

# Knowledge, Attitude and Practice of Primary Health Care Physicians in Abha City about Common Psychiatric Disorders

Ayoub Ali Alshaikh

Family and Community Medicine Department, College of Medicine, King Khalid University

## Corresponding author:

Dr. Ayoub Ali Alshaikh

Teaching assistant,

Family and Community Medicine Department

College of Medicine, King Khalid University,

Abha, Saudi Arabia .

**Email:** dr.ayoub.alshaikh@gmail.com

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## Abstract

**Background:** Primary health care physicians are the cornerstone of recognition, diagnosis, treatment and referral for all disorders, i.e., somatic, psychological, or psychosomatic, so the aim of study was to determine knowledge, attitude and practice of PHC physicians in Abha City regarding common psychiatric disorders.

**Method:** A cross-sectional study design was followed to include 101 Primary Health Care physicians in Abha City. An interview questionnaire was designed by the researcher. It included personal characteristics, knowledge Questionnaire, attitude assessment and Practice assessment.

**Results:** Most PHC physicians in Abha City (86.1%) have unsatisfactory knowledge about psychiatric disorders. Their knowledge gaps included "Who is at risk for major depression" (18%), "depression among children" (6.9%), "community services for people with dementia and their families" (7.9%) and "learning problems" (10.9%). Most PHC physicians in Abha City (88.1%) have a positive attitude toward management of psychiatric disorders. All PHCs (100%) diagnosed psychiatric patients during the last year. However, the majority of diagnosed cases (94.1%) were referred to a psychiatrist, while only 5.9% of PHC physicians prescribed treatment to their patients. Non-Saudi participants had a significantly higher percentage of satisfactory knowledge grade than Saudi participants (21.7% and 7.3%, respectively,  $p=0.036$ ). PHC physicians who attended continuing medical education activities on mental

health had significantly higher percentage of satisfactory knowledge grade than those who did not (35.7% and 10.3%, respectively,  $p=0.011$ ). However, PHC physicians' knowledge grades did not differ significantly according to their age group, gender, qualification, position, experience in PHC, or source of knowledge about mental health. Moreover, both their attitude and practice regarding management of psychiatric disorders did not differ significantly according to their personal characteristics.

**Conclusions:** Knowledge of PHC physicians in Abha City about psychiatric disorders is unsatisfactory, with several knowledge gaps. Their attitude toward management of psychiatric patients is mainly positive. Although all PHC physicians diagnose psychiatric diseases, they mostly refer their patients to a specialist. PHC physicians should be encouraged to attend continuing medical education sessions. Revision of the undergraduate medical curriculum and also the postgraduate curriculum of family medicine in order to enhance teaching of psychiatric disorders, especially covering those with identified knowledge gaps is recommended.

**Key words:** Psychiatric disorder, Physicians, Attitude, primary care

## Introduction

Primary health care (PHC) physicians are the cornerstone of recognition, diagnosis, treatment, and referral for all disorders, i.e., somatic, psychological, or psychosomatic [20].

Globally, psychiatric disorders constitute a major disease burden, which are often treated by non-psychiatrist health workers in PHC facilities. In PHC facilities, once patients are seen by non-psychiatric health workers, referral to psychiatrists or other mental health professionals is frequently unacceptable [12].

According to current data almost 50% of the population experience at least one psychological disorder in their lifetime, and at least 25% have suffered from a psychological disorder during the past 12 months [20]. About one-third of PHC patients have mental illness and one sixth of PHC consumers suffer from moderate to severe depression [2,3].

International epidemiological evidence suggests that, of all the people with psychological disorders who receive treatment minimal intervention is contributed from primary care physicians [7,8]. The countries in which the majority of psychiatric patients were seen in the general medical sector were Chile (80.3%), the Netherlands (74.6%), and Canada (65.7%), compared with the USA (43%) and Germany (36.6%) [5].

It is important to consider that non-psychiatric health workers at PHC facilities can play a pivotal role in the diagnosis and management of patients with mental illness [9]. PHC physicians frequently have a more intimate knowledge of the psychosocial context in which patients' distress and illnesses occur (i.e., interpersonal and family crises, occupational and employment problems, and State-of-the-art social, environmental, and financial difficulties) [20].

Nevertheless, even if PHC physicians were capable of handling psychiatric problems, they usually prefer such patients to be managed by specialist mental health institutions [11].

Moreover, people living with mental illness are less competent and unable to live productive lives which increases stigma toward persons with mental disorders despite knowledge in psychiatric disorders recognition, diagnosis and management by PHC physicians. Having knowledge of mental illness does not always reduce the stigmatizing attitudes [16].

Stigmatizing attitudes toward people with mental illness are common among all classes of people and expressed negative opinions toward consumers of mental health services is possibly due to the majority of the non-psychiatric health workers [18].

It is paradoxical that psychiatric disorders in PHC, and the way they are managed, remains poorly studied. This applies to the magnitude of the problem (i.e., frequency

and type of mental disorders seen in PHC) and the more complex set of questions regarding the quality of care (accuracy of recognition, diagnosis, and management) [20].

The aim of the study was to determine knowledge, attitude and practice of primary health care physicians and associated factors in Abha City regarding common psychiatric disorders, 2017- 2018.

## Subjects and Methods

A Cross sectional study was conducted at primary health care centers in Abha City. All physicians were included from all Ministry of Health primary health care centers in Abha City documented by Abha Health Sector (N=121). Primary health care physicians who had been working at PHC centers for at least one year were included in sample. Newly appointed primary health care physicians were excluded.

An interview questionnaire was designed and validated by the researcher. It included the following parts. 1. Personal characteristics: Age, gender, nationality, qualification, years of experience in primary health care. 2. KAP Questionnaire: Based on thorough review of relevant literature the researcher designed a study questionnaire that includes the following items. 3. Multiple-Choice Knowledge of Mental Illnesses Test (MC-KOMIT): The objective in developing the MC-KOMIT was to make a knowledge test pertaining to serious and prevalent mental illnesses. Questions were designed to cover 10 content areas, i.e., A. schizophrenia/ psychosis, B. depression, C. bipolar disorder/mania, D. personality disorders, E. post-traumatic stress disorder and other anxiety disorders, F. developmental disabilities, G. suicide, H. child/adolescent psychiatric disorders, I. alcohol and drug addiction, and J. Alzheimer's disease/dementia. Each of these content areas included 2 items from each of the following content domains: 1. causes/risks, 2. signs/symptoms, 3. course, 4. treatments, and 5. mental health services. For each question, there are 5 response options (A through to E). The responses (a correct answer and 4 distractors) were listed in alphabetical or chronological order. Test items were developed following standard, well-described multiple-choice question writing procedures, and were designed to avoid ambiguity, vagueness, and value-laden language [6].

Attitude assessment: It comprised 12 statements grouped within 4 factors, i.e., positive attitude (3 statements), helpless attitude (4 statements), avoidant attitude (4 statements) and biomedical orientation (one statement) [10]. Practice assessment: It comprised two statements, one for diagnosis and the other for management of psychiatric disorders.

### Scoring of responses

Participants' correct answer regarding knowledge statements was assigned a score of (1), while an incorrect answer was assigned a score of (0). Therefore, participants' total scores ranged from 0 to 33. Positive

attitude responses were scored from 1 (strongly disagree) to 5 (strongly agree). Scoring for negative attitude was reversed (i.e., 1 for strongly agree and 5 for strongly disagree). Therefore, participants' total scores ranged from 12 to 60.

The total knowledge scores for each component were summed up and the percentage calculated for each participant. Those who obtained >75% of the total scores were considered to have "high" knowledge, those who obtained 60-79%, were considered to have "moderate" knowledge, while those who obtained <60% of the total scores were considered to have "poor" knowledge.

Similarly, total attitude scores were summed up and the percentage calculated for each participant. Those who obtained >60% of the total scores were considered to have a "positive" attitude, while those who obtained <60% were considered to have a "negative" attitude. The Statistical Package for Social Sciences (SPSS ver 23.0) was used for data entry and analysis. Descriptive statistics (i.e., frequency, percentage) were calculated and the appropriate test of significance (i.e.,  $\chi^2$ ) was applied. A statistically significant level was considered when  $p < 0.05$ .

## Results

This study included all primary health care physicians' (121) inside Abha city during a period of 6 months. 101 physicians were interviewed and those who were on vacation or on sick leave as informed.

Table 1 shows that only 13.9% of participants attended continuing medical education courses on psychiatric disorders. The main sources of knowledge about psychiatric disorders were the internet websites (52.5%) and lectures (29.7%), followed by medical journals (23.8%) and textbooks (5.9%). Figure 1 shows that most primary care physicians in Abha City (86.1%) have unsatisfactory knowledge about psychiatric disorders. Table 2 shows that the topics least known by primary care physicians were "who is at risk for major depression" (18%), "depression among children" (6.9%), "community services for people with dementia and their families" (7.9%) and "learning problems" (10.9%). Figure 2 shows that most primary care physicians in Abha City (88.1%) have a positive attitude toward management of psychiatric disorders.

Table 3 shows that positive statements with the highest agreement by primary care physicians were: "It is possible to distinguish two main groups of depression: one psychological in origin and the other caused by biochemical mechanism" and "Antidepressants usually produce a satisfactory result in the treatment of depressed patients in general practice". On the other hand, negative statements with the highest agreement by primary care physicians were "If psychiatric patients need antidepressants, they are better off with a psychiatrist than with a general practitioner" and "Working with psychiatric patients is heavy going".

Table 4 shows that all primary care physicians (100%) diagnosed psychiatric patients during the last year. However, the majority of diagnosed cases (94.1%) were referred to a psychiatrist, while only 5.9% of primary care physicians prescribed treatment to their patients.

Table 5 shows that non-Saudi participants had a significantly higher percentage of satisfactory knowledge grade than Saudi participants (21.7% and 7.3%, respectively,  $p = 0.036$ ). Primary care physicians who attended continuing medical education activities on mental health had a significantly higher percentage of satisfactory knowledge grade than those who did not (35.7% and 10.3%, respectively,  $p = 0.011$ ). However, primary care physicians' knowledge grades did not differ significantly according to their age group, gender, qualification, position, experience in primary care, or source of knowledge about mental health.

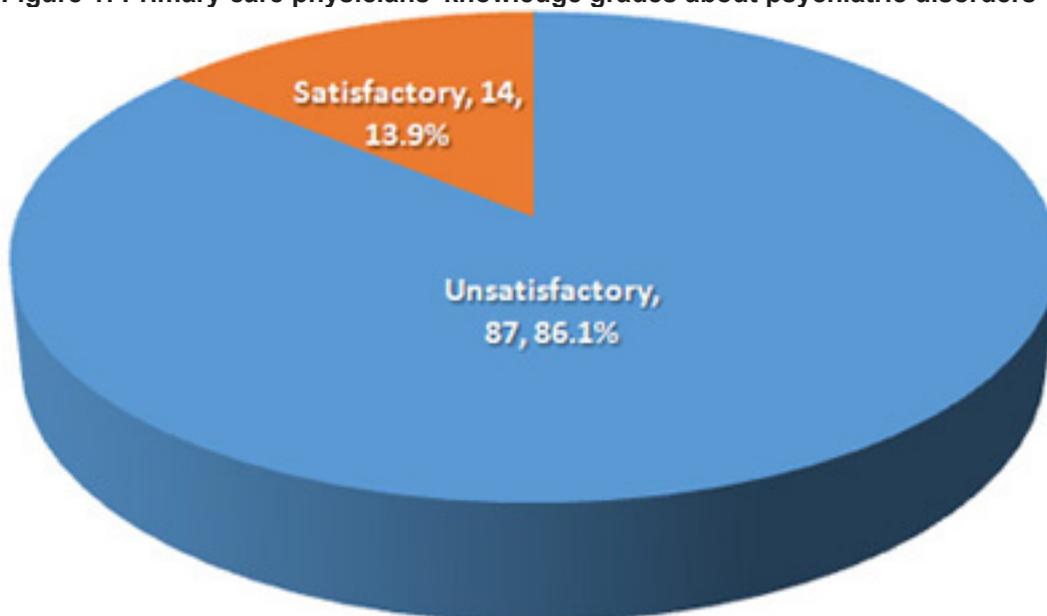
Table 6 shows that primary care physician's attitude towards management of psychiatric disorders did not differ significantly according to their personal characteristics.

Table 7 shows that primary care physicians' practice related to management of psychiatric patients did not differ significantly according to their personal characteristics.

Table 1: Personal characteristics of study sample (n: 101)

Personal characteristics	No.	%
Age groups		
• <30 years	40	39.6
• 30-40 years	49	48.5
• >40 years	12	11.9
Gender		
• Male	63	62.4
• Female	38	37.6
Nationality		
• Saudi	55	54.5
• Non-Saudi	46	45.5
Qualification		
• MBBS	40	39.6
• Diploma	18	17.8
• Master	19	18.8
• Doctorate/Fellowship	24	23.8
Position		
• General practitioner	59	58.4
• Specialist	27	26.7
• Consultant	15	14.9
Experience in primary care		
• <5 years	54	53.5
• 5+ years	47	46.5
Attending CME on mental health		
• Yes	14	13.9
• No	87	86.1
Sources of knowledge about mental health		
• Textbooks	6	5.9
• Internet websites	53	52.5
• Lectures	30	29.7
• Journals	24	23.8

Figure 1: Primary care physicians' knowledge grades about psychiatric disorders



**Table 2: Participants' correct responses regarding knowledge about different topics of psychiatric disorders**

	Topic	No.	%
A	1. Reasons for non-compliance to medication in schizophrenia	51	50.5
B	2. Risk factors for depression	18	18.4
B	3. Screening for depression	43	42.6
B	4. Main physicians who treat depression	44	43.6
C	5. Common signs of mania	21	20.8
C	6. Diagnosis of mania	23	22.8
D	7. Common age groups for personality disorders	31	30.7
D	8. Dependent personality disorder	40	39.6
E	9. Symptoms of obsessive– compulsive disorder	43	42.6
E	10. 10- management of obsessive-compulsive disorder	12	11.9
E	11. 11-Grief and loss processing	25	24.8
E	12. Management of anxiety	56	55.4
E	13. Abusive or neglecting parents	43	42.6
E	14. Scope for treatment with psychotherapy	14	13.9
F	15. Developmental disability	19	18.8
F	16. Features of developmental disabilities	40	39.6
F	17. Learning problems	11	10.9
F	18. Treatment approach for developmental disabilities	74	73.7
F	19. Medical treatment for mental retardation	45	44.6
G	20. Suicidal thoughts	34	33.7
H	21. Depression among children	7	6.9
H	22. Likely causes of ADHD in children	14	13.9
H	23. Common signs of oppositional defiant disorder in childhood	40	39.6
H	24. Psychiatric medicines for children	30	29.7
H	25. Genetic tendency toward developing an illness	45	44.6
I	26. Alcohol abuse after posttraumatic stress disorder	36	35.6
I	27. Denial due to substance abuse	29	28.7
I	28. Description of addiction	44	43.6
I	29. Withdrawal symptoms due to alcohol abuse	13	12.9
J	30. Most common long-term course of dementia	59	58.4
J	31. Assisting living facility	30	29.7
J	32. Community services for people with dementia and their families	8	7.9

**Table 3: Participants' responses regarding attitude toward psychiatric disorders**

Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	No.	%	No.	%	No.	%	No.	%	No.	%
It is my responsibility to recognize psychiatric patients	16	15.8	18	17.8	40	39.6	14	13.9	13	12.9
It is my responsibility to treat psychiatric patients	6	5.9	18	17.8	42	41.6	23	22.8	12	11.9
It is rewarding to spend time looking after psychiatric patients	7	6.9	20	19.8	41	40.6	20	19.8	13	12.9
Psychiatric disorders reflect a characteristic response in patients which is not amenable to change	6	5.9	21	20.8	38	37.6	22	21.8	14	13.9
Becoming a psychiatric patient is a way that people with poor stamina deal with life difficulties	7	6.9	17	16.8	45	44.6	17	16.8	15	14.9
The majority of psychiatric disorders seen in primary care originate from patients' recent misfortunes	3	3.0	11	10.9	42	41.6	25	24.8	20	19.8
Most psychiatric disorders seen in primary care improve without medication	1	1.0	14	13.9	41	40.6	27	26.7	18	17.8
Working with psychiatric patients is heavy going	1	1.0	10	9.9	45	44.6	31	30.7	14	13.9
If psychiatric patients need antidepressants, they are better off with a psychiatrist than with a general practitioner	1	1.0	10	9.9	45	44.6	32	31.7	13	12.9
It is difficult to differentiate whether patients are presenting with unhappiness or a clinical depressive disorder that needs treatment	1	1.0	18	17.8	38	37.6	29	28.7	15	14.9
It is possible to distinguish two main groups of depression: one psychological in origin and the other caused by biochemical mechanism	2	2.0	12	11.9	46	45.5	46	45.5	31	30.7
Antidepressants usually produce a satisfactory result in the treatment of depressed patients in general practice	2	2.0	6	5.9	37	36.6	37	36.6	19	18.8

**Table 4: Primary care physicians' practices regarding diagnosis and management of psychiatric patients**

Variable	No.	%
• Diagnosis	101	100.0
• Treatment	6	5.9
• Referral	95	94.1

**Table 5: Primary care physicians' knowledge grades regarding psychiatric disease according to their personal characteristics**

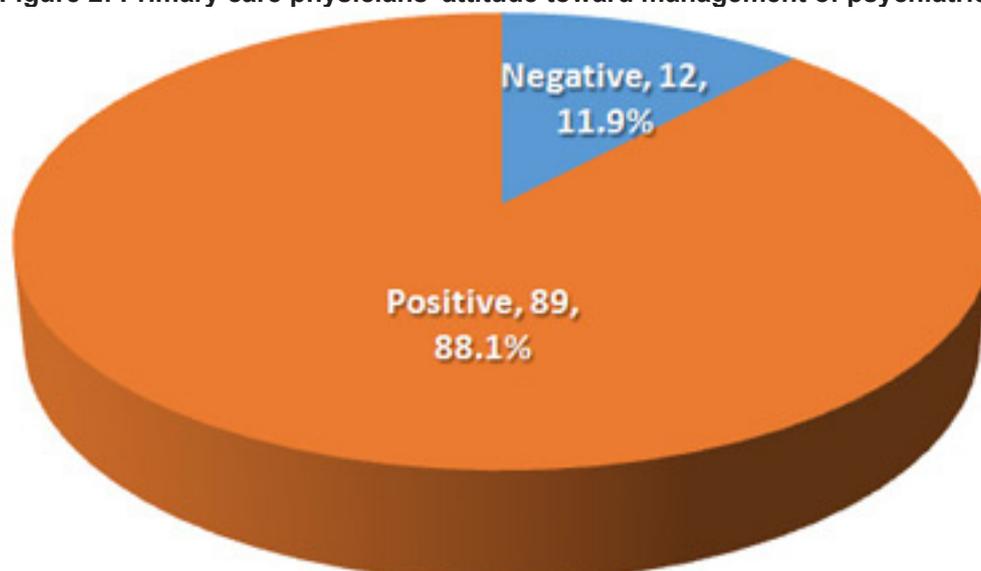
Personal characteristics	Unsatisfactory		Satisfactory		P Value
	No.	%	No.	%	
Age groups					
<30 years	36	90.0	4	10.0	
30-40 years	41	83.7	8	16.3	
>40 years	10	83.3	2	16.7	0.661
Gender					
Male	57	90.5	6	9.5	
Female	30	78.9	8	21.1	0.104
Nationality					
Saudi	51	92.7	4	7.3	
Non-Saudi	36	78.3	10	21.7	0.036
Qualification					
MBBS	35	87.5	5	12.5	
Diploma	17	94.4	1	5.6	
Master	15	78.9	4	21.1	
Doctorate/Fellowship	20	83.3	4	16.7	0.555
Position					
General practitioner	53	89.8	6	10.2	
Specialist	23	85.2	4	14.8	
Consultant	11	73.3	4	26.7	0.252
Experience in primary care					
<5 years	48	88.9	6	11.1	
5+ years	39	83.0	8	17.0	0.391
Attending CME on mental health					
Yes	9	64.3	5	35.7	
No	78	89.7	9	10.3	0.011
Sources of knowledge					
Textbooks	5	83.3	1	16.7	
Internet websites	40	75.5	13	24.5	
Lectures	22	73.3	8	26.7	
Journals	18	75.0	6	25.0	0.965

**Table 6: Primary care physicians' attitude regarding management of psychiatric cases according to their personal characteristics**

Personal characteristics	Unsatisfactory		Satisfactory		P Value
	No.	%	No.	%	
Age groups					
• <30 years	5	12.5	35	87.5	0.921
• 30-40 years	6	12.2	43	87.8	
• >40 years	1	8.3	11	91.7	
Gender					
• Male	8	12.7	55	87.3	0.744
• Female	4	10.5	34	89.5	
Nationality					
• Saudi	8	14.5	47	85.5	0.366
• Non-Saudi	4	8.7	42	91.3	
Qualification					
• MBBS	5	12.5	35	87.5	0.719
• Diploma	2	11.1	16	88.9	
• Master	1	5.3	18	94.7	
• Doctorate/Fellowship	4	16.7	20	83.3	
Position					
• General practitioner	6	10.2	53	89.8	0.812
• Specialist	4	14.8	23	85.2	
• Consultant	2	13.3	13	86.7	
Experience in primary care					
• <5 years	5	9.3	49	90.7	0.383
• 5+ years	7	14.9	40	85.1	
Attending CME on mental health					
• Yes	2	14.3	12	85.7	0.764
• No	10	11.5	77	88.5	
Sources of knowledge					
• Textbooks	0	0.0	6	100.0	0.688
• Internet websites	6	11.3	47	88.7	
• Lectures	3	10.0	27	90.0	
• Journals	4	16.7	20	83.3	

**Table 7: Primary care physicians' practices regarding management of psychiatric cases according to their personal characteristics**

Personal characteristics	Treatment		Referral		P Value
	No.	%	No.	%	
Age groups					
• <30 years	4	10.0	36	90.0	0.268
• 30-40 years	1	2.0	48	98.0	
• >40 years	1	8.3	11	91.7	
Gender					
• Male	5	7.9	58	92.1	0.275
• Female	1	2.6	37	97.4	
Nationality					
• Saudi	5	9.1	50	90.9	0.143
• Non-Saudi	1	2.2	45	97.8	
Qualification					
• MBBS	2	5.0	38	95.0	0.181
• Diploma	1	5.6	17	94.4	
• Master	3	15.8	16	84.2	
• Doctorate/Fellowship	0	0.0	24	100.0	
Position					
• General practitioner	3	5.1	56	94.9	0.314
• Specialist	3	11.1	24	88.9	
• Consultant	0	0.0	15	100.0	
Experience in primary care					
• <5 years	4	7.4	50	92.6	0.504
• 5+ years	2	4.3	45	95.7	
Attending CME on mental health					
• Yes	1	7.1	13	92.9	0.838
• No	5	5.7	82	94.3	
Sources of knowledge					
• Textbooks	1	16.7	5	83.3	0.622
• Internet websites	3	5.7	50	94.3	
• Lectures	1	3.3	29	96.7	
• Journals	2	8.3	22	91.7	

**Figure 2: Primary care physicians' attitude toward management of psychiatric disorders**

## Discussion

The World Health Organization [21] stated that there is a wide gap between community mental health needs and their availability in many countries. Therefore, the integration of mental health into primary health care can be the solution to this gap suggested by Patel [13].

Wittchen et al.[20] noted that the rapidly accumulating knowledge in clinical neuroscience and clinical psychology has resulted in many new treatment options which can mostly be applied in primary health care settings .

Results of this study revealed that most primary care physicians in Abha City have unsatisfactory knowledge about psychiatric disorders. Their knowledge gaps in psychiatric disorders were mainly related to “who is at risk for major depression”, “depression among children”, and “community services for people with dementia and their families”.

Findings of this study also showed that most primary care physicians in Abha City have a positive attitude toward management of psychiatric disorders. Moreover, all primary care physicians diagnosed psychiatric patients during the last year. However, the majority of diagnosed cases were referred to a psychiatrist, while only 5.9% of primary care physicians prescribed treatment to their patients.

This study showed that non-Saudi participants had a significantly higher percentage of satisfactory knowledge grade than Saudi participants. Moreover, primary care physicians who attended continuing medical education activities on mental health had a significantly higher percentage of satisfactory knowledge grade than those who did not. However, primary care physicians' knowledge grades did not differ significantly according to their age group, gender, qualification, position, experience in primary care, or source of knowledge about mental health. In addition, primary care physician's attitude and practice regarding management of psychiatric disorders did not differ significantly according to their personal characteristics.

The significantly better knowledge among non-Saudi primary care physicians can be explained by the highly selective criteria applied on non-Saudi physicians who apply for a contract at the Saudi Ministry of Health, which allows for employing the best. Moreover, the contracts of those who prove to be below an acceptable standard are not renewed.

Abiodun [1] stated that proper integration of mental health care into primary health care services necessitates the application of continuing training programs for primary health care physicians. There is also a need to revise the current mental health component of the undergraduate curricula of medical students in order to increase the scope of their theoretical and clinical exposure, in keeping with the new demands which they now have to cope with in the provision of mental health care at primary care level.

Roy-Byrne[15] and Kroenke et al.[8] emphasized that Mental health problems, and anxiety disorders in particular, are common in primary care. However, although they are as common as depression, they often receive less attention and they remain unrecognized and untreated.

Rollman et al.[14] and Tylee and Walters [19] observed that the high rates of co-morbidity with psychiatric disorders and physical illnesses result in varying and misleading presentations. The patients do not usually link their health issues to psychological problems.

Lappalainen-Lehto et al.[9] argued that, although non-psychiatric physicians at primary care facilities may acknowledge their responsibility for management of psychiatric patients.

The present study showed that only 13.9% of primary care physicians attended continuing medical education on psychiatric disorders and those who attended were significantly more knowledgeable. Moreover, the main sources of primary care physicians' knowledge about psychiatric disorders were the internet websites and lectures, followed by medical journals and textbooks.

Variations in reported sources of physicians' knowledge can be explained by the recent advancement in internet technologies and most of the educational materials and health messages on neuroscience and psychiatry nowadays are posted online by the Saudi Ministry of Health, which may have encouraged primary care physicians to use the widely available internet technology to gain access to this subject.

## Conclusion

Based on findings of the present study, it can be concluded that knowledge of primary care physicians in Abha City about psychiatric disorders is unsatisfactory, while their attitude is mainly positive toward management of these diseases. Psychiatric disorders are common at primary care practice. However, most primary care physicians refer their psychiatric cases to a specialist and only few prescribe treatment. Most primary care physicians do not receive continuing medical education on psychiatric disorders. Receiving continuing medical education is associated with significantly better knowledge. Most of primary care physicians are self-learners through internet websites, and reading medical journals or textbooks. Saudi physicians are less knowledgeable than non-Saudi physicians regarding psychiatric disorders. However, physicians' attitude and practice did not differ significantly according to their personal characteristics. Primary care physicians should be encouraged to attend continuing medical education sessions (e.g. conferences, workshops, lectures and presentations).

Posting educational materials and health messages on neuroscience and psychiatry nowadays online by the Saudi Ministry of Health is to encourage primary care physicians to use the widely available internet technology to gain access to this subject and update their knowledge.

Revision of the undergraduate medical curriculum in order to enhance teaching of psychiatric disorders, especially covering those with identified knowledge gaps is recommended.

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