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Pattern and Determinants of Psychogeriatric Disorders Among the Attendees of Old Age Psychiatric Unit, Baghdad, Iraq

Shalan J.R. Al Abbudi[1] *FIBMS Psych,* **Khalida I. Ezzat**[2] *PhD*

[1]Section of Psychiatry, Dept. of Medicine, Al-Imamein Al-Kadhimein Medical City, Baghdad, Iraq, [2]Ibn-Rushd Mental Hospital, Baghdad Iraq

Abstract

Background Mental disorders in old age are frequent.

Objective To determine the diagnostic pattern of mental disorders in elderly patients aged ≥ 60 years, attending the Old Age Psychiatry Unit, Ibn-Rushed Psychiatric Teaching Hospital, Baghdad, Iraq.

Methods A retrospective study to all attendees to the Old Age Psychiatry Unit between January 2009 and November 2011 was carried out. Data collected included diagnoses, comorbid disorders, treatment received, and socio demographic characteristics.

Results Analysis of 907 patients was done; the mean age 68 ± 6.3 years, 67.5% age range 60 – 69 years, 70% married, 50% without income (unemployed and housewives), 52% illiterate, and 98.5% live with their families. Depression was 46.9%, schizophrenia 23.2%, and 20.7% dementia. 48% of clients had comorbid illness. All patients had at least one pharmacological medication. Diagnoses high statistical significant association with gender (P=0.000), marital status (P=0.001), occupation (P=0.000), and education level (P=0.000).

Conclusion Mental disorders in old age are frequent. Many old age people were with limited access to mental health services. Mental health services must be designed to meet the needs of older people at all points of the mental health continuum.

Keywords Pattern, determinants, elderly, psychiatry, Iraq

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List of abbreviations: CVA = Cerebrovascular accident, OCD = Obsessive compulsive disorder, OAPU = Old age psychiatry unit. SAMHSA = substance and mental health services of America

Introduction

Ageing is an inevitable developmental phenomenon bringing along a number of changes in the physical, psychological, hormonal and the social conditions. To define ageing in terms of the biology; referring to "the regular changes that occur in mature genetically representative organism living under reprehensive environmental conditions as they advance in chronological age" [(1)]. Population ageing is a global phenomenon affecting both developed and developing countries with several implications [(2)]. The number of older population of both developed and developing countries has considerably increased in the 20th century [(3)]. The elderly population is growing faster than the total population throughout the world [(4)]. Currently, the number of people aged 60 and over is more than 800 million. Projections indicate that this figure will increase to over two billion in 2050. People aged 60 can now expect to survive an

additional 18.5 to 21.6 years [5]. The majority of older people live in low- and middle-income countries, and some of the fastest rates of ageing are occurring in these areas [6,7]. It is estimated that between 5% and 17% of the older adults suffers from a mental disorder [8, 9]. Factors such as poverty, social isolation, loss of independence, loneliness and losses of different kinds, can affect mental health and general health. Older adults are more likely to experience events such as bereavements or physical disability that affect emotional well-being and can result in poorer mental health. [10,11]. Many researchers have divided old age into three categories; Early old age or young old age, which extended from age 60 to age 69. Old age or advanced old age, this begins at the age 70 and ends at age 79. From the age 80 and the above is considered older old age. The disintegrating system of joint family, rapid industrialization and urbanization and changing social values have together caused serious problem for the aged. They are treated like an unavoidable burden if they ceased to remain productive members. Occupational problems of aging are generally accepted fact that the lack of employment security of older [1]. Many older people with a mental disorder also have a comorbid or co-existing physical illness or disability. Specialist geriatric psychiatry services include assessment, treatment, rehabilitation and clinical liaison services provided by one or more members of a multidisciplinary team. In Iraq, a mental health services for older people is presented at the old age psychiatry unit (OAPU), Ibn-Rushed psychiatric teaching hospital, Baghdad. OAPU was established at December, 2008. Multidisciplinary team was trained in geriatric psychiatry services at Michigan, USA, through Iraq-SAMHSA initiative, first cohort (June-July) 2008.

This study aimed to determine the pattern of diagnostic disorders seen in elderly patients aged 60 years and above attending OAPU, Ibn-Rushed Psychiatric Teaching Hospital, Baghdad, Iraq and also to determine and explore the factors affected management process.

Methods

Design and setting

This is a retrospective study with analytic component. It was conducted in the OAPU, Ibn-Rushed Psychiatric Teaching Hospital, Baghdad, Iraq. The data collection was done during the period from January 1st, 2009 to November 1st 2011. Ibn-Rushed Psychiatric Teaching Hospital is one of the major mental hospitals in Iraq, with adult and child outpatient psychiatric clinic, it deals with acute cases, with about 70 beds for short stay admission, serving patients from all over Iraq. Record system of the hospital was renewed after year 2005; paper file system and appointment card system were founded. Electronic record computerized system was established during 2009-2010. OAPU has its own separated records. All paper files were converted into computerized system. Appointment card system was updated.

Study population and sampling

All elderly clients aged 60 years and above attending at the OAPU regularly, both sexes were included.

Sample size

Sample size is represented by the total number of clients who attended the OAPU during January, 2009 – November, 2011.

Inclusion criteria

All elderly aged ≥ 60 years, of both gender, have regular visits, and with complete record.

Exclusion criteria

All clients with incomplete data were excluded from the study.

Data collection tools

Information extracted from the case notes file system were entered into information list. The information included sociodemographic variables, main clinical features at presentation, diagnoses, co-morbid physical disorders, type of treatment given to the patients.

Definition of variables

The independent variables were socio-demographics, age, gender, marital status, level of education, occupation, admission times, and comorbid condition.

Ethical Issues

Names were kept anonymous and all paper files and electronic records were kept with full privacy.

Statistical analysis

Data extracted were analyzed using SPSS 17 software for windows.

Results

Demographic data

The total number of patients referred to the hospital during the 3 years was 4534. Clients age 60 and above, visited the OPAU were 931. Only 24 clients had incomplete record and were excluded from the study. Clients who complete records with regular visits and follow up were 907 (493 male and 414 female), and this accounted for about 20% of the total referral for the three years under study. Their mean age was 68 ± 6.3 years. Majority of the clients (67.5%) were within the age range 60 – 69 years. about 70% were married. Clients without income (unemployed and housewives) were about 50%. Clients had no formal education were 52%. About 98.5% live with their families (Table 1).

Table 1. Distribution of the study group by sociodemographic characteristics

Parameter		Sex				Total	
		Male		Female		No.	%
		No.	%	No.	%		
Age group	60 - 69 yrs	367	59.97	245	40.03	612	67.5
	70 - 79 yrs	100	40.82	145	59.18	245	27.01
	80 - 89 yrs	24	54.54	20	45.46	44	4.85
	90 - 99 yrs	2	33.33	4	66.67	6	0.66
Marital status	Single	21	50	21	50	42	4.6
	Married	414	65.1	222	34.9	636	70.12
	Widowed	45	22.73	153	77.27	198	21.8
	Divorced	13	41.94	18	58.06	31	3.4
Occupation	Unemployed	108	82.44	23	17.56	131	14.4
	Employed	47	73.43	17	26.57	64	7.05
	Retired	280	85.89	46	14.11	326	35.9
	house-wife	3	0.93	323	99.07	326	35.9
	free works	55	91.67	5	8.33	60	6.6
Education level	Illiterate	169	35.89	302	64.11	471	52.0
	Primary	80	59.25	55	40.75	135	14.8
	Intermediate	57	82.6	12	17.4	69	7.6
	Secondary	104	88.13	14	11.87	118	13.0
	Institute & college	77	71.97	30	28.03	107	11.8
	Postgraduate	6	85.7	1	14.3	7	0.8
Living circumstances	Live with family	486	54.4	407	45.6	893	98.5
	Live alone	6	85.7	1	14.3	7	0.77
	Live in geriatric house	1	14.3	6	85.7	7	0.77
Total		493	54.4	414	45.6	907	100

Diagnoses

Depression, schizophrenia, and dementia were the three most common diagnoses, 46.9%, 23.2% and 20.7% respectively. Conditions such as generalized anxiety disorders, substance abuse, Parkinsonism, bipolar disorder, obsessive compulsive disorder, and epilepsy accounted for another 9.3% (Table 2).

Table 2. Frequency and percentage of medical diagnoses among the study group

Diagnosis	Frequency	%
Depression	425	46.9
Schizophrenia	210	23.2
Dementia	188	20.7
Parkinsonism	28	3.1
Anxiety	22	2.4
Substance abuse	15	1.7
Bipolar disorder	9	1.0
OCD	2	0.2
Epilepsy	8	0.9
Total	907	100.0

The Nature of co-morbid physical illness

Forty eight percent of the clients reported history of co-morbid physical illnesses. hypertension, diabetes mellitus, and gastrointestinal disease accounted for about 55% of reported disease history (Table 3).

Mode of treatment

All (100%) of the clients received pharmacotherapy as the main treatment. Majority, 64.1%, was with two drugs medication (Table 4).

Significance

A cross classification of clients with 9 different diagnosis by socio-demographic explored high statistical significant association with sex (P=0.000), marital status (P=0.001), occupation (P=0.000), and education level (P=0.000) (Table 5).

Table 3. Frequency and percentage of medical history among the study group

Comorbidity	Frequency	%
No Comorbidity	465	51.3
Hypertension	242	26.7
Diabetes Mellitus	152	16.8
Gastrointestinal disorders	97	10.7
Renal system	36	4.0
Ischemic heart disease	30	3.3
Cerebral vascular accidents	26	2.9
Rheumatology	15	1.7
Hearing	13	1.4
Vision	8	0.9
Respiratory	5	0.6
Hyperlipidemia	5	0.6

Table 4. Frequency and percentage of drug medication

Medications	Frequency	%
One drug medication	69	7.6
Two drug medications	581	64.1
Three drug medications	253	27.9
Four drug medications	4	0.4
Total	907	100.0

Table 5. Distribution of the study group and correlation of medical diagnoses with the socio-demographic characteristics

		Diagnosis									Total		
		Dementia	Depression	Schizophrenia	Anxiety	Substance abuse	Parkinsonism	Bipolar	OCD	Epilepsy	No.	%	P value
Age Group	60 - 69 yrs	129	264	158	14	11	20	9	1	6	612	67.5	**0.444**
	70 - 79 yrs	53	129	43	8	3	6	0	1	2	245	27.	
	80 - 89 yrs	6	27	8	0	1	2	0	0	0	44	4.9	
	90 - 99 yrs	0	5	1	0	0	0	0	0	0	6	0.6	
Sex	Male	115	218	98	17	15	21	5	1	3	493	54.4	**0.000**
	Female	73	207	112	5	0	7	4	1	5	414	45.6	
Occupation	Unemployed	38	52	25	1	2	12	1	0	0	131	14.5	**0.000**
	Employed	6	36	20	1	0	0	0	0	1	64	7.1	
	Retired	90	137	62	15	5	9	5	1	2	326	35.9	
	house-wife	51	166	90	4	0	6	3	1	5	326	35.9	
	free works	3	34	13	1	8	1	0	0	0	60	6.6	
Marital Status	Single	4	15	17	0	1	3	0	0	2	42	4.6	**0.001**
	Married	138	292	137	21	13	22	6	2	5	636	70.2	
	Widowed	45	104	40	1	1	3	3	0	1	198	21.8	
	Divorced	1	14	16	0	0	0	0	0	0	31	3.4	
Education Level	Illiterate	78	248	103	7	6	18	3	2	6	471	52.0	**0.000**
	Primary	22	71	30	2	1	7	1	0	1	135	14.8	
	Intermediate	15	31	16	4	1	1	1	0	0	69	7.6	
	Secondary	61	24	25	1	6	1	0	0	0	118	13.0	
	Institute & college	12	45	35	8	1	1	4	0	1	107	11.8	
	Postgraduate	0	6	1	0	0	0	0	0	0	7	0.8	
Total		188	425	210	22	15	28	9	2	8	907	100.0	

Discussion

Old age psychiatric unit attendees accounted for about 20% of the total referral of the hospital. This number appears small and may not represent the true mental health status of the older population. Some of the possible reasons suggested for the reluctance of older adults to seek and continue with mental health care include physical frailty, transportation difficulties, isolation, stigma, and patient provider preferences. Current violent atmosphere, feeling unsecured, and terror car and belts explosions were affecting the total number of attendees. There is therefore the need for the proper integration of mental health into the primary health care system of this country and the training of mental health care providers at that level of care to identify, provide basic intervention measures and refer when necessary, elderly patients with mental health problems to the tertiary level of health care system. If this is done access to mental

health care will be increased for the elderly patients in the community. This study sample is higher number of attendees than the studies carried out in different country [12-15], and lower than one study (2010) [16]. Current study showed that depression (46.9%), schizophrenia (23.2%), and dementia (20.7%), similar to study done in Accra, Ghana (1997) that found depression (51.4%) higher than dementia (31.5%) [12]. Beside comorbid organic syndromes, personal history of depression, death of spouse, health related factors and anxiety disorders show significant associations with incidence of depression [17]. Other studies showed dementia more frequent than other diagnosis [13,18]. Chronic organic mental disorders, dementias, are the main reason for the necessity of geriatric care units [19]. Dementia is defined as a syndrome of acquired impairment of memory and other cognitive functions secondary to structural brain damage. The clinical interface of depression and dementia is a rich and complex topic [19]. This study found that dementia is less frequent than depression and schizophrenia, which is less than expected. Possible explanations for the small number would include a lower cut off age of 60 years used as the inclusion criteria in this study which could have increased the number of clients with other diagnoses to be included in the study. This is lower than the cut off age of 65 years used in previous studies. Advances in medicine are permitting many people to live to the age of sixty or more, with the result that the proportion of the world community over the age of 60 years is rapidly increasing [20]. Thus the practice in the past as reported by Prince [21], where less attention was given to dementia because it was considered to be a relatively uncommon condition. Depressive syndromes are frequent in old age [22,23] and especially frequent are minor forms of depression like dysthymia, or subsyndromal depression. Although late-life depression is a chronic and disabling illness, there is a common misconception that it is a normal feature of aging. Depression at old age is therefore under-recognized and severely under-treated, especially in very old age with high somatic comorbidity [24]. Poor physical health has long been recognized to be one of the most important risk factors for depression in older adults. Generalized anxiety disorder possibly a pre-stage of depressive illness in many old patients, is very frequently found in medical institutions. In The Longitudinal Aging Study Amsterdam [25], which was based on a random sample of 3107 older adults, the overall prevalence of anxiety disorders was estimated at 10.2 %. Generalized anxiety disorder was the most common disorder (7.3%), followed by phobic disorders (3.1%), whereas panic disorder (1.0%) and obsessive compulsive disorder (0.6%) were rare. Vulnerability factors such as female sex, lower education level, traumatic experiences, stresses commonly experienced by older adults (recent losses of family members and chronic somatic illness), and a smaller size of the social network appeared to be associated with anxiety disorders. This study founded statistical significant association of old age attendees diagnoses and presence of walking aids like wheel chairs or walking sticks(P=0.000), that explored getting disability as going older. Wandera et al. (2014) founded disability was associated with advancement in age [2].

In conclusion, old age is a growing category with some biopsychosocial privacy. Mental disorders in old age are frequent. Mental health of old age needs proper assessment and early detection. Many old age people were with limited access to mental health services due to physical frailty, transportation difficulties, isolation, stigma, and patient provider preferences. Mental health services must be designed to meet the needs of older people at all points of the mental health continuum. This study recognizes the need for the proper integration of mental health into primary health care system of the country and the need to train mental health care providers at that level of care to identify and provide basic intervention measures and refer when

necessary, to the tertiary level of care. Mental health promotion should be embedded in all policies, programs, and services for all older adults (including those with mental illness) and their caregivers, and encompass anti stigma strategies, public awareness, education, and training. Older adults, caregivers, service providers and the public should be informed about the importance of early identification of symptoms of mental illness, prevention strategies and the hope for recovery and well-being. Transformation of a mental health service system must include training, education and support for caregivers and health care providers to increase their capacity to respond to the mental health needs of seniors.

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Authors Contribution:

Dr. Al Abbudi: Consultant Psychiatrist, data collection, data entry, electronic record system, data analysis, and the writer of this paper. Dr. Ezzat: Social worker, data collection, data entry, and file record system.

Conflict of interest

The authors declare no conflict of interest.

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Correspondence to Dr. Shalan J.R. Al Abbudi
E-mail: shalanjoodah@yahoo.com

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