



Prevalence of mental disorder to population who attending left district primary health care centers in Mosul city

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Abstract

Background: In most health care systems, primary care doctors are the cornerstone of recognition, diagnosis, treatment, and specialist referral for all types of disorders, whether they are somatic, psychological, or both. The past two decades have witnessed a further emphasis of this role, particularly with regard to the treatment of mental disorders in primary care.⁽¹⁾

Aim of the study: to describe demographic characteristic of the study population and determine the prevalence of mental disorder among population attending primary health care centers of Left Primary Health District in Mosul City.

Materials and Methods: A biometric descriptive study was conducted in order to achieve the aim of the present study in which the data was taken from the records present in statistical, integrated management of mental unit in left primary health care district which responsible for all primary health care and family medicine centers in left side of Mosul city.

Results: This study revealed that the highest frequency of mental disorder was found in the age group 20-49 years [male 2607 (21.88 %), female 3793 (31.84 %)], while the lowest frequency of mental disorder was observed in the age group less than 5 years [male 97(0.81%), female 66(0.55%)]. mental disorder are more frequently seen among female than male (56.5 % & 43.5 % respectively). the highest frequency of mental disorder is anxiety with total number in all age groups are (6848) with highest frequency in age group 20-49 years old.

Conclusions: the highest prevalence of mental disorder is anxiety (6.3 in 1000 of population) and the prevalence of mental disorders in left side district in Mosul city is (10.8817 in 1000 of population).

Keywords: mental disorder, primary health centers, Mosul

Introduction

In most health care systems, primary care doctors are the cornerstone of recognition, diagnosis, treatment, and specialist referral for all types of disorders, whether they are somatic, psychological, or both. The past two decades have witnessed a further emphasis of this role, particularly with regard to the treatment of mental disorders in primary care^[1].

Mental disorder is a psychological factor reflected in the behavior, which affect the normal development of a person's culture. Mental and behavioral disorders are found in people of all regions, countries, and societies. It may be associated with functions of the brain or nervous system. The personality disorders are emerging in childhood or at least by adolescence or early adulthood^[2].

The World Health organization (WHO) predicted that in 2020 depression would be the second most important cause of disability after ischemic heart disease. Three quarters of the global mental health burden are in low- and middle-income countries (LMICs)^[3].

The prevalence of mental disorders is so high in all countries, including Iraq that specialist care can only ever meet a small proportion of population needs, and there is international consensus that the role of primary care in the delivery of mental health care is a cornerstone for comprehensive services. It eases access and overcomes the stigma of attending psychiatric hospitals and clinics. Furthermore, early diagnosis and treatment, a friendly

environment, better collaboration with specialized services, and effective supervision and follow-up of chronic patients are other advantages of integrating mental health into primary care^[4].

The Iraq Ministry of Health strategy 2009 - 2011 has put primary care as the central plank of health care provision to the population, with emphases on competence, leadership, guidelines, standards and effective referral systems. Mental health is one of the core priorities, alongside maternal care, malnutrition, and non-communicable diseases^[5].

Providing mental health services in primary health care involves diagnosing and treating people with mental disorders; putting in place strategies to promote and prevent mental disorders; and ensuring that primary health care workers are able to apply key psychosocial and behavioral science skills, such as interviewing, counseling and interpersonal skills, in their day to day work^[6].

There is growing concern about the mental disorders among people around the world. Due to its prevalence, depression and anxiety are considered major public health issues and is ranked as the fourth leading cause of the global diseases burden. However, the World Health Organization (WHO) (has estimated that the impact of mental disorders will become the second leading cause of disability among individuals^[7].

Mental health is a positive concept related to the social and emotional wellbeing of individuals and communities. So The burdens of mental health problems include treatment

cost, productivity loss, functional impairment, and reduced quality of life [8].

Majority of people with mental health problems, including those with severe mental illness, view primary care as the cornerstone of their health care system and; health care providers are expected to identify and assess the mental health needs of the patients, and manage common mental health problems in primary care [8].

Aim of the study

To describe demographic characteristic of the study population and determine the prevalence of mental disorders among population attending primary care health center of Left Primary Health Care District in Mosul City.

Materials and Methods

Study Setting

This study was conducted in Mosul city in Iraq, sample was taken from the left side of Mosul city to study the prevalence of mental disorder for all patient with mental disorder of any age who attending primary health care centers and family medicine centers which belong to the left primary health care district.

Study design

A biometric descriptive study was conducted in order to achieve the aim of the present study in which the data was taken from the records present in statistical, integrated management of mental unit in left primary health care

district which responsible for all primary health care and family medicine centers in left side of Mosul city.

Period of the study and sample size

The actual period of data collection began from the 1st of June 2019 till 15th of September 2019 and the sample size was (11911) of all mental disorders who attending primary health care centers and family medicine centers during 2018 years only.

Tools of data collection

This study depends on number of cases (patients) of any age who have mental disorder during one year (2018) only.

Ethical acceptability

The protocol was approved by Ethical and Scientific Committee in Nineveh health sector; an agreement was also signed by the left primary health care district.

Result

This study revealed that the highest frequency of mental disorder was found in the age group 20-49 years [male 2607 (21.88 %), female 3793 (31.84 %)] and the lowest frequency of mental disorder was observed in the age group less than 5 years [male 97(0.81%), female 66(0.55%)], as shown in the table (1.1).

More over table (1.1) also shows that mental disorder are more frequently seen among female than male (56.5 % & 43.5 % respectively).

Table 1: Demographic characteristics and occurrence of mental disorder, Mosul, 2018

Age	Sex				Total No	%
	Male		Female			
	No	%	No	%		
Less than 5 years old	97	0.81	66	0.55	163	1.37
5-14 years old	480	4.12	427	3.58	907	7.61
15-19 years old	874	7.33	1049	8.81	1923	16.14
20-49 years old	2607	21.88	3793	31.84	6400	53.73
50-59 Years old	711	5.96	988	8.29	1699	14.26
More than 60 years	417	3.56	402	3.38	819	6.89
Total No	5186	43.5	6725	56.5	11911	100

Table (2) describes the frequency of mental disorders according age groups, it is clear from the table that the highest frequency of mental disorders are anxiety with total number in all age groups are (6848) with highest frequency

in age group 20-49 years old in female (2428) but in male (1802).

More over the table shows that only 97 of mental disorder is the total number of dementia cases.

Table 2: Frequency of mental disorder according age groups, Mosul, 2018

Mental disorder	Less than 5 years old		5-14 years old		15-19 years old		20-49 years old		50-59 Years old		More than 60 years		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
depression	3	1	47	59	193	245	500	1003	186	302	98	154	2791
anxiety	7	5	104	143	507	658	1802	2428	382	482	187	143	6848
psychosis	0	0	3	2	41	23	72	76	34	34	16	12	313
PTSD	2	3	32	23	36	59	70	134	32	88	20	14	513
Drug abuse	4	1	34	16	12	4	16	5	9	5	16	16	138
Developmental disorder & autism	66	42	224	157	43	18	20	27	19	16	5	5	642
Dementia	0	0	0	0	0	0	3	4	6	3	41	40	97
Epilepsy	9	12	30	25	34	31	115	84	34	28	25	6	433
Body dysmorphic disorder	6	2	6	2	8	11	9	32	9	30	9	12	136
Total	97	66	480	427	874	1049	2607	3793	711	988	417	402	11911

Prevalence of mental disorders calculated by using the following equation:

$$\text{Prevalence of mental disorders} = \frac{\text{No of cases with mental disorders}}{\text{No of total population in left district of Mosul city}} \times 1000$$

$$\text{Prevalence of mental disorders} = \frac{11911}{1094590} \times 1000 = 10.8817$$

Table 3: Prevalence of mental disorders, Mosul, 2018

Mental disorder	No	%	Prevalence in 1000 of population
depression	2791	23.43	2.55
anxiety	6848	57.49	6.26
psychosis	313	2.62	0.29
PTSD	513	4.31	0.47
Drug abuse	138	1.16	0.13
Developmental disorder & autism	642	5.39	0.59
Dementia	97	0.82	0.09
Epilepsy	433	3.61	0.40
Body dysmorphic disorder	136	1.14	0.12

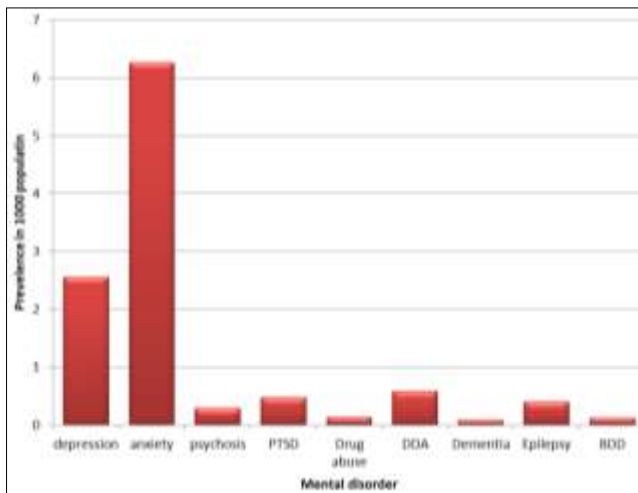


Fig 1: Prevalence of mental disorders, Mosul, 2018

Discussion

In this study, the maximum frequency of mental disorders was observed in the age group 20-49 years old(53.73 %), the lowest frequency was at the age group less than five years old(1.37 %). female patient represent (56.5%) while male patient formed (43.5 %)of all mental disorders among the study population.

These values of the results obtained by other researchers, Celine TM and Antony, in his 5 years retrospective study in India, found that the highest frequency of mental disorders were occurring in the age group (30-44) years old formed 36.6% of all mental disorders but lowest in the age group (10-17) years old, but mental disorder more in male more than female [2].

A study of public perception of mental health in Iraq, a random field research survey done by Sadik Sabah *et al*, revealed that highest frequency of mental disorders in age group (31-40) (32.54 %) and more in female than male [5].

A study by Alghadeer S M, a survey carried out at a centers of primary health care for a period of three months from June to august 2017 in Al-Riyadh city (Kingdom of Saudi Arabia), found that mental disorders more in male than

female with (60.6%) (39.4%) respectively and more in age group (36-55) years old (46.1%) [7].

In Sadik S *et al* study, The survey was carried out in 500 participants’ homes across 2 districts of Baghdad, highest frequency of mental disorder in age group 31-40 years old (32.54%) more in female than male and more in married marital stat while least in age group less than 20 years old (10.29%) [9].

In the present study a highest frequency of mental disorder is anxiety with total number (6848)(57.49%) and highest in age group (20-49)years old with(1802, 4228) male and female respectively, a second most common mental disorder is depression 2791 (23.43%) and also highest in age group (2,49) years old with (500, 1003) male and female respectively while least common mental disorder is dementia 97 (0.82%) and highest in age group more than 60 years (41,40) with male and female respectively.

This result is comparable to other study, Ghuloum S, found that highest frequency of mental disorder is depression account for (13.5%) of the patients, the second one is anxiety (10.3%) while least common mental disorder in this study is dementia (1.1%) which is across sectional study done from July-December 2009at the primary health care centers of the Supreme Council of Health, State of Qatar [10].

Comparable to the study in which the participants were selected from the French national cross-sectional multi-centric ECOGEN study, 20 613 patients were included in the study, the frequency of mental health disorders was 17.6% [CI 95% 17.1-18.1]. The main disorders were depressive disorders, anxiety disorders, sleep disorders, and substance abuse disorders.[11] In the present study a highest prevalence of mental disorder is anxiety (6.26 in 1000 population), the second prevalence of mental disorders is depression (2.55 in 1000 population), the prevalence mental disorder in left district Mosul city is (10.8817 in 1000 population).

A study of Mental disorder in primary care,by WittchenH-U *et al.*, found that The highest prevalence of mental disorder is depression (10.4%) and second common prevalence is anxiety (7.9%) [1].

A prospective cross-sectional study that included Qatari patients aged 18–65 years who attended the Primary Health Care (PHC), during the period from November 2011 to October 2012, using WHO-CIDI instrument. Revealed that more than one-third of the participants were in the age group 35–49 years (37.8%), followed by 18–34 years (34%), then 50–64 years (19.6%) and above aged 65 years old (8.5%), the highest prevalence of mental disorder is anxiety (10.4%) [13].

Conclusions

From the results of present study revealed that the highest frequency of mental disorder was found in the age group 20-49 years [female more than male] and the lowest frequency of mental disorder was observed in the age group less than 5 years [male more than female]. Mental disorder are more frequently seen among female than male in all mental disorders. the highest frequency of mental disorders are anxiety with total number in all age groups, the second common mental disorder is anxiety and least common mental disorder is dementia. The highest prevalence of mental disorder is anxiety, second is depression and least prevalence mental disorder is dementia.

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