Original Research Article

A Clinical Analysis of patients seen in a Geriatric Mental Health Camp organized in Mumbai

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ABSTRACT

Background: Geriatric mental health is a neglected domain of mental health and many cases remain undetected in the community. Community programs have often helped to detect many cases of the elderly with psychiatric problems and help them access care. The current paper aims to present an analysis of patients seen in a geriatric health camp from a psychiatric perspective.

Methods: 103 elderly attended the geriatric camp and were assessed clinically for psychiatric problems. They were also administered the Adenbrooke's Cognitive Examination Revised (ACE-R) Hindi version, Barthel's Index for Activities of Daily Living and 3.Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST). The results were analyzed statistically and presented.

Results: The mean age of the subjects in the study was 66.05 ± 7.9 years. 83 subjects (79%) out of the 105 were female. The mean BIADL score of the sample was 19.52 ± 1.9 and on the basis of scores on the ACE-R they were classified as having cognitive impairment (n=67) and not having cognitive impairment (n=27). The cognitively impaired group differed from the non-cognitive impairment on all subscales of the ACE-R. 55 (52.4%) reported the presence of elder abuse but had taken no action against it. The BIADL scores showed a significant correlation on all aspects of ACE-R scores.

Conclusions: Geriatric health camps can serve as a useful arena for the detection of geriatric mental health problems. Further studies in larger populations are needed to corroborate the findings seen in the geriatric health camp reported in this study.

Key words: geriatric health, geriatric mental health, ADL, ACE-R

INTRODUCTION

Geriatric mental health is one of the most neglected domains of mental health care and there are a large number of challenges that come up when one looks at the implementation of mental health care for the elderly [1]. There is a need for mental health screening of the elderly in primary care settings and appropriate referrals when psychopathology is detected [2]. There have been reports in scientific literature of the success of geriatric health camps where psychiatry has been included and has been instrumental in detecting psychiatric problems in the elderly especially when access to mental health care is sparse and far fetched [3]. Forgetfulness is very often the first sign of memory loss or impending dementia and is a symptom that is considered a part of normal aging and is hence never investigated further [4]. This symptom may be a part of medical conditions as well as dementia and also may present as the main symptom in geriatric depression [5]. Another problem with a high prevalence but rarely asked about in clinical settings is elder abuse [6]. Many elders fear reporting abuse as they are dependent on their caregivers and the problem goes undetected

and under-reported [7]. Psychiatric care for the elderly must be community based so that patients have access to care and the stigma of receiving psychiatric care is reduced [8]. In fact efforts must be made to have screening for mental health problems in community based camps where the elderly come for medical checks and psychiatric problems may be detected and treated simultaneously [9]. Keeping this in mind, we participated in a medical geriatric camp for the elderly and herewith present a clinical analysis of the patients seen at such a camp organized in Mumbai.

METHODOLOGY

A free medical camp was organized by local non-governmental organizations in the Sion area of Mumbai which has a large number of slum dwellings. The department of Psychiatry participated in this camp for mental health awareness and screening for psychiatric problems in the elderly as we form part of a major tertiary general hospital in the area. 105 patients attended the camp from different areas of Mumbai. All were in the geriatric age group above the age of 60 years. Of these only 94 completed all the scales and were included in the final study analysis. They were screened for psychopathology via a history and clinical mental status evaluation like done in a routine out patient setting. They were diagnosed with a psychiatric disorder if present, memory loss and questioned about elder abuse.

They were also assessed using the following scales –
- **Adenbrooke's Cognitive Examination Revised (ACE-R) (Hindi version)** – The Addenbrooke's Cognitive Examination is a brief, 15–20-minute test battery originally designed to detect and classify different kinds of dementia without the use of specialized test equipment [10]. It incorporates the Mini Mental Status Examination (MMSE) [11], with additional memory, language, and visuospatial components. The maximum score is 100, weighed as follows: orientation (10), attention (8), memory (35), verbal fluency (14), language (28), and visuospatial ability (5).
- **Barthel's Index of Activities of Daily Living (BIADL)** – This is a standardized scale widely used by clinicians and researchers to assess disability [12]. It includes 10 fundamental items of activities of daily living (ADL) viz. feeding, grooming, bathing, dressing, bowel and bladder care, toilet use, ambulation, transfers, and stair climbing. The total score ranges from 0 to 20, with higher scores signifying better degrees of function. Many researchers in different populations have demonstrated the BI to be reliable and valid [13-14].
- **Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST)** – The scale was developed to identify indicators and actual symptoms of elder abuse using a pool of over a thousand items selected from various elder-abuse protocols. Identifying the correlates of abuse were of most interest in the development of a screening tool, because they could be present prior to abuse occurring. This original pool of items was subjected to data reduction techniques to develop a brief screening tool. It has been widely used in the screening for elder abuse [15].

The study was approved in a Departmental Review Board meeting and informed and written valid consent was taken prior to administering the scales. The data was statistically analyzed using descriptive statistics for the sociodemographic data. The ACE scores between groups having and not having cognitive impairment was analyzed using the unpaired t test and correlations between ACE-R and BIADL was established using Pearson's correlation. All the statistical calculations were done using the Graph Pad Statistical Software online.

RESULTS

The mean age of the subjects in the study was 66.05 ± 7.9 years. 83 subjects (79%) out of the 105 were female. Majority of subjects i.e. 94 (89.5%) were Hindus while 61 (58.1%) belonged to nuclear families. The socio-demographic data has been described in Table 1. The mean BIADL score of the sample was 19.52 ±

1.9 and on the basis of scores on the ACE-R they were classified as having cognitive impairment and not having cognitive impairment. This was based on the cut off score of 88 on the ACE-R. The cognitively impaired group differed from the non-cognitive impairment on all subscales of the ACE-R (Table 2). On elder abuse screening 55 (52.4%) reported the presence of elder abuse but had taken no action against it. The BIADL scores showed a significant correlation on all aspects of ACE-R scores and has been documented in Table 3.

Table 1 – Socio-demographic data of the sample

Socio demographic parameter	Mean / N
Age	66.05 ± 7.9 years
Gender	
Male	22 (21)
Female	83 (79)
Family Type	
Nuclear	61 (58.1)
Joint	44 (41.9)
Religion	
Hindus	94 (89.5)
Muslims	11 (10.5)
Education (in years)	
Uneducated	23 (21.9)
1 – 5 years	5 (4.8)
6 – 9 years	21 (20)
10 – 12 years	30 (28.6)
> 12 years	26 (24.7)
Marital Status	
Married	58 (55.2)
Single	7 (6.7)
Separated	3 (2.9)
Widow	37 (35.2)
Income Status	
Dependent	77 (73.3)
Independent	28 (26.7)
Psychiatric Illness	
No psychiatric illness	73 (69.5)
Depression	28 (26.7)
Schizophrenia	1 (0.9)
Dementia	1 (0.9)
Insomnia	1 (0.9)
Alcohol Use Disorder	1 (0.9)
Medical Illness	
Diabetes	22 (21)
Hypertension	58 (55.2)
Cerebrovascular event	2 (1.9)

DISCUSSION

The present study just looks at preliminary data from a health camp conducted for the elderly but some very interesting facts emerge. 71.3% (67) subjects attending the camp had cognitive impairment and had never sought any help for the same. This indicates that while cognitive impairment may be widely prevalent in the elderly they rarely seek help for the same and unless they are examined for the same it may go undetected and untreated [16]. Thus many cases of age associated impairment could receive treatment early and the

progression to dementia may be halted if more elderly come for help the moment the cognitive impairment ensues [17]. It was interesting to note that cognitive impairment was uniform across all domains of the ACE-R and no specific pattern of cognitive impairment emerged.

Table 2 – Scores on ACE-R scale

ACE-R Scores Domain (N=94)	Present (N=67)	Absent (N=27)	t value	p value
ACE total	69.48 ± 20.03	92.81 ± 4.15	5.98	0.0001*
ACE-attention	15.24 ± 4.06	17.85 ± 0.45	3.32	0.0013*
ACE-memory	14.58 ± 6.8	23.74 ± 2.2	6.83	0.0001*
ACE-fluency	6.27 ± 3.12	10.96 ± 2.59	6.91	0.0001*
ACE-Language	22.46 ± 6.11	26.00 ± 0.0	2.99	0.003*
ACE-visuospatial	10.88 ± 4.38	14.30 ± 2.31	3.82	0.008*

*significant (p < 0.05). All calculations done using unpaired t test

Table 3 – Correlation between ACE-R Scores and BIADL scores

	ACE-R Total	ACE-R attention	ACE-R memory	ACE-R fluency	ACE-R language	ACE-R visuospatial
Barthel's Score (N = 94)	r = 0.496 p < 0.0001*	r = 0.520 p <0.0001*	r = 0.335 p = 0.009*	r = 0.279 p = 0.006*	r = 0.550 p < 0.0001*	r = 0.401 p < 0.0001*

*significant (p < 0.05). All calculations done using Pearson's Correlation

Many of the subjects in the study did very well in activities of daily living. Many elderly in India continue to do their ADL unless crippled with physical difficulties even though they may have mild to moderate cognitive impairment [18]. 52.4% (55) subjects in the study reported elder abuse. Elder abuse studies using community cohorts are lacking in India and the prevalence of elder abuse is in fact quite high and it goes unreported [19]. All the elderly in our sample considered elder abuse in some way to not be problem and did not want to report the same as they were completely dependent on their children. This is in keeping with studies that were done previously [20]. The current study was circumscribed and cross sectional while being limited to an urban cohort that attended a geriatric health camp. Further studies in larger samples would be needed to corroborate and give impetus to our findings. There is a need for larger epidemiological surveys to understand the extent to which geriatric mental health problems are neglected and remains undetected in these populations.

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