Prevalence of Mental Illnesses among Adults Attending Primary Health Care Centers in Baghdad

Tha'er Saleem Salman *, Faris Hasan Al-Lami **, Shalan Joodah Rhemah *

ABSTRACT:

BACKGROUND:

It is gradually becoming recognized that mental disorders are a public health problem throughout the world. Psychiatric epidemiological studies are therefore crucial for the planning and development of psychiatric services.

OBJECTIVE:

To determine the prevalence and determinants of mental illness among adults attending Primary Health Care Centers (PHCCs) in Baghdad, Iraq.

METHODS:

A cross sectional survey was conducted in two primary health care centers in Baghdad governorate. Participants were interviewed and data filled using a questionnaire for socio-demographic variables, Self Reporting Questionnaire (SRQ-20), and WHO guide to mental health in primary care.

RESULTS:

A total of 527 PHCCs attendees were approached. The prevalence of mental illness was 36.8%. Depression (49.48%) and anxiety (20.62%) were the major categories of mental illness. The highest proportion of mental illnesses was seen among the older age groups (80%), females (37.9%), widows (84.6%), higher education level (96.7%), and retired (77.8%).

CONCLUSION:

In accordance with other studies, about one third of adult attending PHCCs had mental disorders. The study emphasized strengthening mental health services in PHCCs through establishing metal health care units.

KEY WORDS: mental illness, prevalence, primary health care.

INTRODUCTION:

Primary Health Care (PHC) was put forward thirty years ago as a set of values, principles and approaches aimed at raising the level of health in deprived populations [1]. PHC is about providing essential health care which is universally accessible to individuals and families in the community and provided as close as possible to where people live and work. It refers to care which is based on the needs of the population [2].

Mental disorder has been characterized as a clinically significant behavioral or psychological pattern that occurs in an individual and is usually associated with distress, disability or increased risk of suffering [3,4]. It is currently estimated that at least 500 million people in the world suffer from mental disorders, and that only a small proportion of them receive appropriate care [5]. Mental disorders have been found to be fairly common,

with more than one in three people in most countries reporting sufficient criteria for at least one diagnosis at some point in their life up to the time they were assessed [5].

Mental disorders are a common problem in primary health care centers (PHCCs). According to various authors, these disorders account for 24% -36% of all PHCCs' patients. Most of these are minor psychiatric disorders, presenting with depression, anxiety or somatization. More than half of those patients presented with somatic rather than psychological complaints. Beside, a preexisting of a severe or chronic physical ailment constitutes a stressful life event, which can generate subsequent psychiatric morbidity. It was noted that mental illnesses were poorly estimated in the PHCCs. However, if these disorders are recognized early and treated, their complications such as suicidal thoughts, suicidal attempts and psychosis can be prevented. Unnecessary investigations and medicines can be avoided; time and cost can be saved. [3-5]

*Ministry of Health.
**Baghdad College of Medicine.

In Iraq, few studies had tackled the extent of mental illness morbidity in PHCCs [6-8]. The aim of this study is to determine the prevalence of mental illnesses among adult patients attending the PHCCs in Baghdad, Iraq, and to identify high risk groups.

PATIENTS AND METHODS:

Design: This is a cross sectional study. Setting: The study was conducted in two PHCCs in Baghdad governorate, one in Al-Risafa (Eastern) side of Baghdad (Al- Habibia PHCC), the second is in Al – Karkh (Western) side (Al -Salhia PHCC). These centers provide general primary health care services to all attendees from the neighboring areas. Study Population and Sampling Technique: A systematic random sampling technique was applied. Where every 5th patient entering the clinic aged 18 years or more, who agree to participate, was included. Patients known to have psychotic disorders were excluded. Sample Size Estimation: the following formula was used to estimate the necessary sample size: $n = (z^2 \ p \ q) / d^2$, where n= the recommended minimal sample size, z= (1-α/2), where α=0.05, accordingly Z= 1.96, p= the estimated proportion of the least psychiatric problem, the maximum value was used (0.5), estimated as: q=1-p, d= absolute precision, and chosen to be 5%. Ethical Issue: Verbal consent was obtained from each individual accepted to participate in the study. Data Collection Tools: Each selected participant was directly interviewed using the structured questionnaires; a questionnaire gathering socio-demographic data, Self Reporting Questionnaire (SRQ-20) [9], and Mental health symptoms checklist for diagnosis of mental illnesses in primary health centers [10]. The Arabic short version of the SRQ 20 was used as a practical screening research instrument for the detection of any psychiatric morbidity or mental disorder in the community. The cut-off point was considered to be equal to seven. The sensitivity and specificity of this cut-off point is 89.7%, and 95.2%,

respectively. Statistical Analysis: Statistical Package of Social sciences (SPSS) version 15 was used for data entry and analysis. Categorical variables were tested using chi square test. Continuous variables of two independent samples were tested using unpaired t-test. Similar variables of more than two samples were tested using ANOVA test. P<0.05 was considered statistically significant.

RESULTS:

A total of 563 patients from two PHCCs in Baghdad were approached, 527 accepted to participate, giving a response rate of 93.6%. The most frequent age group was 31-50 years (49%). About 59% of the sample was female; 71% were married; 40% were employed; and about 57% had poor education. The mean (±SD) age of patients was 41.33 ±13.96 years. The mean family size (±SD) was 6.08 (±2.35), mean crowding index was 2.54 (± 1.13), and the average monthly family income was 877,410 (± 761,907) ID.

The overall prevalence of mental illnesses among the sample was 36.81%; 95% confidence interval: 32.7-40.9%.

On applying mental health checklist for diagnosis of mental illnesses in PHCCs among participants who found to have mental illnesses, depression was the most frequent illness (49.48%) followed by anxiety (20.62%), sleep disorders (13.4%), somatization (8.8%) and chronic fatigability (7.2%). Alcohol abuse was reported in 0.5% only.

The highest proportion of mental illnesses was reported among the older age group; 61-70 years (80%) (P=0.001). Females showed slightly higher proportion of mental illnesses (37.9%) than males (35.3%); (p=0.551). Widows and divorced showed higher prevalence of mental illnesses (84.6%) and (82.4%), respectively; (P=0.001). Individuals with high education showed higher prevalence than other educational levels (96.7%); (p=0.001). In the field of occupation, retired people showed the highest prevalence (77.8%), followed by unskilled worker (73.9%), then unemployed (70%); (p=0.000) (Table 3).

Table 3: Distribution of the study group by mental illness and certain socio-demographic variables.

Demographic Variables	Mental Illness				Total		X²	P
	Positive		Negative					
	N (194)	%	N (333)	%	N (527)	%		
Age Group (year)								
≤30	13	14.1	79	85.9	92	17.5	126.326	0.000
31-40	24	17.3	115	82.7	139	26.4		
41-50	37	31.1	82	68.9	119	22.6		
51-60	52	57.8	38	42.2	90	17.1		
61-70	56	80.0	14	20.0	70	13.2		
71+	12	70.6	5	29.4	17	3.2		
Gender								
Male	77	35.3	141	64.7	218	41.3	0.355	0.551
Female	117	37.9	192	62.1	309	58.7		
Marital Status								
Married	108	28.8	267	71.2	375	71.2	94.085	0.000
Single	17	24.3	53	75.7	70	13.3		
Divorced	14	82.4	3	17.6	17	3.2		
Widow	55	84.6	10	15.4	65	12.3		
Education Level								
Illiterate	75	66.4	38	33.6	113	21.4	149.973	0.000
Preliminary	67	35.8	120	64.2	187	35.5		
Secondary	6	14.6	35	85.4	41	7.8		
Diploma	15	10.7	125	89.3	140	26.6		
University	0	0.0	14	100.0	14	2.6		
Postgraduate	31	96.7	1	3.3	32	6.1		
Occupation								
Unemployed	14	70.0	6	30.0	20	3.8	125.093	0 .000
Employed	68	24.6	208	75.4	276	52.4		
Student	0	0.0	37	100.0	37	7.0		
Retired	35	77.8	10	22.2	45	8.5		
Housewife	77	51.7	72	48.3	149	28.3		

Concerning smoking status, patients with mental illnesses represented 55.6% of current smokers compared to 31.5% among non-smokers (P=0.000). No significant association found with alcohol intake (Table 2).

Table 2: Distribution of the study group by mental illness and smoking habits and alcohol intake.

	Mental Illness				Total		X^2	P
	Positive		Negative					
	N (194)	%	N (333)	%	N (527)	%		
Smoking Habit								
Current Smoker	65	55.6	52	44.4	117	22.2		
Not-smoker	129	31.5	281	68.5	410	77.8	22.714	0.000
Alcohol Habit								
Drinker	6	40.0	9	60.0	15	2.8		
Not-drinker	188	36.7	324	63.3	512	97.2	0.791	0.495

Regarding the role of co-morbid illnesses and prevalence of mental illness, a significant higher rate was noticed among those who experienced chronic disease (p=0.000). Those who suffer from heart problems had highest rate (80%), followed by hypertensive patients (72.7%). (Table 3).

Table 3: Distribution of study group by mental illness and co-morbid illnesses.

Chronic Diseases	Mental Illness				Total		X^2	P
	Positive		Negative					
	N	%	N	%	N	%		
Hypertension	64	72.7	24	27.2	88	16.7		
Diabetes M.	32	68.1	15	31.9	47	8.9		
Asthma	16	61.5	10	38.5	26	4.9		
Heart disease	8	80.0	2	20.0	10	1.9	153.55	0.000
Others	31	60.8	20	39.2	51	9.7		
No disease	43	14.1	262	85.9	305	57.9		
Total	194		333		527	100%		

DISCUSSION:

The importance of mental disorders as a public health priority is increasing due to increasing contribution to global burden of diseases, availability of prevalence rates in different populations and the effective interventions to address majority of these disorders [11-14]. In the Arab world, epidemiological studies in the field of psychiatry have mostly focused on specific mental disorders or in specific population groups like those living in conflict situations [15]. In Iraq a nationwide general population survey of mental disorders had been done in 2006-2007 (Iraqi mental health survey (IMHS)) [16] that was completed during the period of ongoing conflict. The current cross sectional study is the first to explore mental disorders among Iraqi patients attending PHCCs in Baghdad, Iraq.

The prevalence of mental disorders in this study was 36.8% which is consistent with studies conducted in many countries in the region [17-20] and in IFHS study in Iraq [21]. The prevalence reported in this study is also higher than those reported in south Iraq [22] and IMHS study in Iraq [16] and higher than that reported in other studies conducted in Bahrain and Lebanon [23,24]. Iraq population can be considered as having significant psychological distress which is in line with the findings from Afghanistan [25]. During the past three decades, Iraq has witnessed many internal and external conflicts, including three wars and 12 years of sanctions. Studies in western population conducted at primary care level revealed a prevalence ranging from 14% to 50% [26,27]. Studies in Arab world at primary care level revealed a similar range of 18% to 47% [28].

The prevalence of depression and anxiety were consistent with many studies conducted in some Arab countries [22,23] and higher than local Iraqi studies [16,19]. In fact, the prevalence is less than expected within these circumstances, which could be due to the social network and close family

relationships that enhance social support and improve coping skills and stress resilience [29].

The current study showed that those whose age > 50 years had significantly higher prevalence of mental illnesses than younger people. The cumulative effect of repeated exposure to stressful events could be behind this finding. The high prevalence among widows and divorced groups may be due to their exposure to extra burden of social difficulties; meanwhile this may be confounded by age particularly the widows. Age may also explain the high rate among retired group. This is explained in view of the social difficulties facing these groups, particularly in women [16]. Mental illness was significantly more common among educated group. Currently, in Iraq, highly educated people are at more risk that endanger their lives. Comorbidity is significantly associated with higher prevalence of mental illnesses as chronic diseases can negatively affect the quality of life.

CONCLUSION:

That mental disorders are common among patients attending PHCCs particularly depression and anxiety. Older age group, retired, educated and those with chronic diseases are the risk groups. Health care providers need to be adequately trained on detection, and management of these illnesses at the PHCCs.

REFERENCES:

1. World Health Organization. Primary Health Care – Now More Than Ever, The World Health Report 2008.
2. World Health Organization Monitoring and Evaluation of Mental Health Policies and Plans. 2007 (Mental Health Policy and Service Guidance Package)
3. WebMD, Inc. (2005, July 01). Mental Health: Types of Mental Illness. Retrieved April 19, 2007, from http://www.webmd.com/mental-health/mental-health-types-illness
4. United States Department of Health & Human Services. (1999). Overview of Mental Illness. Retrieved April 19, 2007 .
5. WHO International Consortium in Psychiatric Epidemiology Cross-national comparisons of the prevalences and correlates of mental disorders Bulletin of the World Health Organization 2000;78.
6. Desjaralais R et al., eds. World mental health: problems and properties in low-income countries. Oxford, Oxford University Press, 1995.
7. Kebede D, Alem A, Rashid E. The prevalence and socio-demographic correlates of mental distress in Addis Ababa, Ethiopia. Acta psychiatrica scandinavica. Supplementum, 1999;397:5–10.
8. World Health Organization and World Organization of Family Doctors (Wonca), Integrating mental health into primary care. A global perspective. 2008.
9. World Health Organization, A user's guide to the self reporting questionnaire(SRQ), Division of mental health, WHO, Geneva,1994.
10. World Health Organization Collaborating Center for Research and Training for Mental Health, eds. WHO Guide to mental health in primary care. London: Royal Society of Medicine Press, 2000.
11. World Health Organization. The world health report 2001: mental health, new understanding, new hope. Geneva: World Health Organization; 2001. Available: http://www.who.int/whr/2001/en/index.html. Accessed 15 February 2008.
12. Chisholm D, Lund C, Saxena S. Cost of scaling up mental healthcare in low- and middle-income countries. British Journal of Psychiatry, 2007;191:528–35.
13. Saraceno, B., van Ommeren,M., Batniji, R., Cohen,A., Gureje, O., Mahoney.J., Sridhar,D., Underhill,C. Barriers to improvement of mental health services in low-income and middle-income countries, Lancet 2007; 370:1164-74.
14. Kessler,R.C. , Ustun,T.B The World Mental Health (WMH) survey initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview(CIDI) , International Journal of Methods in Psychiatric Research.2004; 13: 93-121.
15. Okasha, A. , Karam, E Mental health services and research in the Arab world, Acta Psychiatrica Scandinavica, .1998;98:406-13.
16. Iraq mental health survey 2006/7 report. March 2009.WHO& MOH Iraq. Pp24
17. Kim,G., Torbay,R., Lawry,L. Basic health, women's health, and mental health among internally displaced persons in Nyala Province, South Darfur, Sudan, American Journal of Public Health, 2007;97: 353-61.
18. Thabet,A.A. , Vostanis,A. Effect of trauma on the mental health of Palestinian children and mothers in the Gaza Strip, Eastern Mediterranean Health Journal, 2001;7:413-21.

19. Daradkeh, T. K., Eapen, V., & Ghubash, R.. Mental morbidity in primary care in Al Ain (UAE): Application of the Arabic translation of the PRIME-MD (PHQ) version. German Journal of Psychiatry, 2005;8: 32–5.

20. Alqahtani A A, Salmon P, , prevalence of somatization and minor psychiatric morbidity in Saudi Arabia: A preliminary study in Asir region J. fam. Community Med: 2008;815:27-33.

21. Iraq Family Health Survey Study Group. Violence related mortality in Iraq from 2002 to 2006, The New England Journal of Medicine, 2008;358:484-93.

22. Hussein A. H. and Sa'adoon A A. Prevalence of Anxiety and Depressive Disorders among Primary Health Care Attendees in Al-Nassiryah, Iraq. Journal of Muslim Mental Health, 2006;1:171–76.

23. Al-Haddad, M. K., Al-Garf, A., Al-Jowder, S., & Al-Zurba, F. I.. Psychiatric morbidity in primary care. Eastern Mediterranean Health Journal, 1999;5: 20–26.

24. Karam E G, Mneimneh Z. N, Dimassi H, Fayyad JA, Karam A N, Nasser S C, Chatterji S, and Kessler R C, (2008). Lifetime Prevalence of Mental Disorders in Lebanon: First Onset, Treatment, and Exposure to War. PLoS Med.2008 April; 5(4): e61. Published online 2008 April 1. doi: 10.1371/journal.pmed.0050061.

25. Cardozo BL, Bilukha OO, Gotway Crawford CA et al. Mental health, social functioning, and disability in postwar Afghanistan. Journal of American Medical Association, 2004;292:575-84.

26. Richards J, Ryan P, McCabe M, Groom G, Hickie I. Barriers to the effective management of depression in general practice. Australian and New Zealand Journal of Psychiatry 2004; 38:795-803.

27. Pini S, Perkonnig A, Tansella M, Wittchen H, Psich D. Prevalence and 12-month outcome of threshold and subthreshold mental disorders in primary care. Journal of Affective Disorders 1999; 56:37–8.

28. Al-Khathami A, Ogbeide D. Prevalence of mental illness among Saudi adult primary-care patients in Central Saudi Arabia. Saudi Medical Journal 2002; 23:721-24.

29. Southwick, S.M., Vythilingam, M., Charney, D.S. The psychobiology of depression and resilience to stress: implications for prevention and treatment, Annual Review of Clinical Psychology, 2005;1: 255-91.

30. Goldberg, D. P., & Blackwell, P. Psychiatric illnesses in general practice: A detailed study using a new method of case identification. British Medical Journal, 1970; 2:439–43.

31. Harding, T. W., DeArango, M. V., Baltazar, J., Climent, C. E., Ibrahim, H. H. A., Ladrido-Ignacio, L., et al.. Mental disorders in primary health care: A study of their frequency and diagnosis in four developing countries. Psychological Medicine, 1980;10:231–41.

32. Olfson, M., Shea, S., Feder, A., Fuentes, M., Nomura, Y., Gameroff, M., et al.. Prevalence of anxiety, depression, and substance use disorders in an urban general medicine practice. Archives of Family Medicine, 2000;9:876–83.