

ORIGINAL ARTICLE**Physicians' Knowledge and Attitude towards Mental Health in Saudi Arabia**Abdulrahman A. Al-Atram^{1*}**OPEN ACCESS**

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ABSTRACT

BACKGROUND: Physicians working in Saudi Arabia belong to different countries and may have differences in knowledge and attitude towards psychiatry. We evaluated non-psychiatric physician's knowledge and attitude towards psychiatric disorders, such as anxiety and depression, in the Kingdom of Saudi Arabia.

METHODS: A descriptive cross-sectional study design was used. The current knowledge and attitude towards anxiety and depression of physicians were determined by using a questionnaire. We distributed 180 study questionnaires at various hospitals to be answered by physicians in the Riyadh Province of Saudi Arabia. One hundred and forty-two completed questionnaires were included in the study. The participants were divided into three groups: (1) 63(44.4%) general practitioners (GPs), (2) 55 (38.7%) specialists and (3) 24 (16.9%) family practitioners. Data were analysed using the chi-square, ANOVA and independent sample t-test.

RESULTS: GPs and specialists showed a negative attitude towards psychiatric patients, but family practitioners showed a positive attitude. There were statistically significant differences ($p < 0.05$) in the knowledge regarding anxiety and depression among the groups. The relationship between specialty and knowledge was statistically significant ($p < 0.05$) and the effect of first language is insignificant ($p > 0.05$).

CONCLUSION: Expansive enlightenment programmes, continued medical education and inclusion of psychiatric posting in rotating residential internship programme during undergraduate courses are required for physicians not only to fill the gap in knowledge and attitude but also to improve their cognitive, communication and interpersonal skills.

KEYWORDS: GPS, family doctors specialist, survey, mental health, anxiety, depression, knowledge and attitude.

INTRODUCTION

In Saudi Arabia, the Ministry of Health (MOH) is the major government agency entrusted with providing preventive, curative and rehabilitative healthcare for the population of Saudi Arabia. The MOH with its chain of primary health care (PHC) centres provides medical care to the citizens and

residents of the Kingdom. The total number of PHC centres has increased from 1925 in 2007 to 2259 by 2012. The highest growth in number of PHC centres were in Makkah (23%) and Riyadh (20%). In the year 2012, physicians in MOH hospitals included 3201 General Practitioners (GP's), 2079 Internal Medicine, 399 Urology, 217 Chest diseases, 313 Skin and Venereology, 1083 Anesthesia, 2466 Pediatrics, 5075 Psychiatry and 766 Family Medicine experts. The surgeons included 2466 General Surgery, 1552 Dentists, 817 Orthopedics, 110 Cardiothoracic Surgery, 225 Neuro Surgery, 140 Plastic Surgery, 479 ENT, 67 Ophthalmology, 1790 OBS/GYN, 503 Cardiology adding to a total of 26,266 including other specialists (1). There are 435 PHC centres in the study area of Riyadh province with an estimated population of 7739570 (2). The other government bodies include referral hospitals, security forces medical services, army forces medical services, national guard health affairs, ministry of higher education hospitals (Teaching hospitals), ARAMCO hospitals, royal commission for Jubail and Yanbu health services, school health units of ministry of education and the red crescent society. The private sector also contributes to the delivery of healthcare services especially in cities and large towns with a total of 125 hospitals and 2218 dispensaries and clinics (3).

In accordance with the Saudi Constitution, the government provides all citizens and expatriates working within the public sector with full and free access to all the public health services. The primary function of PHC centres is to provide primary care services, both preventive and curative, referring cases that require more advanced care to public hospitals (the secondary level of care) while cases that need more complex level of care are transferred to central or specialized hospitals (the tertiary level of health care). The World Health Organization (WHO) recommend all countries to make PHC centres the point of first contact for those with mental disorders. In situations where PHC physicians cannot handle these patients, recommendation was to refer to psychiatrists in general hospital (secondary level) and if psychiatrists in those settings could not manage

patients then they were referred to specialty psychiatric hospitals or teaching hospitals (tertiary level). There were over 700 psychiatrist (3.0 per 1,00,000) including 380 who performed primarily outpatient psychiatry and 263 who worked in mental hospital. 1980 psychiatric nurses working in outpatient facilities and 1176 in mental hospitals. There were also 515 psychologist, social workers and occupational therapist at outpatient facilities and 611 working in mental hospitals (4).

The prevalence of mental health disorders is high and people can be affected irrespective of age, culture or socioeconomic status (5). Often in general health facilities, once patients are examined by physicians; they are then infrequently referred to psychiatrists or other mental health professionals. One reason for this behaviour is that patients are often more comfortable with physicians because they do not want to be stigmatised by others for visiting a psychiatrist. Hence, general practitioners (GPs) and specialists have a pivotal role in the management of psychiatric patients (6).

In Saudi Arabia, the majority of physicians are from other countries. Most of the GPs or physicians working in Saudi Arabia came from other Arab countries (North Africa and Middle East) and from the Indian subcontinent (India, Pakistan and Bangladesh). Anxiety and depression are the most common mental disorders and are not easy to diagnose in primary care because of complex barriers. These barriers are usually classified as the patient, physician and health system or organisational factors (7-9). The patients may consider the symptoms as non-medical in nature and think that the physician cannot help. He or she thinks the problem is simple and can be handled by the person while bearing in mind the stigma of mental illness. Physician factors include negative attitude towards mental illness, lack of knowledge to differentiate the common symptoms of anxiety and depression from other mental disorders, lack of good communication and interviewing skills, medicalization of symptoms and fear of offending the patient. This situation is complicated by comorbidity with a medical condition and negative or false perception about

the treatment, in addition to personal factors, such as discomfort in dealing with emotional and interpersonal issues. Health system or organisational barriers include limitations on third party coverage, limited treatment resource availability, restriction on access to a particular treatment and fragmentation of care, limited time for history taking and counselling or education and poor reimbursement for antidepressants and counselling (9,10). Other barriers to effective care include lack of resources, lack of trained health providers and social stigma associated with mental disorders (11).

Hence, this study was designed to assess the physicians' knowledge and attitude towards anxiety and depression disorder in Saudi Arabia. Our goal is to use the data to help make decisions regarding updating the knowledge of physicians so that they will be able to diagnose anxiety and depression effectively and refer patients to psychiatrists for further treatment.

MATERIALS AND METHODS

Study design: This was a descriptive cross-sectional study. This study was conducted to assess physicians' knowledge and attitude towards anxiety and depression.

Study setting and period: The study was conducted during the period of November 2016 to April 2017. The physicians including general practitioners (GPs), specialists and family medicine practitioners working in various hospitals of Ministry of Health in the Riyadh Province of Saudi Arabia were invited telephonically and by electronic mail to participate.

Study participants: Copies of the questionnaire were sent by mail to 180 physicians, who were requested to complete the questionnaire and return it to the researcher. A total of 142 completed questionnaires were received (79%) and included in the study. The GPs group consisted of 63 participants, the specialist group consisted of 55 participants, and the family practitioner group consisted of 24 participants.

Measurements: The study questionnaire was designed to assess physicians' knowledge and attitude towards anxiety and depression. The questionnaire had three parts: demographic data,

such as age, sex, specialty and language; attitude and interest in psychiatry and assessment of knowledge about anxiety and depression and management issues. With each item for attitude were rated on a Likert's scale of four points ranging from strongly agree to strongly disagree. The knowledge questions consisted of 20 items: 10 for anxiety and 10 for depression. The questions were a simpler form of some questions available online from the Membership of the Royal College of Psychiatry Parts I and II. Another seven were formulated by the researcher after gaining knowledge on the subject from the literature review and semi-structured interviews with physicians and approved by a panel of physicians, psychiatrists and statistician (12,13).

Statistical analysis: The data were analysed to generate descriptive statistics using SPSS software version 21. Chi-square was performed to compare the observed values with the standards and ANOVA helped in analysing variance with level of significance as p value less than 0.05. Independent sample t test was used to compare the knowledge on anxiety and depression among the Arabic and non-Arabic speaking groups with level of significance as P value less than 0.05.

Ethical approval: This study was approved by the ethics of research committee of Majmaah University. The participants were sent a consent form, the study details and rights of the participants along with the questionnaires. The participation was voluntary and the signed consent form was obtained. The participants were assured of confidentiality of the data. This study is a self-supported study and no internal or external funding is availed.

RESULTS

Background characteristics: Out of 180 questionnaires, over a period of six months, 142 completed questionnaires were received. The participants were divided into three groups: the GPs group consisted of 63 participants, the specialist group consisted of 55 participants and the family practitioner group consisted of 24 participants. The age range of most of the GPs (44.4%) and specialists (63.6%) was 36–45 years. Most family practitioners (54.2%) were 25–35

years of age. Most of the participants in all groups were males. Arabic speakers comprised 77.8% of the GPs, 76.4% of the specialists and 100% of the family practitioners (Table 1). Among the three groups, 70.8% of family practitioners referred more than five cases per year to a psychiatrist, followed by specialists and GPs. The data showed that 46.3% of the GPs referred less than five cases per year to psychiatrists followed by 23.64% of the specialists and 20.8% of the family practitioners. Among all participants, 42.9% of the GPs, 12.7% of the specialists and 8.3% of the family

practitioners reported that they had never referred any case to a psychiatrist. Importantly, 77.9% of the GPs and 94.6% of the specialists reported that they had no interest in psychiatry, but 91.67% of the family practitioners showed an interest in psychiatry. Evaluation of the attitude items showed that more than half of the GPs and specialists agreed with more than five of the items that reflected a negative attitude towards psychiatric patients, but family practitioners showed a positive attitude.

Table 1: Demographic data: Participants of the study

group	General practitioner(63)	Specialist (55)	Family medicine practitioners (24)
Age 25-35	20	7	13
36-45	28	35	9
46-55	15	13	2
Gender Male	43	48	15
Female	20	7	9
Language Arabic	49	42	24
Non Arabic	14	13	0
Specialty	63	55	24

Knowledge about anxiety: When all of the groups were assessed for their knowledge of anxiety, we found that 36.5% of the GPs, 63.6% of the specialists, and 95.8% of the family practitioners were able to identify the type of anxiety. Most of the participants were able to correctly identify key features of anxiety. The GPs (77.8%) and family practitioners (54.2%) were more accurate in describing obsessive-compulsive disorders than were specialists (16.4%). The specialists (61.8%) and family practitioners (100%) were more accurate than were GPs (46.0%) in identifying the key features of a history of phobia in patients. Almost half (49.1%) of the specialists, 62.5% of the family practitioners and 38.1% of the GPs were able to identify the clinical symptoms of panic attacks. Regarding post-traumatic stress disorders, family practitioners (91.7%) were more accurate than were specialists (38.2%) and GPs (55.6%). GPs (60.3%) were more accurate in identifying the causes of hallucinations compared with the family practitioners (45.8%) and specialists (12.7%). Less

than half of the GPs (36.5%) and specialists (38.2%) were accurate in describing the characteristics of phobias followed by 70.8% of the family practitioners. A total of 57.1% of GPs, 61.8% of specialists and 33.3% of the family practitioners were able to identify the organic causes of anxiety. Almost half of the GPs (55.6%) and 75.0% of the family practitioners were able to identify the correct presentation of obsessive-compulsive disorder followed by 25.5% of the specialists (Table 2).

Knowledge about depression: Responses to the depression questions showed that 65.1% of the GPs, 74.5% of the specialists and 58.3% of the family practitioners were aware of depression symptoms. Family practitioners were more accurate in the differentiation of mild, moderate and severe depression. Only 22.2% of the GPs, 27.3% of the specialists and 75.0% of the family practitioners responded correctly on the relationship between depression and other diseases and medications. All three groups of participants

were less accurate in recognising depression in the elderly. Postpartum depression was accurately recognised by 23.8% of the GPs, 49.1% of the specialists and 58.3% of the family practitioners. Family practitioners (79.2%) were more accurate than GPs (44.4%) and specialists (45.5%) in recognising the relationships between visual hallucinations and other psychotic disorders. Family practitioners (83.3%) were more accurate in determining the relationships between suicide attempts and other factors in depression than were

Specialists (63.6%) and GPs (57.1%). Specialists (61.8%) responded accurately on the topic of drug interactions. Only 38.1% of the GPs, 25.5% of the specialists and 16.7% of the family medicine specialists were aware of the features enabling discrimination between major depression and primary anorexia nervosa. Family practitioners were more accurate in identifying drug interactions that can occur during treatment of psychiatric patients (Table 2).

Table 2: Responses of participants (%) indicating knowledge about anxiety and depression. Pearson chi-square and df used to evaluate difference in knowledge about anxiety and depression among three groups.

Question	General practitioner	Specialist	Family Practitioner	p-value
	Correct	Correct	Correct	
18. The following are forms of anxiety except:	36.5	63.6	95.8	0.000
19. Key features of generalised anxiety disorder include:	82.5	76.4	100	0.036
20. Obsessive compulsive disorder is best described as:	77.8	16.4	54.2	0.000
21. Which feature of the history is of particular importance in phobia patients:	46	61.8	100	0.000
22. A 20 year female college student presents with recurrent attacks of sweating, chest pain and palpitations. Her blood investigations, E.C.G and clinical examination are normal. She is probably suffering from:	38.1	49.1	62.5	0.110
23. Features of Post-traumatic Stress Disorder include:	55.6	38.2	91.7	0.000
24. Hallucinations may be caused by:	60.3	12.7	45.8	0.000
25. Which of the following is not true of phobias:	36.5	38.2	70.8	0.010
26. Organic causes of anxiety include:	57.1	61.8	33.3	0.058
27. The following may present as obsessions in obsessive compulsive disorder:	55.6	25.5	75	0.000
28. Which of the following is not a symptom of depression:	65.1	74.5	58.3	0.311
29. A 45 year diabetic, father of five suffers from low self-esteem, poor sleep, sadness and poor concentration now and then. He is probably suffering from:	12.7	25.5	58.3	0.000
30. Which of the following statements is true about depression:	22.2	27.3	75	0.000
31. Which statement is not true about depression in elderly patients:	17.	38.2	87.5	0.000
32. Regarding postpartum depression:	23.8	49.1	58.3	0.002
33. Visual hallucinations in the elderly are common in:	44.4	45.5	79.2	0.009
34. Suicide attempts in depression are more likely if there is:	57.1	63.6	83.3	0.075
35. Common side effects of tricyclic antidepressants include all except:	33.3	61.8	20.8	0.001
36. The following are good discriminating features between major depression and primary anorexia nervosa:	38.1	25.5	16.7	0.102
37. Drugs which interact significantly with tricyclics include:	19	23.6	54.2	0.003

df= degrees of freedom, $p < 0.05$ is significant

Comparison between groups for anxiety and depression: The differences in knowledge about

anxiety and depression were found to be statistically significant ($p < 0.05$) among the groups,

and both the GPs and specialists in the study population had statistically significant less knowledge than did family practitioners ($p < 0.05$) (Table 2, Table 3). There was statistically non-significant difference in knowledge of anxiety and depression among Arabic and non-Arabic participants (Table 4).

Table 3: ANOVA statistical analysis results for differences in knowledge of depression and anxiety among the three groups.

	Sum of Squares	Mean Square	F	Sig.
Between Groups	394.035	197.018	36.857	.000
Within Groups	743.014	5.345		
Total	1137.049			

df= degrees of freedom, $p < 0.05$ is significant, Sig.=significance

Table 4: Student's t test and df used to evaluate knowledge of anxiety and depression among Arabic and non-Arabic groups

Group	No.	Mean	SD	t	df	P value
Arab general practitioners vs non- arab general practitioners	49	8.959	2.20756	1.008	61	0.318
Arab specialists vs non- arab specialists	14	8.286	2.19890			
	42	9.0238	2.39398	.632	53	0.530
	13	8.5385	2.50384			
Overall Arab vs non-arab participants	91	8.9890	2.28276	1.160	116	0.249
	27	8.4074	2.30817			

df = degree of freedom, $p < 0.05$ is significant

DISCUSSION

The response rate of the study questionnaire was 79% (20 GPs, 15 specialists and 3 family practitioners did not responded). A total of 142 completed questionnaires were included in the study. Among the respondents, the highest number was 63(44%) for the GPs followed by 55 (39%) for the specialists and 24 (17%) for the family practitioners. The results of the attitude items showed that a large number of participants in GPs and specialist group agreed with more than five of the items that indicated a negative attitude towards psychological problems. Our results are in agreement with those of previous studies in which physicians had negative attitudes towards psychiatry and psychiatric patients (14-18), but family practitioners showed positive attitude which is in agreement with a study done in Abu Dhabi (12).

Another part of the questionnaire consisted of 20 knowledge questions, including 10 on anxiety and 10 on depression, and more than 50% of the

GPs correctly answered six questions. When the responses of specialists were analysed for anxiety, it was found that five of the ten questions were answered correctly by the specialists. The family physicians were most accurate in their responses. The answers to eight of the ten questions were correct for more than 50% of the family physicians (Table 2).

The differences in the percentages of the participants for the correct and incorrect responses were statistically significant ($p < 0.05$) (Tables 2 and 3). Our results, which indicate more knowledge about anxiety and depression by family practitioners, are consistent with those of previous studies (19-20) and contradictory with the study from Australia in which GPs gave a higher percentage of correct answers about knowledge of anxiety and depression (13).

The knowledge questions about depression revealed that more than half (80%) of the questions were answered incorrectly by 50% or more of the GPs. Specialists were slightly better than GPs;

more than 50% of the specialists responded correctly. Family physicians were better than both specialists and GPs as indicated by the fact that only three questions received low percentages of correct answers (Table 2).

The differences in the percentages of participants who gave incorrect responses were statistically significant for both GPs and specialists (Tables 2, 3). These results are in agreement with those of previous studies (21,22). The lack of adequate knowledge results in the wrong diagnosis of psychiatric disorders. A probable explanation of why family practitioners had good knowledge about anxiety and depression could be that their training curriculum includes effective psychiatry training by psychiatrist. Our study also reveals non-significant difference among Arabic and non-Arabic participants (Table 4); this is in agreement with a similar study conducted in Abu Dhabi (12).

In conclusion, family physicians had a better knowledge and positive attitude to recognise and treat anxiety and depression than GPs and specialists. Therefore, it is evident that the effective psychiatric training received by the family physicians could have resulted in better diagnostic skills. This finding suggests the possibility of a larger number of patients screened by the GPs, and specialists may not be adequately recognised and may not receive appropriate referrals and treatments. On the basis of our findings, we recommend that more training courses, enlightenment programmes, continued medical education and inclusion of sufficient psychiatric postings in rotating internships during undergraduate course work to increase the knowledge about anxiety and depression for physicians for a holistic health care.

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