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## Perceptions, attitude and practices toward elderly depression among primary health care physicians, Riyadh, Saudi Arabia, 2021.

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### Abstract

**Background:** Elderly people need to care services in particular to maintain a high quality of life and health status. Managing the health needs of geriatric patients is part of the continuity of care family physicians provide to their patients.

**Aims:** to assess physicians' attitude, perception and practice toward depression in elderly in primary care sitting.

**Methodology:** A cross-sectional study to assess primary health care physicians' attitude and perceptions and practices toward depression in elderly patients in primary health care centers of King Saud medical city in Riyadh, kingdom of Saudi Arabia using self-administrated questionnaire

**Results:** We received 210 responses to our questionnaire with response rate of 100% where 51% of them were females. PHC physicians routinely screen for sleep disturbance (79%), loss of interest or pleasure (79%), sad mood (72%), and decreased energy (63%) in order to diagnosis of depression. Moreover, we found that 56% of physicians would use clinical guidelines for diagnosis and treatment of geriatric depression. Furthermore, the main barriers to adequate diagnosis and treatment of elderly depressed patients were rejection of patients to treatment (22% of them indicated it as major problem) and difficulty for access to mental health care in our community (19% of them indicated it as major problem).

**Conclusion:** we found that most of the physicians in Riyadh show high positive attitude toward depression of elderly however, there are some limitations in knowledge about symptoms of depression and restriction to guideline.

**Keywords:** Depression, elderly, geriatric patients, anxiety

### Introduction

According to the World Health Organization (WHO), health is defined as a state of complete physical, mental and social well-being and not restricted to absence of disease and therefore, mental health is an inherent component of health [1]. Moreover, it is known that population is aging rapidly, and it is estimated that by the year of 2050, the percentage of elderly over 60 will double from 12% to 22% [2] and Saudi Arabia is not an exception with an increase in percentage of elderly from 3.48% in 1993 to 6.7% in 2004 [3].

Generally, mental illness is responsible for 10% of all disabilities among elderly 4 where depression is the most common mental condition [5] with a prevalence between 10-15% among elderly [2]. In Arab countries, prevalence of depression among elderly is much higher including 24.3% in Jordan, 16.9% in Oman, 38.9% in Iraq, 25% in Kuwait and 17.5% in Saudi Arabia [3, 4, 6].

Primary care physicians have a significant role in management of depression in elderly starting with diagnosis of depression [7].

Ability of primary care physicians to reduce the stigma of depression and easier access of patients to these physicians encourage patients to ask primary care physicians other than psychologists [8-10] and thus depression is managed more effectively when there is collaboration between primary care physician and psychiatrist [11].

Depression in elderly is different from depression in adults where elderlies usually present with somatic symptoms rather than emotional symptoms and thus some physicians could face difficulties as they may refer these symptoms for being aged leading to being depression without proper diagnosis [11].

However, there are many tools that are used to screen for depression including PHQ-9 and Geriatric depression scale [12]. However, a comprehensive clinical interview is essential for all patients to confirm the diagnosis before starting treatment [13].

Treatment of depression in elderly is challenging for many physicians because of the increased risk of drug interaction, side effect, comorbidities and memory impairment [14]. There are many studies that conducted worldwide that showed that physician knowledge and attitude toward depression in elderly would affect the quality of depression management [3, 11] where physicians with positive attitude are more likely to participate in depressed patient care [11]. Therefore, in this study we aimed to assess physicians' attitude, perception and practice toward depression in elderly in primary care sitting.

### Methodology

This was a cross-sectional study to assess primary health care physicians' attitude and perceptions and practices toward depression in elderly patients in primary health care centers of King Saud medical city in Riyadh, kingdom of Saudi Arabia. We included all primary health care physicians working in PHC centers of king Saud medical city, in Riyadh with a total population of 210 physicians working in king Saud medical city Primary health care centers of Ministry of Health (MOH) in Riyadh city. The study was depended on self-administrated questionnaire was adapted from University of Illinois College of Medicine [15]. The questionnaire was divided into categories: demographic characteristics of physician (age, sex, level of physicians, etc.), attitude and perception section and practice section, then section of barriers and needs of physician for improvement of geriatric care in primary care sitting.

Ethical considerations were considered to avoid physical or emotional harm, and to ensure confidentiality and privacy of the collected data. A consent form was given to each subject before filling the questionnaire

Date was collected according to the questionnaire, data was entered using MS Excel 2010 where data was coded, and IBM SPSS was used for data analysis. Percentage and frequency were used to describe the categorical variables and mean, and standard deviation were used to describe continuous variables. Chi-test was used to assess the significance of difference in satisfaction level among different categories. Difference was significant when P value is lower or equal to 0.05.

### Results

We received 210 responses to our questionnaire with response rate of 100% where 51% of them were females. Moreover, 42 of physicians were Saudi Arabian while 33% of them were between 31-39 years old and 29% of them were younger than 30 years old. Furthermore, 37% of them had experience in PHC less than 5 years while 32% had experience for more than 10 years. Most of the participants were either a practitioner or residents while 14% were specialist and 7% were consultants. 18% of them indicated that they are psychologists or counselors in primary care office and 33% of them indicated that they had attended a conferences or CME activities, which specifically focus on the health need of older adults (Table 1).

In table 2, we found that in order to diagnosis of depression, PHC physicians routinely screen for sleep disturbance

(79%), loss of interest or pleasure (79%), sad mood (72%), and decreased energy (63%), while only 21% of physicians would screen patients for sexual complaints, and 27% for pain in diagnosis for depression. Moreover, 4% of participants indicated that they did not routinely screen for depression. Experience of physicians in years did not significantly affect the main symptoms that physicians would screen for diagnosis for depression however, they interest in mostly all symptoms are increasing with age.

Moreover, we found that 56% of physicians would use clinical guidelines for diagnosis and treatment of geriatric depression where PHQ-9 was the most reported used tool (28%) followed by geriatric depression scales (24%). It was found that older participants with longer experience would be restricted to guidelines more than younger participants. Moreover, most of the physicians would ask for comprehensive metabolic panel (72%) followed by brain CT (39%) and CBC (38%).

Furthermore, 71% of physicians would refer patients with depression to psychiatry and 65% to CBT instead to prescribe medications including SNRI (29%), TCA (17%) and SSRI (2%) (Table 3).

Moreover, we found that most of the participants were agreed that psychotherapy is less efficacious for the older patient compared to younger patients (96%) while 91% of them would not focus on depression before excluded possible organic cause, 84% reported having high confident in diagnosis of depression in elderly patients, 83% felt comfortable dealing with the family members of depressed patients and 81% of them thought that is important to help depressed patients. On the other hand, 85% of physicians did not think that elderly patients would expect their primary care physician to deal with depression, while 55% of them did not think that there is nothing to do with depression, 53% denied that they were pressured for time to routinely investigate depression in elderly patients (Figure1).

Moreover, the main barriers to adequate diagnosis and treatment of elderly depressed patients were rejection of patients to treatment (22% of them indicated it as major problem) and difficulty for access to mental health care in our community (19% of them indicated it as major problem).

On the other hand, all the physicians agreed that patients' concern about medication side effects would be a barrier in treatment. Experience of physicians did not have a significant effect on thought of physicians about barriers except in one factor of that treatment of depression is stigmatizing where older participants thought that this is not considered a barrier compared to less experienced participants ( $P=0.045$ ) (Table 4).

Moreover, we found in table 5, that experience of physicians has no significant effect on their attitude or perception except in three statements. Less experienced physicians thought that their knowledge of diagnosis and treatment of depression is up-to-date in a significantly more manner than physicians with higher experience are ( $P=0.002$ ). Furthermore, a higher percent of low experience physicians would agree that they preferred not to use the term of depression than high-experienced participants ( $P=0.005$ ). Finally, 66% of physicians with experience between 5-10 thought that family members' information is useful in diagnosis of depression compared with 46% of physicians with experience lower than 5 years and 39% of physicians

with experience of more than 10 years (P=0.005) (Table 5).

**Discussion**

Depression is one of diseases that is considered a disabling condition in elderly and have a significant negative effect on the quality of life [16]. Generally, most of the elderly with mental problem do not seek help from specialist mental health service providers; therefore, their care will fall upon non-psychiatrists [17]. Therefore, primary care physicians play a great role in management of depression in elderly patients as they considered the primary access to elderly with depressive symptoms [7]. Therefore, it is important for primary care physicians to have the correct knowledge, adequate attitude and practice toward depression in elderly patients. In this study, we aimed to assess physicians' attitude, perception and practice toward depression in elderly in primary care sitting.

In this study, the response rate was 100% which is higher than response rates reported by other studies of 43.7% [16], 79% [18], 80% [19], 56.7 [1] and 23% [20] respectively. Moreover, 37% of them have experience in PHC less than 5 years while 32% have experience for more than 10 years. Most of the participants were either a practitioner or resident while 14% were specialists and 7% were consultants. These results are slightly different from results of the study of Ashwaq, in which 41.6% of participants had experienced lower than 5 years and 19% of them had experienced over 10 years [16]. Moreover, results of this study showed that most of the physicians depend on sleep disturbance, loss of interest and sad mood as symptoms of depression in elderly patients while only 21% and 27% would ask for sexual complaints or pain. In study of Ashwaq, the author found that majority of PHC physicians asked about sad mood (87.6%) and loss of interest (91.2%) as the main symptoms of depression while more than one-third (38.7%) asked about pain and more than half (53.3%) asked for decreased energy [16]. Moreover, these results showed a lack in knowledge of physicians toward depression in elderly where most of the literature showed that somatic complaint including pain are the most common symptom of depression in elderly patients [8, 21] however, only 27% of our sample would ask for pain and 51% for unexplained symptoms and this could be a reason for delaying of diagnosis of depression in elderly [21]. Furthermore, we found that 4% of physicians indicated that they did not routinely screen for depression which is higher than reported by Ashwaq of 2.9% [16].

Besides, we found that 56% of physicians would use clinical guidelines for diagnosis and treatment of geriatric depression where PHQ-9 was the most reported used tool

(28%). In the study of Ashwaq, 48.9% of participants indicated using of PHQ-9 for diagnosis of depression while 28.5% of them used Geriatric depression scale compared with lesser percent of ours (24%) [16]. Both PHQ-9 and Geriatric depression scale are important scales for diagnosis of depression [12] however, geriatric depression scale is a part of annual screening tests recommended by Saudi MOH and is available on Geriatric assessment forms in all PHC center [18], therefore, it was interesting that only 24% of our sample used it indicating that implementation of geriatric clinics in PHC is still suboptimal. Moreover, we found that comprehensive metabolic panel and brain CT for diagnosis of depression. Furthermore, 71% of physicians in this study would refer patients with depression to psychiatry and 65% to CBT, which is similar result with results of Ashwaq [16]. This is in line with previously mentioned lack of confidence in management.

Furthermore, we will discuss the main statement-indicating attitude. We found that 81% of them thought that is important to help depressed patients which is similar with results of Ashwaq [16], and study of S Liu who indicated that 94.9% of physicians thought that it is their responsibility to recognize depressed patients [17]. Moreover, we found that 96% of physicians in our results agreed that psychotherapy is less efficacious for the older patient compared to younger patients while 91% of them would not focus on depression before excluded possible organic cause which similar to the results of Ashwaq which also found that only 50% of physicians had confident to diagnose depression [16] which in contrast to our results that 84% of physicians reported having high confident in diagnosis of depression in elderly patients. In addition, J Bawo find that 61.5% of physicians have difficulties in diagnosis of depression [19] where similar results reported by other studies [11, 22]. Moreover, the main barriers to adequate diagnosis and treatment of elderly depressed patients were rejection of patients to treatment and difficulty for access to mental health care in our community. Similar results found in study of S Liu who found that 81.4% of physicians thought that noncompliance of patients with medications [17].

There are some limitations in this study. The first limitation is depending on self- reported questionnaire, which may cause some personal bias where some participants chose answers, which make them more moral or knowledgeable which could affect results of the study. Other limitations include that the study had been conducted in one institution therefore; we could not generalize the results in the entire kingdom. Finally, the study did not study the effect of demographic factors in attitude and practice of physicians.

**Table 1:** Baseline Characteristics for participants (N=210)

Variable	Category	N	%
Gender	Male	103	49
	Female	107	51
Nationality	Saudi	88	42
	Non-Saudi	122	58
Age	<30	60	29
	31-39	69	33
	40-49	50	24
	≥50	31	15
Years' experience in PHC	<5 YEAR	78	37
	5-10 year	65	31
	>10 year	67	32

Professional level	General practitioners	80	38
	Family medicine resident	86	41
	Family medicine specialist	29	14
	Consultant	15	7
Psychologists or counselors in primary care office	Yes	38	18
	No	172	82
Attended conferences/CME activities which specifically focus on the health needs of older adults	Yes	69	33

**Table 2:** Symptoms that PHC physicians routinely screen for depression

Symptom	N (%)	Years of practice in PHC		
		<5 YEAR	5-10 year	>10 year
		N (%)	N (%)	N (%)
Sad mood	153 (72)	57 (73)	53 (82)	43 (64)
Pain (headache, abdominal pain)	57 (27)	19 (24)	19 (29)	19 (28)
Decreased energy	133 (63)	44 (56)	36 (55)	53 (79)
Anxiety/irritability	120 (57)	42 (54)	34 (52)	44 (66)
Sexual complaints	44 (21)	9 (12)	13 (20)	22 (33)
Weight loss/Weight gain	77 (37)	24 (31)	25 (39)	28 (42)
Loss of interest or pleasure	165 (79)	60 (77)	50 (77)	55 (82)
Numerous unexplained symptoms	108 (51)	34 (44)	34 (52)	40 (60)
Work or relationship dysfunction	85 (41)	22 (28)	26 (40)	37 (55)
Sleep disturbance	165 (79)	62 (80)	45 (69)	58 (87)
Multiple worries and distress	105 (50)	34 (44)	26 (40)	45 (67)
Do not routinely screen for depression	9 (4)	3 (4)	3 (5)	3 (5)
Others	1 (1)	0 (0)	1 (2)	0 (0)

**Table 3:** Practice of PHC physicians with elderly patients

Variable	Category	N (%)	Years of practice in PHC		
			<5 YEAR	5-10 year	>10 year
			N (%)	N (%)	N (%)
Using clinical guidelines for diagnosis and treatment of geriatric depression		118 (56)	48 (62)	35 (54)	35 (52)
Which standard screening tests or interviews do you use to diagnose depression in the elderly?	PHQ 9	59 (28)	18 (23)	17 (26)	24 (36)
	Geriatric Depression Scale	51 (24)	16 (21)	17 (26)	18 (27)
	No standard test used	5 (2)	2 (3)	3 (5)	0 (0)
	Other	132 (63)	55 (71)	38 (59)	39 (58)
In establishing a new diagnosis of depression in an elderly patient, what lab tests or imaging /special examinations do you routinely order?	CBC	80 (38)	28 (36)	23 (35)	29 (43)
	Comprehensive metabolic panel	152 (72)	54 (69)	47 (72)	51 (76)
	TSH	24 (11)	7 (9)	11 (17)	6 (9)
	Brain CT	82 (39)	41 (53)	17 (26)	24 (36)
Which one medication do you most often prescribe for depression in elderly patients?	SSRI	5 (2)	2 (3)	1 (2)	2 (3)
	SNRI	61 (29)	20 (26)	24 (37)	17 (25)
	TCA	36 (17)	14 (18)	14 (22)	8 (12)
	Referral to CBT	136 (65)	43 (55)	46 (71)	47 (70)
	Referral to psychiatry	150 (71)	58 (74)	42 (65)	50 (75)

**Table 4:** Relationship between barrier to adequate diagnosis and treatment of geriatric depression and years' experience in PHC

Variable	Category	Total sample	Years' experience in PHC			P-value
			<5 YEAR	5-10 year	>10 year	
			N (%)	N (%)	N (%)	
Psychiatric treatment is stigmatizing	Major barrier	24 (11)	14 (18)	6 (9)	4 (6)	0.048
	Often barrier	69 (33)	28 (36)	21 (32)	20 (30)	
	Somewhat barriers	91 (43)	27 (35)	34 (52)	30 (45)	
	Not barriers	26 (12)	9 (12)	4 (6)	13 (19)	
Patients will reject psychotherapy	Major barrier	46 (22)	22 (28)	15 (23)	9 (13)	0.154
	Often barrier	86 (41)	29 (37)	25 (39)	32 (48)	
	Somewhat barriers	67 (32)	26 (33)	19 (29)	22 (33)	
	Not barriers	11 (5)	1 (1)	6 (9)	4 (6)	
Co-morbidity in depressed elderly	Major barrier	22 (11)	9 (12)	6 (9)	7 (10)	0.783
	Often barrier	95 (45)	38 (49)	30 (46)	27 (40)	
	Somewhat barriers	69 (33)	24 (31)	19 (29)	26 (39)	
	Not barriers	24 (11)	7 (9)	10 (15)	7 (10)	
Reluctance to discuss emotional problems	Major barrier	41 (20)	16 (21)	11 (17)	14 (21)	0.929
	Often barrier	75 (36)	28 (36)	26 (40)	21 (31)	
	Somewhat barriers	66 (31)	25 (32)	18 (28)	23 (34)	
	Not barriers	28 (13)	9 (12)	10 (15)	9 (13)	
Access to mental health care is a problem in our community	Major barrier	40 (19)	14 (18)	14 (22)	12 (18)	0.41
	Often barrier	99 (47)	35 (45)	34 (52)	30 (45)	

	Somewhat barriers	59 (28)	26 (33)	15 (23)	18 (27)	
	Not barriers	12 (6)	3 (4)	2 (3)	7 (10)	
Patients are concerned about medication side effects	Major barrier	0 (0)	0 (0)	0 (0)	0 (0)	NA
	Often barrier	0 (0)	0 (0)	0 (0)	0 (0)	
	Somewhat barriers	0 (0)	0 (0)	0 (0)	0 (0)	
	Not barriers	210 (100)	78 (100)	65 (100)	67 (100)	

**Table 5:** Relationship between Attitudes and Perceptions of PHC Physicians and years’ experience in PHC

Variable (Only significant variables were mentioned)	Category	Years’ experience in PHC			P-value
		<5 Year	5-10 year	>10 year	
		N (%)	N (%)	N (%)	
I do not focus on depression as a diagnosis until I have ruled out organic disease.	Agree	65 (83)	61 (94)	64 (96)	0.024
When depression and dementia co-exist, depression should still be treated.	Agree	42 (54)	40 (62)	48 (72)	0.089
I consider my knowledge of diagnosis and treatment of depression up to date.	Agree	54 (69)	33 (51)	27 (40)	0.002
It is preferable not to use the term “depression” to avoid labeling or stigmatizing the patient.	Agree	44 (56)	35 (54)	21 (31)	0.005
In my experience, family members’ information is useful in the identification and diagnosis of depression in the older patient.	Agree	36 (46)	43 (66)	26 (39)	0.005



**Fig 1:** Attitudes and Perceptions of PHC Physicians

### In Conclusion

We found that most of the physicians in Al Riyadh show high positive attitude toward depression of elderly however, there are some limitations in knowledge about symptoms of depression and restriction to guideline. Main barriers to adequate diagnosis and treatment of elderly depressed patients were rejection of patients to treatment and difficulty for access to mental health care in our community. We recommended repeating the study in different regions of the kingdom in order to be able to generalize the results.

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