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Study of Morbidity Pattern in Geriatric Population in Rural Areas of Aligarh

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Abstract- Elderly population, in India as well as world-wide, is increasing rapidly over the years. Geriatric medicine is yet to acquire an important place in India. People aged 60 years and above are considered as the Elderly population. Elderly people are suffering from various physical, mental ,social and economical problems. Elderly are vulnerable to long term diseases of insidious onset such as- cardiovascular illness, CVA, cancers, diabetes, musculoskeletal and mental illnesses. The present study was conducted in Rural Health Training Centre, Jawan, of Jawahar Lal Nehru Medical College, AMU, Aligarh .A semi structured questionnaire was used to collect data from March and April 2015. A total of 100 persons of age 60 or more, who were living for more than 6 months in Jawan village, formed the target group. An informed consent was taken from them. A detailed history was taken regarding present and past illness. The laboratory investigations available at RHTC were done on each included person .The data was entered into excel sheet and was analyzed. The study population comprises 100 people, out of which 60% were males and 40% females.90% were illiterate and 10%were literate.98% of the study population were dependent on their children for their livelihood. Only 2% were independent. The most common complaints were generalized bodyache(53%) and diminished vision due to refractive error(60%). It was followed by cataract problem(30%) and joint pain problems(30%). Known hypertensives were 22% and known diabetics were 8%. Dental problems were present in 27% of the subjects. Chronic cough was present in 25% of subject's. Asthma and impaired hearing was present in 21% of subjects. Hemoglobin (<12gm%) was present in 65% of subjects. The elderly population represents a high prevalence of morbidity like impaired vision, joint pains, cataract etc. So there is need to provide training to health care providers to manage the existing health problems in the community.

Keywords:- Elderly, Rural, Morbidity, Gastrointestinal.

I. INTRODUCTION

Elderly population ,in India as well as world-wide ,is increasing rapidly over the years. Geriatric medicine is yet to acquire an important place in India [3].People aged 60 years and above is considered as the Elderly population by the United Nation [1]. In India, the proportion of elderly was 8% in 2012,which is expected to increase to 19% in 2050 [2]. Elderly people are suffering from various physical, mental ,social and economical problems. Elderly are vulnerable to long term diseases of insidious onset such as- cardiovascular illness, CVA, cancers, diabetes, musculoskeletal and mental illnesses. Chronic health conditions are common in elderly persons, and the prevalence of multiple chronic conditions is expected to increase [4]. Numerous studies have examined the distribution of multi morbidity among older persons in developed nations but the studies are scanty of developing countries [5]. In India, Joshi reported in 2003 that 83% of the elderly people had more than three morbidities [5]. Research showed that average number of morbidities per person was 2.77 among the elderly people of rural India[6]. Very little information is there about the prevalence of morbidity among geriatrics in rural Bangladesh. In India, the elderly population as per 2011census was 8% which is expected to increase to 12.4% by 2026 [7]. The present study aimed to know the morbidity pattern of the elderly in rural population of Aligarh.

II. MATERIAL AND METHODS

The present study was conducted in Rural Health Training Centre, Jawan, of Jawahar Lal Nehru Medical College, AMU, Aligarh .A semi structured questionnaire was used to collect data from March and April 2015. A total of 100 persons of age 60 or more,who were living for more than 6 months in Jawan village, formed the target group. An informed consent was taken from them. A detailed history was taken regarding present and past illness.A general physical examination was done. Blood pressure was measured twice using a

mercury sphygmomanometer from the right arm with the elderly in sitting position. Screening for vision was tested by Snellens chart. Impaired hearing is defined as inability to hear a whisper at a distance of 1 meter. Known diabetes is defined as those subjects under study who have been diagnosed by clinicians earlier to have high blood sugar levels and they are on medications for the same. Known hypertension is defined as those subjects under study who have been diagnosed by clinicians earlier for raised blood pressure and are on anti-hypertensive for the same. Gastrointestinal disorders history of constipation or fecal incontinence or gastritis was considered. Urinary disturbances History of urinary hesitancy or stress incontinence or urge incontinence were considered. Known cardiac illness particularly ischemic heart disease, congestive heart failure, valvular heart disease was accepted by clinician earlier with necessary investigations. The laboratory investigations available at RHTC were done on each included person. Hemoglobin estimation was done by Sahlis method, ESR by Wintrobes method, stool examination for ova and cyst, urine examination for albumin and sugar. The data was entered into excel sheet and was analyzed

III. RESULT & DISCUSSION

Table- 1 shows that the study population comprises 100 people, out of which 60% were males and 40% females.90% were illiterate and 10%were literate.98% of the study population were dependent on their children for their livelihood. Only 2% were independent.

Table 1 Demographic Profile of Study Population

Age group (years)	Males (n=60)	Females (n=40)	Total
60 -70	37	23	60
70-80	20	15	35
>80	3	2	5
Education			
Literate	7	3	10
Illiterate	53	37	90
Dependency			
Dependent	58	40	98
Independent	2	0	2

Table 2 shows the total number of illnesses among 100 subjects was 324. Therefore the average number of illnesses per persons was recorded as 3.24. The most common complaints were generalized bodyache (53%) and diminished vision due to refractive error (60%). It was followed by cataract problem (30%) and joint pain problems (30%). Known hypertensives were 22% and known diabetics were 8%. Dental problems were present in 27% of the subjects. Chronic cough was present in 25% of subject's. Asthma and impaired hearing was present in 21% of subjects. Gastrointestinal upset symptoms were present in 11% of people under study. Urinary symptoms were present in 10% of subjects.5% of subjects have cardiac illness and only one was under DOTS ,category 1.

Table 2 Morbidity Observed In the Study Population (N=100)

S. No	MORBIDITY CONDITION	No.
1	Joint Pains/Joint Stiffness	30
2	Dental Problems	27
3	Cataract	30
4	Refractive Error	60
5	Generalized Body Pain	53
6	Known Hypertension	22
7	Impaired Hearing	21
8	Gastrointestinal Upset	11
9	Chronic Cough(>3 Weeks)	25
10	Asthma	21
11	Urinary Symptoms	10
12	Known Diabetes	8
13	Tuberculosis Under Treatment	1
14	Known Cardiac Illness	5
TOTAL MORBIDITY		324
AVERAGE MORBIDITY PREVALENT		3.2

Table 3 Abnormal Reports from Laboratory

S. No.	Abnormal Reports From Laboratory Results	N=100
1	Hemoglobin Level <12.0 Gm%	65
2	Erythrocyte Sedimentation Rate (>30 Mm1 Hour)	30
3	Random Blood Sugar (>180 Mg/Ml)	12
4	Urine Examination	
	Albumin	11
	Sugar	17
5	Stool Examination (Ova And Cyst)	14

Table 3 shows laboratory investigations on the study population. Hemoglobin (<12gm%) was present in 65%

of subjects. ESR (>30mmper hour)was present in 30% of subjects. Random blood sugar (180mg/ml) was present in 12% of subjects. Stool examination showing ova and cyst was present in 14% of subjects. In our study the average number of illnesses per person was 3.2.In other studies, it was reported 2.627 and 2.42 in North and South India respectively [13]. JP Singh et al [14] found in their study the average morbidity per person was 3.17 ,which is very near to our reading. In our study the most common complaint was diminished vision (60%). This finding was similar to the finding of study done at southern India[8].Similarly ,in the study done at Chandigarh[9],61%of the subjects had visual impairment and in a study done at Pondicherry 68.2% were visually impaired [10].Sunder et al[15] reported visual impairment in 65% of subjects. In our study,30% of the subjects had cataract problem. In a study by Purohit and Sharma, cataract was reported in approximately 40% elderly [11]. Whereas Mishra reported in 25.8% elderly and Agarwal reported in 40% elderly[12]. A study in a rural area of Wardha district reported cataract in 30% of subjects[19]. In our study, cataract was reported in 30% of subjects. While Garg et al reported cataract in 24.3% of subjects[16]. In our study, joint pains were present in 30% of subjects, while Sunder reported it in 51.8% of subjects. Purty et al [17] reported joint pains in 43.4% of subjects. Other findings of our study are similar to Jabeen et al[18]. In our study GI upset symptoms were present in 11% of subjects which is similar to Jabeen et al study (11.7%). Sunder et al reported [15]GI problems in 9.9% of subjects. In our study, urinary symptoms were present in 10% of subjects while in Jabeen study ,it was 12.7%. Known diabetics were 8% in our study. Rao PV et al reported prevalence of known diabetics was 6.1%.[20]. Impaired hearing was present in 21% cases in our study. Sunder et al [15]reported hearing problem in 18.3% of cases. While Kishore and Garg [19] reported impaired hearing in 5% of cases. Dental problems were present in 27% of the subjects. Sijan et al [21] reported 42% toothache,29.9% tooth decay,10.3%mobile tooth,8.2% bleeding gums,3% mouth ulcer in their study. Anemia was very common. In our study, in 65% of subjects, the hemoglobin is less than 12gm%.Another study in the Southern India reported a much higher prevalence of anemia (82.9%) in the 60 years and above [22].Anemia in elderly may be due to nutritional, physiological and pathological problems[23].

IV. CONCLUSION

The elderly population represents a high prevalence of morbidity like impaired vision, joint pains, cataract etc. So there is need to provide training to health care providers to manage the existing health problems in the community. There should be separate geriatric clinics in the government hospitals. The elderly should be encouraged for routine checkups in the hospitals. Indigenous and allopathic doctors should be trained to manage geriatric cases. Insurance scheme that would enable the elderly meet their medical expenses should be implemented.

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