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Original Article:

An Approach of Initiating Geriatric Screening OPD at the Rural Health Training Centre of SMVMCH, Pondicherry

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Abstract: Objectives: To study the common chronic health problems among the elderly patients attending in recently initiated geriatric screening OPD at the RHTC. Material and Methods: Since one year, screening OPD has been started at RHTC of SMVMCH, for old patients (>60 years), twice a week. A team of trained medical interns, a post-graduate, a faculty in Community Medicine and a counselor screen and counsel the elderly patients for common medical and mental health problems. The screening tool is structured and has been adopted for patients of geriatric OPD at RHTC. The screening tool consist of General Health Questionnaire (GHQ-5), Psychosis screening, Alzheimer's disease (AD8) questionnaire and checklist of common medical conditions. Patients were screened for early detection of health problems followed by counseling them/their caregivers and referral to specialty OPD for further care. Results: Total 512 elderly patients were screened over 4 months period from the start of geriatric OPD. Out of them, 276 (54%) and 117 (23%) were between the age group of 60-65 years and 66-70 years respectively. Among them 387 (75%) were below poverty line and 68 (13.3%) were having some kind of health insurance. GHQ score indicates that 255 (50%) patients had a score more than one and it was significantly higher among females compared to males. About 76 (16.8%) elderly had a score of > 1 for psychosis, out of which only 12 (14%) were referred to the higher centre. AD8 score shows 204 (40%) patients attended the clinic having a score more than 1 and it is significantly higher among females compared to males. Counseling for caregivers was given only in 13 (6%) of the patients with high AD8 score. Common chronic conditions present among them were joint pains (310, 60%), visual disturbances (247, 48%), hearing difficulty (120, 23.4%) and hypertension (107, 21%). Conclusion: The proportion of people with AD8 score more than 1 is high and most common chronic condition seen is joint pain. The action component of the clinic such as referral of dementia patients, psychosis patients and counseling of their care-givers need to be strengthened.
Key Words: Screening; Counseling; Geriatric; Care-givers; Psychosis; Dementia; Alzheimer's disease

Introduction:
Geriatric population which accounted for 7.2% of total population in 2001 has increase its share to more than 8.0 % by the year 2011 and is projected to rise to 10.7% by year 2021.[1] The psychiatric problems of geriatric age group has always been underestimated. The need for research in gero-psychiatry has been grossly demanded by growth in the size of elderly population.
Psychiatric morbidity is reported much higher in geriatric than non-geriatric age group.[2] Alzheimer disease (AD) and other dementias are both under-recognized and under-diagnosed in the community.[3] This may be due in part to the lack of brief measures that can discriminate normal aging from very mild dementia. Hence, appropriate screening program for screening general health problems, psychosis and dementias of old age people (>60 Years) is needed.
The Tamil Nadu and Pondicherry public health system runs weekly geriatric OPD's at Primary Health Centres and sub-district hospitals where the emphasis is mainly on screening for non-communicable diseases. The screening of geriatric patients for psychiatric morbidities remains untouched.
A geriatric screening OPD has been started at the RHTC Thiruvennainallur, UHTC Villupuram and at HELPAge

village Thamaraikulam. A geriatric screening questionnaire has been framed and used with an intention to focus on the screening of general health problems, psychosis and dementias among elderly people. This may help in better planning and implementation of elderly care program in our OPD services.[4]

Materials and Methods:

Setting: Rural Health Training Centre (RHTC), Thiruvanainallur is a peripheral centre of department of Community Medicine, Sri Manikula Vinayagar Medical College and Hospital, in Villupuram district of Tamil Nadu. The centre offers free basic medical care and laboratory services to surrounding rural community through a team of medical officer, medical interns, social workers and a post-graduate in Community Medicine. Once in a week specialist visit is arranged to offer specialist care to patients. Screening of the patients from geriatric OPD is followed by counselling them/their caregivers after which they are referred to the specialist OPD at the RHTC for further care.

The secondary data of patients screened in the OPD during first four months from the beginning of geriatric OPD, i.e. from June 2012 to September 2012 was used for the present analysis.

Screening OPD: A twice a week screening OPD for old patients (>60 years) has been planned and initiated at the Rural Health Training Centre starting from June 2012. All elders attending OPD are screened and counselled for common chronic medical and mental health problems.

Screening tool: A structured screening tool is being used for easy and quick identification of chronic medical problems and mental health problems such as Psychosis and Alzheimer's disease. The General Health Questionnaire of 5 items (GHQ5; sensitivity-86%, specificity-89%)[5] is being used as a first step to screen psychiatric morbidities. Alzheimer's disease (AD8) questionnaire is used to screen Alzheimer's disease.[6] Number of affirmative responses to the questions in the screening tool were added to obtain the GHQ-5, Psychosis and AD8 score. The cut of score of more than or equal to 1 was considered significant to be indicative of positive findings in GHQ-5, psychosis and AD8 questionnaire.

Data analysis: The data collected so was further entered and analysed using EPI info software version 3.4.3. by the interns and post-graduates working at the RHTC. The present study reports findings of secondary data of the geriatric screening OPD at RHTC during first four months duration from the beginning of this OPD i.e. from June to September 2012.

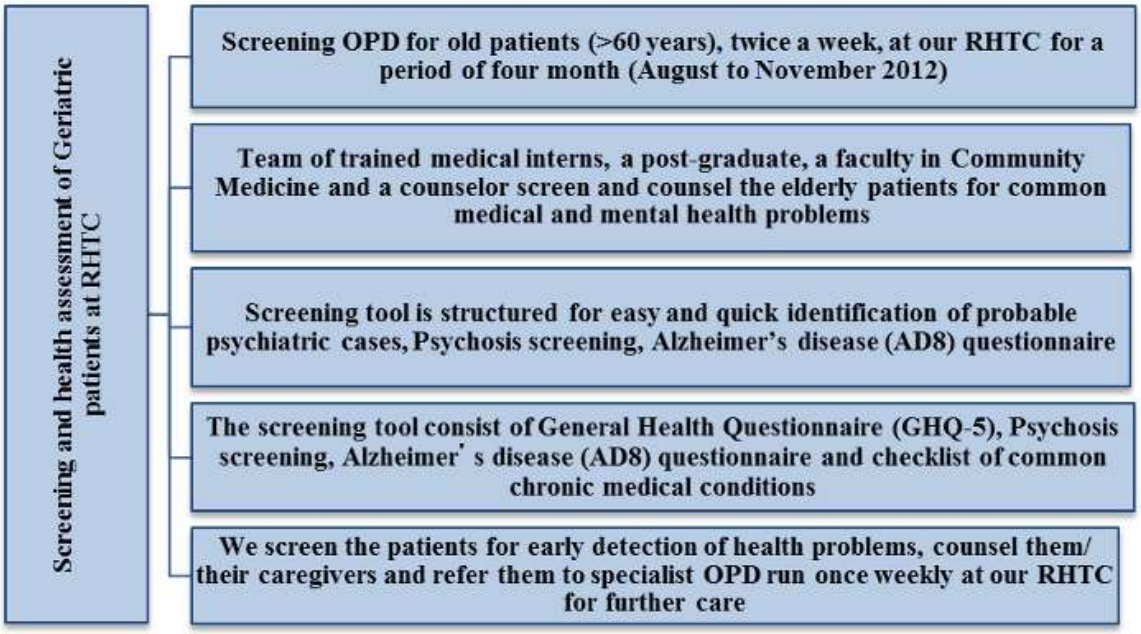

Fig. 1: Screening and health assessment of Geriatric patients at RHTC

Results:

The median age group of patients attending the geriatric OPD was 65 years. Total 512 elderly patients were screened over four months period, out of which 276 (54%) and 117 (23%) were between the age group of 60-65 years and 66-70 years respectively. 247(48.2%) of the patients were males while 265 (51.8%) were females. 387 (75%) patients were below poverty line and 85 (16.6%) were having some kind of health insurance. The GHQ-5 score was more than or equal to 1(>1) in 421(82.2%) patients, psychosis score was more than or equal to 1 (>1) in 86 (16.8%) patients and AD8 score in 342 (66.8%) patients. Socio-demographic characteristic of the patients visiting geriatric clinic have been described in Table 1.

Out of 512 elderly there were 412 working, in which male and female were equally distributed (40.2%). Here, widows (21.9%) were higher than widowers (3.5%). The females comprised of 226 (44.1 %) of the total patients with GHQ score (>1) while males comprised of 195 (38.1%, thus showing a female preponderance in the geriatric population attending the clinic. AD8 also showed a female preponderance [female = 191(37.3), male = 151(29.5)] while psychosis scoring was distributed equally.

The geriatric age group patients were screened for Common chronic medical conditions. The common chronic morbidities among the patients were Joint pain 310(60.5%), Glaucoma 153(29.9%), Anaemia 127(24.8%), Hearing problem 120(23.4%), Hypertension 107(20.9%), Diabetes Mellitus 87(17.0%) and Lung disease 45(8.8%).

Morbidity profile of the elderly revealed that 24(4.6%) of the total elderly subjects had no morbidity, 487(95.1%) had at least one morbidity, 382(74.6%) had at least two morbidities while 265(51.7%) had at least three morbidities.

Table 1: Socio-demographic characteristic of the patients visiting geriatric clinic (n=512)			
	Male	**Female**	**Total**
Sex	247(48.2)	265(51.8)	512(100)
Age			
60 to 65	111(21.7)	165(32.2)	276(53.9)
66 to 70	51(10.0)	66(12.9)	117(22.9)
71 and above	85(16.6)	34(6.6)	119(23.2)
Socio-economic status			
APL	48(9.4)	26(5.1)	74(14.5)
BPL	178(34.7)	209(40.8)	387(75.5)
Not known	21(4.1)	30(5.9)	51(10)
Occupation			
Working	206(40.2)	206(40.2)	412(80.4)
Not working	41(8.0)	59(11.5)	100(19.5)
Marital status			
Married	225(43.9)	147(28.7)	372(72.6)
Never married	4(0.8)	6(1.1)	10(1.9)
Widowed/Divorced/Separated	18(3.5)	112(21.9)	130(25.4)
Type of family			
Joint	114(22.2)	95(18.6)	209(40.8)
Nuclear	105(20.5)	89(17.4)	194(37.9)
Staying alone	28(5.4)	81(15.8)	109(21.2)
Health insurance			
Present	47(9.2)	38(7.4)	85(16.6)
Absent	200(39.1)	227(44.3)	427(83.4)
Patients screened positive			
GHQ ≥1	195(38.1)	226(44.1)	421(82.2)
Psychosis score (≥1)	42(8.2)	44(8.5)	86(16.7)
AD8 ≥1	151(29.5)	191(37.3)	342(66.8)

Table 2: Common self-reported chronic medical conditions among elderly (Multiple response questions	
Diseases	**N=512**
Joint pain	310(60.5%)
Glaucoma	153(29.9%)
Anaemia	127(24.8%)
Hearing problem	120(23.4%)
Hypertension	107(20.9%)
Diabetes Mellitus	87(17.0%)
Lung disease	45(8.8%)

Table 3: Morbidity profile of the elderly			
	Male n=247	**Female n= 265**	**Total n=512**
No morbidity	13(5.2)	11(4.1)	24(4.6)
At least one morbidity	233(94.3)	254(95.8)	487(95.1)
At least two morbidity	178(72.1)	204(77.0)	382(74.6)
At least three morbidity	130(52.6)	135(50.9)	265(51.7)
Note: multiple response			

Discussion:

About 512 elderly patients were screened over the period of four months. The General Health Questionnaire (GHQ-5) was high (> 1) in 421 (82.2%) elderly patients, Psychosis score was high in 86 (16.8%) patients while Alzheimer's disease (AD8) score was high among among 342 (66.8%) patients.

The GHQ-5 is a valuable effective first stage screening tool for easy and quick identification of probable psychiatric cases in primary care settings. Its five questions can be easily integrated into routine clinical enquiry by the doctor or a health professional. The reported significant AD8 score is much higher than the prevalence of dementia ranging from 2.4% to 19.5% reported from various studies.[8] This is possible because the AD8 score worked as screening tool for Alzheimer's dementia. However, the confirmation of diagnosis was needed for the elderly patients after referral to psychiatrist.

The number of health morbidities was reported to be high with more than 95% of OPD patients having more than one morbidity, 74.6% reported of two morbidities and 51.7% patients reported three morbidities. The compromise in quality of life of elderly persons has been reported to be more with increase in the number of morbidities, as reported by Dongre et. al. in 2012.[9] Hence, limiting the number of morbidities of geriatric age group using early screening and prompt management of health morbidities should be a major concern for those involved in imparting geriatric health care. Up-gradation of psychiatry wings of government medical colleges and government hospitals had been targeted as a component of National Mental Health Program in the 11th Five Year Plan.[10]

The limitations of present study should be kept in mind. It was a small scale facility based study. Many patients attending geriatric clinic were not accompanied by the caregivers. Hence, counseling, follow-up and referral were a challenge for health service providers.

In conclusion, the chronic morbidities and mental health problems among elderly attending RHTC geriatric screening OPD was found high. There is a need to ensure trained manpower and motivation of caregivers for better care of sick elderly attending the screening OPD.

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