Uttar Pradesh.

Selection of study subjects: Multi stage sampling was carried out in this study. Varanasi district has 8 blocks. Out of these blocks one block i.e**.** *Kashi Vidyapeeth* was selected by using simple random sampling; then villages were selected by simple random sampling at the second stage and complete enumeration was done after taking written consent from suitable respondents.

Sample Size: The sample size was calculated by the use of formula 3.84 x p.q/e2 with prevalence (p) 75% taking the morbidity rate (from pilot study) a relative precision (e) of 10%, confidence level of 95% at two tailed test, and a design effect of 2 for multi stage sampling. Taking 10% over sampling on the calculated sample size of 256, the final expected sample size was 290.

Data Collection Tool: A pre tested structured schedule was used for data collection. Variables were included by keeping in mind the objectives of the study. Data were collected by using both open and closed ended schedule. The schedule contains the personal and morbidity profiles.

Statistical analysis: Data entry and analysis was done by using statistical software frequencies and percentages were calculated.

RESULT AND DISCUSSION:

Findings of this study are based on 290 elderly out of them140 (48.30 were male and 150 (51.70 were female. The mean age of elderly was 71.1 years with a range of 60- 98 years. About one third (28.3%) elderly had the habit of present smoking and 12.4% consumed alcohol. 51% elderly were in the age group of 60 – 69 years and remaining were in the aged 70 years or more.

The problems of health among study subjects as per their age group wise is presented in table no. 1. Approximately one third (32.8%) elderly had the problem of cough, which may be due to the environmental changes and their poor nutritional status. One third elderly had the problem related to the infection e.g. loose stool, dysentery, diarrhoea etc. with slightly difference between early and late elderly. More than one third (35.1%) early aged were suffered with malaria parasites as compared to one fourth among late elderly. Approximately three fourth (74.6%) late elderly had the problem of vision as compared to 58.1% among early elderly. 24.1% elderly had problem of hearing. Digestive complication was found more among the elderly of age group 70 years and more as compared to 60-69 years (table-1). The increasing incidence of nervous complication such as sleep and fall were 46.5% and 41.5% in late elderly. The complication of forgetting was found among 53.4% of early elderly as compared to 54.9% in late elderly. Approximately one fourth (23.0%) late elderly faced the problem of pruritis. The problem of diabetes was observed among 5.6% in late elderly as compared to negligible among early aged. The complications of urination was observed among 15.5 elderly of age group 70 years or more as compared to 10 % among early aged. More than three fifth elderly had problem of joint pain in both age groups of elderly. 3.4% elderly of age group 60-69 years had the experience of blood transfusion as compared to 4.9% in the age group of 70 years and more. The age wise complications were found statistically significant ($p<0.05$) in the breathing problem, vision difficulty, and cataract, and ear discharge, hoarseness in voice, sleep diabetic and dentition.

Table-1: Distributions of respondents as per their health problems age group

Problems of Health	Age group (yrs)						P Value
	60-69 (Early)		≥70 (Late)		Total		
	No.	%	No.	%	No.	%	
	148	51.0	142	49.0	290	100.0	
Circulatory and Respiratory							
• Asthmatic	12	8.1	22	15.5	34	11.7	0.05
• Breathing problem	21	14.2	34	23.9	55	19.0	0.03
• Cough	51	34.5	44	31.0	95	32.8	0.52
• Bleeding cough	03	2.0	04	2.8	07	2.4	0.66
Hypertension	10	6.8	12	8.5	22	7.6	0.58
• Chest pain	31	21.0	24	16.9	55	19.0	0.37
Infectious Diseases							
• Loose stool	43	29.1	39	27.5	82	28.3	0.76
• Dysentery	04	2.7	03	2.1	07	2.4	0.74
• TB	08	5.4	04	2.8	12	4.1	0.26
• MP	52	35.1	36	25.4	88	30.3	0.07
• Jaundice	18	12.2	16	11.3	34	11.7	0.82
• Typhoid	12	8.1	05	3.5	17	5.9	0.09
Eye, Ear, Nose & Throat							
• Vision difficulty	86	58.1	106	74.6	192	66.2	0.003
• Cataract	23	15.5	51	35.9	74	25.5	<0.0001
• Hear difficulty	30	20.2	40	28.2	70	24.1	0.12
• Ear discharge	04	2.7	04	2.8	08	2.8	0.94
• Hoarseness in voice	18	12.2	32	22.5	50	17.2	0.02
Digestive							
• Bowel habit	64	43.2	59	46.5	123	42.4	0.77
• Appetite	36	24.3	39	27.5	75	25.9	0.54
• Stomachache	47	31.8	50	35.2	97	33.5	0.53
Nervous and Skin							
• Sleep	46	31.1	66	46.5	112	38.6	0.007
• Fall	48	32.4	59	41.5	107	36.9	0.11
• Forgetting	79	53.4	78	54.9	157	54.1	0.80
• Pruritis	30	20.3	34	23.9	64	22.1	0.45
Miscellaneous							
• Diabetic	01	0.8	08	5.6	09	3.1	0.02
• Urination	15	10.1	22	15.5	37	12.8	0.17
• Bleeding rectum	09	6.1	07	4.9	16	5.5	0.67
• Fever	44	29.7	48	33.8	92	31.7	0.45
• Weight loss	11	7.4	09	6.3	20	6.9	0.71
• Dentition	48	32.4	89	62.7	137	47.2	<0.001
• Gum bleeding	05	7.4	03	2.1	08	2.8	0.51
• Joint pain	93	62.8	90	63.4	183	63.1	0.92
• Blood transfusion	05	3.4	07	4.9	12	4.1	0.51

The percentage wise complications in both the gender are presented in table-2. Gender-wise differences in various health problems such as- cough, jaundice, typhoid, cataract, stomach ache, fall, dentition was found significant ($p<0.05$) between male and female elderly. Similar findings were also reported several authors.

Table- 2: Distributions of respondents as per their health problems and gender

Problems of Health	GENDER						P Value
	Female		Male		Total		
	No.	%	No.	%	No.	%	
	150	**51.7**	**140**	**48.3**	**290**	**100.0**	
Circulatory And Respiratory							
• Asthmatic	19	12.7	15	10.7	34	11.7	0.66
• Breathing problem	27	18.0	28	20.0	55	19.0	0.66
• Cough	40	26.7	55	39.3	95	32.8	0.02
• Bleeding cough	04	2.7	03	2.1	07	2.4	0.77
• Hypertension	09	6.0	13	9.3	22	7.6	0.29
• Chest pain	28	18.7	27	19.3	55	19.0	0.89
Infectious Diseases							
• Loose stool	38	25.3	44	31.4	82	28.3	0.25
• Dysentery	05	3.3	02	1.4	07	2.4	0.29
• TB	05	3.3	07	5.0	12	4.1	0.47
• MP	40	26.7	48	34.3	88	30.3	0.15
• Jaundice	08	5.3	26	18.6	34	11.7	<0.001
• Typhoid	09	6.0	08	5.7	17	5.9	0.92
Eye, Ear, Nose & Throat							
• Vision difficulty	103	68.7	89	63.6	192	66.2	0.36
• Cataract	48	32.0	26	18.6	74	25.5	0.008
• Hear difficulty	38	25.3	32	22.9	70	24.1	0.62
• Ear discharge	04	2.7	04	2.9	08	2.8	0.92
• Hoarseness in voice	20	13.3	30	21.4	50	17.2	0.07
Digestive							
• Bowel habit	64	42.7	59	42.1	123	42.4	0.93
• Appetite	43	28.7	32	22.9	75	25.9	0.26
• Stomachache	62	41.3	35	25.0	97	33.5	0.003
Nervous and Skin							
• Sleep	60	40.0	52	37.1	112	38.6	0.61
• Fall	67	44.7	40	28.6	107	36.9	0.004
• Forgetting	86	57.3	71	50.7	157	54.1	0.26
• Pruritis	35	23.3	29	20.7	64	22.1	0.60
Miscellaneous							
• Diabetic	03	2.0	06	4.3	09	3.1	0.26
• Urination	15	10.0	22	15.7	37	12.8	0.14
• Bleeding rectum	08	5.3	08	5.7	16	5.5	0.88
• Fever	47	31.3	45	32.1	92	31.7	0.88
• Weight loss	08	5.3	12	8.6	20	6.9	0.27
• Dentition	60	40.0	77	55.0	137	47.2	0.001
• Gum bleeding	03	2.0	05	3.6	08	2.8	0.42
• Joint pain	94	62.7	89	63.6	183	63.1	0.87
• Blood transfusion	07	4.7	05	3.6	12	4.1	0.62

The finding of ICMR 1984-85 on elderly attending geriatric clinics in rural areas shows visual impairment/ complaint, locomotive disorders neurological complaints cardiovascular disease, respiratory disorder, skin conditions, gastro-intestinal/ abdominal disorders, psychiatric problem, hearing loss, and genitourinary disorders were 88%, 40%, 18.7%, 17.4%, 16.1%, 13.35, 9.0%, 8.5%, 8.2%, and 3.5% respectively.[7] After the age of 40 years, the deposition of lipid material takes place at the inner walls of arteries breakdown and again it replaced by calcium, which leads to narrowing of blood vessels. Diet, hereditary, overweight, nervous and emotional strain

etc. are main causes of the diseases of blood vessels. Cardiovascular diseases are the main cause of death in developed countries and India also.

The causes of cancer rise rapidly after the age of 40 years after the age of 65 years prostate cancer is more common. In geriatric population the problem of bone fragile are more common due to certain amount of decalcification and break easily. Diabetes is a long term illness caused by faulty carbohydrate metabolism. Approximately three forth diabetes are over 50 years of age. It is the leading cause of death of elderly. Diseases of loco motor system cause more discomfort and disability than any other chronic diseases of the elderly. These disorders affect the aged regarding fibrosities, myositis, neuritis, gout, rheumatoid arthritis, osteoarthritis, spondylosis etc. Respiratory illnesses such as chronic bronchitis, asthma, breathing problems are major concern of the aged population. Enlargement of prostate dysuria, nocturia, frequent and urgency of maturation are the common problems of the elderly. There is cessation of reproduction by women and diminishing of sexual activity on the part of men during 40 to 50 years of age. Physical and emotional disturbances e.g. irritability, jealousy and despondency may occur. Emotional disorders occur from social maladjustment. Unadoption of the aged by the family members, relatives, and community can result in bitterness, inner withdrawal, depression, weariness of life and even suicide.[6]

CONCLUSION AND RECOMMENDATION:

It is concluded that maximum elderly had the problem of economic dependency. The care of elderly is done by the family members/ relatives. The cost on treatment /investigation/ transportation/ balanced diet is too high so rural community had not the sufficient resources for it. Therefore, it is recommended to make the effort for economically independency/social support/encouragement of better quality of life etc. The government /NGOs, social societies, local communities should come forward for the better care of elderly. These findings are very important from a policy planning perspective. As aged person increases then, there is a need to understand their health status. Thus, this study is an approach in the understanding of the health needs of the elderly.

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