



Ageing and Mental Health: A 3-Year Analysis on Elderly Psychopathology in Northwest Malaysia

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Abstract

Ageing population has increased rapidly over the recent decades, so as the prevalent of mental illness among the elderly population.

Objectives: Our study aimed to investigate the prevalence of mental health problems among the elderly in our setting, the common diagnoses of elderly (aged 60 years old and above) psychiatric referrals and their socio-demographic distribution.

Method: This is a retrospective cross-sectional study over three-year period (2015-2017) looking at outpatient records of psychiatric clinic in our locality. Individual medical records were retrieved and data pertaining to demography, cause of referral, diagnosis and follow-up progress were transcribed.

Results: A total of 233 patients were included in the analysis. Common causes of elderly psychiatric referral to our centre include schizophrenia (26.2%), depression (24.9%), dementia (14.2%) and mood disorders (12.0%). Among the commonest mental health illness in the elderly, schizophrenia had the youngest age of referral among the elderly at 50.7 ± 16.12 years old while dementia had the oldest (72.7 ± 10.56 years old). Depression had a significantly younger age of referral as compared to dementia ($p < 0.001$). Additionally, elderly with depression had a significant poor social/family support as compared to those with dementia ($p < 0.001$).

Conclusion: The study provided a general view of the local landscape of psychiatric illness among the elderly. Screening and management of elderly with mental illness remains a challenge to healthcare professional as the disorders are still invisible and often disguised as an ageing process.



Introduction

Over the last decades, the ageing population has increased rapidly due to the reduction in mortality at younger ages and the increase in life expectancy worldwide [1]. By 2030, Malaysia is expected to be an ageing nation whereby the proportion of elderly aged 60 years or more is estimated at 10.3% or 3.36 million of the 32.6 million estimated total population for 2019 [2]. Such rapid ageing at an unprecedented pace would have a significant effect on the nation's cultural, social, economic environments, as well as on the healthcare delivery system.

The elderly face numerous difficulties associated with physical and psychological changes which are generally associated with the ageing process. While many attributed changes to older people are often perceived as natural and acceptable, there are some aspects of mental health that need to be identified and addressed early, especially those that lead to emotional dysregulation and overt depression [3].

Elderly mental health issues arise from a complex combination of social, psychological, and biological influences. Elderly people are more likely to encounter incidents such as bereavement, a decline in socio-economic status due to retirement, incapacity to work due to progressive impairment, loss of social positions and networks.

Screening for those who need treatment remains a challenge for health professionals, as mental disorders in the elderly are still invisible and disguised as an ageing process. The social stigma of mental health diseases among elderly results in the elderly's reluctance in seeking help.

The prevalence of severe depression was 19.2 % in Penang, Malaysia [4]. Depression contributed 5.7% of total Years Lost Due to disability (YLD) of those 60 years and older [5]. Dementia is not merely "forgetfulness in the elderly" as the 70th World Health Assembly in May 2017 adopted dementia as a public health priority [6]. This is timely because in 2016, dementia was the world's fifth leading cause of death [7].

Scientific work has largely ignored older adults with schizophrenia, with only 1% of schizophrenia literature dedicated to this group, and health care services are ill-equipped to tackle significant growth in this demographic [8]. To date, little is known about the spectrum of mental health issues among the elderly in Malaysia. Therefore, this study aimed to investigate the prevalence of mental health problems among the elderly, their socio-demographic data, the common cause of elderly psychiatric referrals and the clinical characteristics of elderly psychiatric patients in our setting.

Methods

This is a retrospective cross-sectional study conducted in the Department of Psychiatry, Hospital Tuanku Fauziah, Perlis, Malaysia. Outpatient logs were screened and data of patients aged 60 years old and above, who were on active follow-up at Department of Psychiatry, Hospital Tuanku Fauziah, Perlis, Malaysia from 1 January 2015 until 31 December 2017 were retrieved. Separate data sheet was used for data collection.

Detailed information on the diagnosis, progress of illness, and the on-going therapy were collected from individual patients' medical record. Trained abstractors were involved to analyse the outpatient psychiatry records and the supplementary documents attached.

Statistical Analysis Plan

Descriptive data such as gender and race were described using percentages and distribution. Normally distributed numerical data such as age were described in mean and standard deviation. Statistical association between two categorical data (presence family support vs. nature of psychiatric illness; nature of psychiatric illness vs. total no. of hospitalization) were analysed using Pearson chi-square test of independence (or Fisher exact test depending on the criteria fulfilment), analyses of trend between categorical data with regards to different years of study were described using Pearson chi-square test for trend.

Ethical clearance

The study was registered with the Malaysian National Medical Research Registry (NMRR-18-94-39520) and had received ethical clearance from the Medical Research and Ethics Committee (MREC), Ministry of Health Malaysia.

Results

There were a total of 233 subjects included in the analysis. Out of these, there were 102 (43.8%) male and 131 (56.2%) female. Based on ethnicities, majority were Malay ($n=157$, 67.4%), followed by Chinese ($n=63$, 27.0%), Siamese ($n=8$, 3.4%), Indian ($n=4$, 1.7%), and others ($n=1$, 0.5%).

Schizophrenia is the commonest elderly psychopathology from our centre, followed by depression and dementia (Table 1).

Table 1: Distribution of mental illness-related diagnoses in elderly.

Diagnosis	n (%)
Schizophrenia	61 (26.2)
Depression	58 (24.9)
Dementia	33 (14.2)
Others (i.e. brief psychotic disorder, delirium, panic disorder, adjustment disorder, dysthymia)	28 (12.0)
Insomnia	27 (11.6)
Anxiety disorder	20 (8.6)
Bipolar disorder	6 (2.5)

Majority did not require any hospitalisation for their mental illness ($n=160$, 68.7%) while in those who did, the most common elderly psychopathology was schizophrenia ($n=37$, 50.0%), followed by depression ($n= 12$, 16.2%) and dementia ($n= 7$, 9.5%).

Radio-imaging was not routinely done in the majority of the patients ($n= 210$, 90.1%) for the evaluation of elderly psychology. However, among those who did require supplementary radio-imaging, dementia was the commonest diagnosis ($n= 14$, 60.9%).

There were 102 (43.8%) patients requiring anti-psychotic medication on a regular basis. Out of this, majority ($n= 62$, 60.8%) required second generation anti-psychotics, 35 (34.3%) required first generation anti-psychotics and 3 (2.9%) patients required a combination of both first and second generation anti-psychotics. The most common indication for anti-psychotics were schizophrenia ($n= 53$, 52.0%), dementia ($n= 21$, 20.6%) and depression ($n= 12$, 11.8%).

Among the commonest mental health illness in the elderly, schizophrenia had the youngest age of referral among the elderly at 50.7 ± 16.12 years old while dementia had the oldest (Table 2).

Table 2: Socio-demographic distribution of common elderly psychopathology in our study centre.

Variable(s)	Schizophrenia		Depression		Dementia		Insomnia	
	Mean (SD)	n (%)	Mean (SD)	n (%)	Mean (SD)	n (%)	Mean (SD)	n (%)
Age at referral	50.7 (16.12)		64.4 (8.23)		72.7 (10.56)		66.4 (8.52)	
Race								
Malay		51 (83.6)		38 (65.5)		24 (72.7)		11 (40.7)
Chinese		18 (13.1)		18 (31.0)		6 (18.2)		14 (51.9)
Indian		1 (1.6)		0 (0.0)		0 (0.0)		0 (0.0)
Siamese		1 (1.6)		2 (3.4)		3 (9.1)		2 (7.4)
Gender								
Male		24 (39.3)		25 (43.1)		11 (33.3)		12 (44.4)
Female		37 (60.7)		33 (56.9)		22 (66.7)		15 (55.6)
No. of hospitalisation								
Never hospitalised		24 (39.3)		46 (79.3)		26 (78.8)		25 (92.6)
1-2 times		22 (36.1)		10 (17.2)		5 (15.1)		2 (7.4)
≥ 3 times		15 (24.6)		2 (3.4)		2 (6.0)		0 (0.0)
Diabetes mellitus (NIDDM)								
Yes		8 (21.6)		9 (25.7)		5 (29.4)		1 (7.1)
No		29 (78.4)		26 (74.3)		12 (70.6)		13 (92.9)
Hypertension								
Yes		14 (37.8)		25 (71.4)		12 (70.6)		12 (85.7)
No		23 (62.2)		10 (28.6)		5 (29.4)		2 (14.3)
Dyslipidaemia								
Yes		2 (5.4)		12 (34.3)		2 (11.8)		5 (35.7)
No		35 (94.6)		23 (65.7)		15 (88.2)		9 (64.3)
Presence of social/family support								
Yes		42 (68.9)		33 (56.9)		32 (97.0)		14 (51.9)
No		19 (31.1)		25 (43.1)		1 (3.0)		13 (48.1)

A direct comparison and determination of association was made between depression and dementia (Table 3).

Table 3: Social demographic and biological characterisation comparison between elderly with depression and dementia.

Variable(s)	Depression		Dementia		p-value
	Mean (SD)	n (%)	Mean (SD)	n (%)	
Age at referral ^a	64.4 (8.23)		72.7 (10.56)		<0.001*
Race^b					
Malay		38 (65.5)		24 (72.7)	0.305
Chinese		18 (31.0)		6 (18.2)	
Indian		0 (0.0)		0 (0.0)	
Siamese		2 (3.4)		3 (9.1)	
Gender^c					
Male		25 (43.1)		11 (33.3)	0.359
Female		33 (56.9)		22 (66.7)	
No. of hospitalisation^b					
Never hospitalised		46 (80.7)		26 (78.8)	0.831
1-2 times		10 (17.6)		5 (15.1)	
≥ 3 times		1 (1.8)		2 (6.0)	
Diabetes mellitus (NIDDM)^c					
Yes		9 (15.5)		5 (15.2)	0.778
No		26 (44.8)		12 (36.4)	
Hypertension^c					
Yes		25 (43.1)		12 (36.4)	0.950
No		10 (17.2)		5 (15.2)	

Dyslipidaemia^a					
Yes		12 (20.7)		2 (6.1)	0.086
No		23 (39.7)		15 (45.5)	
Presence of social/family support^b					
Yes		33 (56.9)		32 (97.0)	<0.001*
No		25 (43.1)		1 (3.0)	

Discussion

Elderly psychopathology is linked to cellular ageing which is assessed in leukocytes by telomere length and telomerase activity [9]. Thus, psychiatric illness among the elderly may be closely related to advancing age, being part of the ageing process. Apart from the tendency to develop mental illness among the elderly, the biological and executive function often deteriorates with age too.

Our study found that majority of our patients did not require hospitalization throughout their diagnosed mental illness. This is in contrast to the findings by Hendrie et al (2013) who found that elderly with psychiatric illness reported a higher rate of emergency care with longer hospitalizations [10]. Despite so, an integrated model of healthcare is perpetually needed as caring for them is complex and requires multidisciplinary teams in the continuum of care [11].

The commonest elderly psychopathology in our study centre was schizophrenia, depression, insomnia and dementia. Dementia had the oldest age of referral, followed by insomnia, depression and schizophrenia. Older people are generally less sociable hence, their mental illness may long groom before been publicly detected. This has led to the growing number of unreported, underdiagnosed cases. It is not until the illness has caused a substantial damage to the patients' lives only did the family members realised the problem and seek for medical help. Our elderly with depression, dementia and insomnia were commonly diagnosed with either hypertension, diabetes mellitus or both while our schizophrenic patients were found to be relatively healthy with majority of them not having any underlying medical co-morbidities.

Conclusion

The elderly are less assertive and often shun away their internal conflict from the light of others. Therefore, a holistic management of the elderly through integrated healthcare model is warranted.

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