

Incidence of the mental illnesses in Najaf governorate

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نسبة حصول الأمراض النفسية في محافظة النجف الاشراف

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الخلاصة

الخلفية: تعد وحدة الامراض النفسية في مستشفى الحكيم العام في محافظة النجف هي الوحدة الوحيدة إذ أنها تدعم مليوناً وثلاثمائة ألف مواطناً وقد فتحت عام ٢٠٠٧ وهي مكونة من عشرة أسرة - خمسة أسرة لكل من الجنسين - وقسم علاج جماعي وقسم علاج بالصدمة الكهربائية وقسم للمرضى العيادة الخارجية كما أنها تحتوي على أقسام دعم أخرى كصيدلانية وقسم تسجيل وقسم تخطيط الموجات الدماغية وردهة النشاط الاجتماعي. أما طاقم الوحدة فيتكون من باحثين اجتماعيين وطاقم تمريض مكون من أربعة أشخاص (احدهم ممرض نفساني) وصيدلاني تمريضي واثنين من الأطباء النفسانيين المختصين وطبيب أقدم نفسية وعامل خدمة. أن الوحدة النفسية هي مسؤولة عن الكثير من مهمات المتعلقة بالصحة النفسية لذا تهدف هذه الدراسة إلى تسليط الضوء على الحالات الجديدة للاضطرابات العقلية وما هي نسبة حصولها بين الناس.

الطريقة والأدوات: يتم جمع البيانات عن طريقين احدهما الزبائن المدونون في البرنامج الالكتروني في الحاسوب والآخر الزبائن المدونون في السجلات الطبية. ثم تحسب القيمة الإحصائية بعد أن يتم استبعاد الحالات غير المكتملة المعلومات والتي يمكن أن تؤثر على النتائج. أن نسبة حصول الامراض العقلية تحسب على أساس عدد الحالات الجديدة المصابة بالامراض العقلية خلال السنة (أي سنة ٢٠١٠) مضروباً في عدد ثابت ومقسوماً على عدد سكان محافظة النجف حسب قاعدة المعلومات دائرة صحة النجف لعام ٢٠١٠ وهو (١,٣٠٠,٠٠٠) شخص ناقصاً عدد حالات الإصابة المشخصة قبل عام ٢٠١٠. ثم بعد ذلك تدخل النتائج لغرض دراستها إحصائياً باستخدام برنامج spss 11.5 .

النتائج: من بين ٢١٧٨ من الحالات الجديدة التي تزور شعبة الامراض النفسية هناك ١١١٣ حالة (الذكور = ٦٧٧، الإناث = ٤٣٧) إصابة بالاضطرابات الذهانية أي ما يعادل ٥١% من مجموع حالات الجديدة وتعادل ٨٥,٦ حالة من كل ١٠٠٠٠٠ في السنة. أما حالات الاضطرابات العصابية وهي ٢٨٨ (الذكور = ١٨٢، الإناث = ١٠٦) أي ما يعادل ١٣% من مجموع الحالات الجديدة التي تمثل وجود ٢٢,١ من كل ١٠٠٠٠٠ في السنة. في حين الحالات الاضطرابات العاطفية وهي ٢٨٩ (الذكور = ١٤٥، الإناث = ١٤٤) أي بنسبة ١٣% من مجموع الحالات الجديدة والتي تمثل وجود ٢٢,٢ حالة من كل ١٠٠٠٠٠ في السنة وهنا لا يوجد فرق في نسبة الإصابة بين الذكور والإناث.

أما الاضطرابات السلوكية واضطرابات الاستخدام المواد فقد سجلت وجوداً منخفضاً (٣ و ١) على التوالي في كل ١٠٠٠٠٠ في السنة في حين سجلت نسبة وجود الصرع ١٨ حالة لكل ١٠٠٠٠٠ في السنة.

استنتاج: يتبين أن حالات الاضطرابات الذهانية لدى الذكور تشكل نسبة أعلى مما عليه في الإناث كما إنها تفوق نسبة الأنواع الأخرى من الاضطرابات النفسية والتي تم تسجيلها خلال عام ٢٠١٠ ولعل هناك عدة عوامل ترافق هذا التغير في مختلف نسب الاضطرابات النفسية.

الكلمات الدلالية: الاضطرابات الذهانية، الاضطرابات العصابية، الاضطرابات العاطفية، الاضطرابات السلوكية، الاضطرابات استخدام المواد، الصرع، نسبة حصول الأمراض، العراق.

Abstract

Background: Psychiatric unit in Al-hakeem general hospital is unique psychiatric unit in the Najaf province which support one million and three hundred of citizens. It's open in 2007 with 10 beds, group therapy, Electro convulsion therapy and outpatient departments as well as it is content another support divisions such as pharmacy, registration, electroencephalography (EEG) and patients social activity hall. The bed rooms consist fro 2-3 beds, five bed to each gender. The staff of psychiatric unit is consist of two social workers, four nursing staff (one of them is psychiatric nurse), one nursing pharmacist, two psychiatric specialist, one psychiatric senior office , one service employer. Psychiatric unit is responsible for many mental health objectives. The aims of this study is to highlight the new cases of mental disorders and its incidence among peoples.

key word: psychotic disorders, neurotic disorders, affective disorders, behavioral disorders, substance disorders, epilepsy incidence, Iraq.

Method and material: Data collection is done by two ways; one from software record clients and second from copybook registry, bias between two ways is counting and statistical value is calculated to excluded any unweight cases which effect the results. Incidence rate is calculated by a number of new cases of mental illness during year multiply by constant and divided by 2010 census data for the denominator population (1,300,000) of province minus number of already diagnosed with mental illness before 2010. Nonparametric statistic studies by use SPSS 11.5 soft ware are calculated.

Results: From 2178 of the new cases consulting to the psychiatric unit 1113 (male=677, female=436) were psychotic disorders with 51% of all new cases and represent 85.6 per 100000/year. Neurotic disorders with 13% of all new cases 288(male=182, female=106), represent incidence rate 22.1 per 100000/year. The affective disorders is 289(male=145, female=144), 13% with incidence rate 22.2 per 100000/year ,there is no significant value difference between male and female. The behavioral disorders and substance use disorders are recorded low incidence (3 and 1) per 100000/year respectively. While incidence rate of epilepsy is represent 18 per 100000/year.

Conclusion: Male mental illness reported higher rates of psychotic disorders than female and also more than other psychiatric disorders. Several factors could be found to be associated with heterogeneity among rates of different psychiatric disorders.

Background: Psychiatric unit in the Al-hakeem general hospital is unique psychiatric unit in Najaf province which is support one million and three hundred of citizens. It's open in 2007 with 10 bed of admission ,group therapy, Electro convulsion therapy and outpatient departments as well as it is content another support divisions such as pharmacy, registration, EEG and patients social activity hall. The bed rooms consist fro 2-3 beds, five bed to each gender The psychiatric unit is achieved by WHO as part of rebuilding of Iraq mental health service after Iraq liberation from Saddam regime and the cost is nearly 400,000 US dollars. Previously at Saddam regime, the mental health service is restricted by only outpatient department in Al-hakeem general hospital. The staff of psychiatric unit are consist of two social worker, four nursing staff (one of them is psychiatric nurse), one nursing pharmacist, two psychiatric specialist, one psychiatric senior office , one service employer.

Objectives of Najaf psychiatric unit:-

1. The unit is responsible for prevention, assessment , treatment, rehabilitation and follow up programs of psychiatric patients in province.
2. Management of acute psychiatric emergency.
3. Treat and follow up of child ,adult and geriatric patients in outpatient department.
4. Psychiatric unit is responsible for supplying medications to chronic patients.
5. Assess children before entrance the primary school
6. Consultation and licenses to many committees in the province.
7. Assess accused citizens .
8. Consultation to many pleading that is occur in province court.
9. Teaching the medical students of Kufa College of Medicine, students of technical medical institute and nursing school.
10. Responsibly for development of mental health services in the province via provided consultations to Najaf Health office.

Aims to study

Highlight the new cases of mental disorders and its incidence among peoples

Method and material

1. background

The psychiatric unit in al-hakeem general hospital is established treatment the mentally ill patients directly or that referred from primary healthcare units from all districts of Najaf province only. there is 10 beds for inpatients and outpatients department.

2. Data collection

The staff of registration department in the psychiatric unit are well training on access microsoft program 2003 whatever the data base related to clients are collect from 2-1-2010 to 31-12-2010 by access software 2003, we are comparing the data records in the software and patients registry in the copybook to excluded any bias. We found that 9010 visits were recorded during the above period, three of recorded visits were incomplete personal information were excluded, the reminding were 9007 visits compared with patients registry copybook.

3. Participants

The psychiatric interview and mental state examination were done to all recording clients in the outpatients department and diagnosis was done according to DSM-IV-TR by all psychiatrist without mention of comorbid disorder with exception of the behavioral disorder else most adult were dependence on substances as comorbid disorder. Management , psychopharmacological treatment and follow up was achieved to each client. The diagnosis and psychopharmacological treatment for each was recorded in patients registry copybook, access software registration program and pharmacy department.

4. Analysis

The clients were categorized to new case visit and recurrent case visit, the total eligible visiting during period between 2-1-2010 to 31-12-2011 were 9007 visits. The new cases were residence in the administrative boundaries of Najaf province and should be first time visit to psychiatric unit of Al-hakeem general hospital during this year. The recurrent visiting case is represent a client who have more than one visit to psychiatric unit for treatment or follow up. The age groups were divided into below 18, beteewn 19-65 and above 66 years according to data base of software, while age group were sent by report to mental health bureau in the Najaf health office as below 17 year and above 17 year. Also we are sent data through the most important monthly report to mental health bureau in Najaf health office depending on categorized of psychiatric illnesses according gender as follow; Psychotic disorders(which include schizophrenia, psychosis, brief psychotic reaction, psychotic depression, mania and monodelusional disorder, schizoffective disorders, puerperal psychosis). Neurotic disorder(which include general anxiety disorder, social phobia, non-specific phobia, panic attack, acute stress disorder, posttraumatic stress disorder and obsessive compulsive disorder. Affective disorder(which include major depressive disorder, depressive phase of bipolar affective disorder, manic phase of bipolar affective disorder, puerperal depression, grief reaction and dysthemia). Behavioral disorder(which include personality disorders and behavioral disorder). Substance use disorder(which

include all clients who are dependence on smoking, alcohol and illicit drugs, clients in drugs intoxication or in withdrawal symptoms). Other(which include epilepsy, learning disability, parkinsonism, psychosomatic disorder, attention deficit hyperactivity, autism, enuresis and other condition not mention above).

The monthly reports of the psychiatric unit show data base of psychiatric illness bias in 12 cases due to miss registries so the total numbers of visiting clients during 2010 were 8995 documented in the mental health bureau and as well as ministry of health. Documentation of agreement from Health Office of Najaf province is completed.

Incidence rate⁽¹⁾ is equal to the number of new cases of mental illness during year multiply by constant and divided by 2010 census data for the denominator population (1,300,000) of province minus number of already diagnosed with mental illness before 2010.

Incidence rate =number of new cases of mental illness X constant / (population of 2010 census data - number already diagnosed with mental illness before 2010)

Nonparametric statistic studies by use SPSS 11.5 soft ware are calculated.

Results

Table 1 show no significant of bias at (95% confidence interval 0.13-0.15, p-value=0.38) between total case visiting and total miss cases. There are significant difference between male and female in all group of mental illness as in table 2 is reveal, the psychotic disorders (male 31%, female 20% with odd ratio=1.93,chi=61,df=1,,p-value=0.000), the neurotic disorders(male 8%, female=5% with odd ratio=2.9, chi=40, df=1, p-value=0.000), the behavioral disorders(male 2%, female=0%, odd ratio=27, chi=51, df=1,p-value=0.000). the substance use disorders(male 1%, female=0%.with odd ratio=77, chi=23, df=1, p=value=0.005), the other psychiatric illness(male=12%, female=7%, odd ratio=3.6, chi=80. df=1, p-value=0.000) with except in the affective disorder at (95% confidence interval 0.81-1.19, male=7%, female=7%, chi=0.1, odd ratio=1.01 , p-value=0.9). Table 3 show the incidence rate of group of mental illness in general population of Najaf province. there is high rate of psychosis (85.6 per 100000/year), neurotic disorders(22.1 per 100000/year), affective disorders(22.2 per 100000/year). Behavioral disorders(4.3 per 100000/year). while substance use disorder SUD show low rate of incidence (1.5 per100000/year). The incidence rate of mental illness is common in male(103 per 100000/year) than female(64.5 per 100000/year). The incidence rate of "Other" psychiatric illness represent (31.8 per 100000/year) In current study the "Other" psychiatric illness are recognized as the following mental illness these are; epilepsy, learning disability, parkinsonism, psychosomatic disorder, attention deficit hyperactivity, autism, enuresis and other condition not mention. More than half cases(239 case) is count as epilepsy, while (140) cases are diagnosed under title "other", whatever the new cases of epilepsy is regard as significant number to stick by the total mental illness incidence it is represent 18 cases per 100000/year while cases which are count as other condition not mention is represent 11 cases per 100000/year.

Discussion

There are different studies around the world as shown in table 4 , the incidence rate of psychotic disorders is high (85.6) as compare with study of North England (30.9)⁽²⁾ and Stockholm (72)⁽⁵⁾. While the incidence rate of neurotic disorders is less as compared with studies in Canada(6.3 per 1000)⁽³⁾ and USA(1.57 per 100)⁽⁹⁾ and high as compared

with Netherlands(19.3)⁽⁷⁾ and other study in USA(17.2)⁽⁸⁾. The affective disorders, behavioral disorders and substance use disorders are less as compared with studies in Canada⁽³⁾, Swedish⁽⁴⁾ and Greece⁽⁶⁾ respectively. There are disparities in group of "Other" mental illness range from child , old and women psychiatric illness to neuropsychiatric , learning disability and developmental disorders from study to study so it is very difficult to found basic background of comparison value.

As compared with northern Tanzania⁽¹⁰⁾ the incidence including the last 5 years was 81.1/year per 100,000 while the average incidence across developed countries⁽¹¹⁾ has been estimated at 33.9/100,000 .

Psychological comorbidities such as anxiety, depression ⁽¹²⁻¹³⁾ and sleep disturbance ⁽¹⁴⁾ are common in people with epilepsy, and increase the risk of suicide ⁽¹⁵⁾. Lifetime prevalence estimates of major depressive disorder are as high as 17.4%, mood disorders 24.4% and anxiety disorders 22.8% in people with epilepsy, who were more than twice as likely than people without epilepsy to report such disorders ⁽¹⁶⁾. For this reason it should be count comorbid disorders as diagnosed in new case which titled as other in the official reports.

Conclusion

The international incidence of group of mental illness varies greatly between published epidemiologic reports. The variability associated with all illness is considerably smaller than the variability associated with individual disorders. Male mental illness report higher rates of psychotic disorders than female and also more than other psychiatric disorders. Several factors could be found to be associated with heterogeneity among rates of different psychiatric disorders, including diagnostic criteria, diagnostic instrument, sample size, and response rate and well as environmental factors, all these should be investigated carefully in separated researches.

Suggestion

Mental illnesses is a costly, stigmatized and neglected conditions. With the rapidly changing demographic and ethnic makeup of the Najaf population, a population based study of this conditions is timely.

There is a dearth of information regarding the incidence of substance use disorders, behavioral disorders and mental illness which categorized as "others" among special populations. We are need some research suggests that risk of such illnesses may be greater within certain subgroups, such as children, adolescent and residents of hospitals. Further investigation of these and other subgroups is required to identify concentrations of need and hasten the deployment of requisite services.

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Declaration of interest

None declared.

Table 1: Bias of cases

Cases	Number	%	bias
Total case visiting to psychiatric unit	9010	100.00%	
Total case diagnosis by psychiatric unit	9007	99.97%	
Total case sent to bureau of mental health	8995	99.83%	
Miss cases will not sent to bureau of mental health	12	0.12%	
Undiagnosed case by psychiatric unit	3	0.03%	
Total miss cases	15	0.16%	
95% confidence interval of bias			0.13 -0.15
standard deviation of bias			6.36
p-value			0.38

p-value < 0.05 is significant

Table 2: Gender difference of new mental illness cases visiting psychiatric unit

Mental illness	Male (%)	Female (%)	Total (%)	<i>Odd ratio</i>	<i>95% Confidence interval</i>	<i>Chi</i>	<i>df</i>	<i>P-value</i>
psychosis disorder	677 (31%)	436 (20%)	1113 (51%)	1.93	1.2-1.5	61	1	0.000
neurotic disorder	182 (8%)	106 (5%)	288 (13%)	2.95	1.4-2	40	1	0.000
affective disorder	145 (7%)	144 (7%)	289 (13%)	1.01	0.81-1.19	0.1	1	0.9
behavior disorder	47 (2%)	9 (0%)	56 (3%)	27	2.8-9.6	51	1	0.000
SUD	17 (1%)	2 (0%)	19 (1%)	77.2	2.27-31.8	23	1	0.005
Other	271 (12%)	142 (7%)	413 (19%)	3.6	1.6-2.2	80	1	0.000
Total	1339 (61%)	839 (39%)	2178 (100%)	2.5	1.5-1.7	229.5	1	0.000

p-value < 0.05 is significant

Table 3: Incidence of mental illness per 100000 of population

Mental illness	new case visit				Incidence of illness per 100000
	Gender		Total	%	
	Male	female			
Psychotic disorder	677	436	1113	51	85.6
Neurotic disorder	182	106	288	13	22.1
Affective disorder	145	144	289	13	22.2
Behavior disorder	47	9	56	3	4.3
SUD	17	2	19	1	1.5
Other*	271	142	413	19	31.8
Total	1339	839	2178	100	167.5
Incidence of illness according to gender	103	64.5	64.5	167.5	

*The Other represent number of case of epilepsy=239, learning disability=32, parkinsonism=0 psychosomatic disorder=0, attention deficit hyperactivity=0, autism=0, enuresis=2 and other condition not mention=140.

Table 4 : Compared current study with another international studies.

Authors, year of study, and study site	Mental illness					
	Psychotic disorder	Neurotic disorder	Affective disorder	Behavior disorder	SUD	Other
R. Reay 2010 Northern England ⁽²⁾	30.95 per 100000					
Jorgensen L and et al. Stockholm ⁽⁵⁾	72 per 100000	-----	-----	-----	-----	-----
JANE MURPHY 1988; Canada ⁽³⁾	-----	6.3 per 1000	2.5 per 1000	-----	-----	-----
Bijl R, 1998 Netherlands ⁽⁷⁾	-----	19.3 per 100000	-----	-----	-----	-----
Kessler and other 1994 USA ⁽⁸⁾	-----	17.2 per 100000	-----	-----	-----	-----
Anna kokkevi and other 2007 Greece ⁽⁶⁾	-----	-----	-----	-----	1.7 per 100	-----
Micheal and other 2005 Swedish ⁽⁴⁾	-----	-----	-----	3 per 100	-----	-----
BF Grant and other 2009 USA ⁽⁹⁾	-----	1.57 per 100	2.21 per 100	-----	0.31 per 100	-----
Current study	85.6 per 100000/y	22.1 per 100000/y	22.2 per 100000/y	4.3 per 100000/y	1.5 per 100000/y	31.8 per 100000/y

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