The Prevalence and Correlates of Common Mental Disorders in Dakahlia Governorate (Egypt)

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ABSTRACT

Background: Epidemiological studies of the prevalence of mental disorders in Egypt are rare and are needed for planning of health care delivery. **Objective:** to estimate the one year prevalence of common mental disorders in Dakahlia Governorate and its impact on disability and quality of life. **Method:** Using an Epidemiological sample frame, a random sample of 810 household adults (age 15-65 both sexes) in urban and rural areas were interviewed using the short Arabic form of the Present State Examination 10th revision (PSE-10). The level of disability and quality of life were also measured. **Results:** 64% of the sample were males, 63% resided in rural areas. A one year prevalence of mood (4.8%), anxiety (4.3%) somatoform and dissociative (1.4%) and psychotic (0.6%) disorders was found. A further 6.3% of the sample had subclinical symptoms. Females were more likely to have mental disorders than males (OR = 1.8). The quality of life and disability scores were significantly different in cases than in non cases (p<0.001). **Conclusion:** A representative randomized sample from 27sites in Dakahlia shows a prevalence of 10.6% of common mental disorders with significant disability and effect on the QOL. **[Egypt J Neurol Psychiat Neurosurg. 2011; 48(4): 375-381]**

Key Words: Epidemiological, one year prevalence, mental disorder, Egypt, PSE-10, disability, QOL.

INTRODUCTION

The world is suffering from an increasing burden of mental disorders and a widening treatment gap: about 450 million people suffer from a mental or behavioral disorder, yet only a small minority receives even the most basic treatment¹. Mental disorders are known to have a greater negative effect on role functioning than many serious chronic physical illnesses².

Epidemiological studies of the prevalence of mental disorders in Egypt are rare^{3,4}. Providing accurate data about the prevalence of mental disorders in the community would help to justify the allocation of scarce resources and planning of health services. The study aims at providing estimates of the magnitude of common mental disorders in the community of Dakahlia and to study the sociodemographic and socioeconomic correlates of these disorders as well as their impact on disability and quality of life.

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METHODS

The sample: This is a cross-sectional study of a random sample of household adults of both sexes aged 15-65 years residing in Dakahlia governorate in both urban and rural areas. The target sample size is 810 subjects. A Four-Stage randomization procedure was adopted as follows:

- **First Stage:** The sample size was determined based on the population size of the governorate.
- Second Stage: The Primary sampling Units (PSUs) of the 2008 Egypt Demographic Health Survey (EDHS 2008)⁵ were used as a frame for the survey. PSUs were selected randomly from both urban and rural units (proportional to size) and divided into parts then one part or two was selected from each PSUs.
- Third stage: Each randomly selected part was divided into smaller areas called segments of about 200 households in which a household listing was carried out. Two segments were selected from each PSU. A sample of 30 households was randomly selected by computer from each segment.
- **Fourth stage:** Within each household one adult (15-65 years) was randomly selected for the

assessment procedure. The survey excluded non household members for less than six months, such as the military, those in prison and people receiving long-term inpatient care. A person who refused to participate in the study was excluded and considered as non responsive and was

replaced by another responsive person till reaching the desired sample size (810 persons). Data was collected after taking informed consent from chosen people after discussing with them the aim of the study.

Table 1. Sample Allocation.

Population (age 15-65)	PSUs	Segments	No of targeted HH	Urban PSUs	Rural PSUs
3450000	14	27	810	5	9

HH House Holds, PSU Primary Sampling Unit

Instruments:

- Sociodemographic data of the family was collected.
- 2- The Present State Examination 10th revision (PSE-10) of the Schedules of Clinical Assessment in Neuropsychiatry (SCAN)⁶ has been translated into Egyptian colloquial Arabic by Hamdi and colleagues⁷. An abridged form of the Arabic version of the PSE-10⁸ was employed in the survey based upon the short English form of the PSE-10 that was translated and expanded by further questions from the Arabic version in the domains of psychotic disorders, somatoform and dissociative disorders, and mood disorders. The final version was back translated, tested during training of the field researchers, modified according to feedback and tested for reliability⁹.
- 3- Sheehan Disability Questionnaire (SDS)¹⁰: a brief self-report tool developed to assess functional impairment in three inter-related domains; work/school, social life and home life or family responsibilities on a 10 point visual analogue scale.
- 4- Socio Economic Level Questionnaire¹¹: an Egyptian scale developed to assess the social class of the patient according to education, housing, and income.
- 5- Quality of life scale¹²: (QOLS) contains 15 items representing 5 conceptual domains of QOL: physical and material well being, relationships with other people, social and civic activities, personal development, and recreation.

Training, Data Collection and Quality Control:

Interviewers were specialist psychiatrists with a minimum of four years experience. They received a standard training program that lasted 4 full days divided into 3 sessions and included assessment of cases at the end of each session. Fieldwork took 6 months between January and July 2010, for

completion followed by two months of Data entry. Quality control was implemented at various levels; two supervisors checked the questionnaires for completeness and consistency, regular meetings were held to review experience and discuss difficulties, and an extensive data review and cleaning process was conducted with quality check of the data entry twice on a random in 10 % of the cases. The operational definition for a case with mental disorder was any individual considered after the interview to be "likely" or "definitely" suffering from a specified mental disorder within the range of disorders studied in the past year. This includes persons who have been in remission for less than one year or whose symptoms have improved with treatment. Non cases were those who after completing the interview were considered "not likely to suffer from a mental disorder, those who experience sub clinical symptoms, or those who expressed no mental symptoms during the past year". This categorization of cases and non-cases with mental disorder is based upon the Present State Examination 9th Edition, Index of Definition ¹³.

Data Management and Statistical Analysis:

The data entry team handled the data sheets to ensure quality and standardization of the entered data. The statistical package for social science version 16.0 (SPSS) was used. Cases and non-cases were compared the sociodemographic variables studied. Categorical variables were presented as numbers and percentages. Chi square or Fisher Exact Test (FET) was used for comparing the groups as appropriate. Odds ratio and their 95% confidence intervals were calculated. Quantitative variables were presented as minimum-maximum and median. These variables were tested for normality distribution and found to be non parametric so Mann-Whitney test was used for group comparison. $P \le 0.05$ was considered to be statistically significant.

RESULTS

A sample of 810 households was approached in the study from which 141 (17.4%) could not be included (i.e. replaced by their next door) more than 63% of the sample are of rural residence. Males constitute 64%. The most frequent age group (25%) is 35-44 years and the mean age of the sample is 38.9+13.5. Seventy five per cent are either illiterate (25.2%) or can read and write (Table 1). The great majority of individuals studied (83.1%) have no or minimal symptoms of mental disorder while 6.3% exhibit subclinical symptoms and 10.6%, are either likely to be cases of mental disorder, definite cases, cases in remission, or cases undergoing treatment with variable degrees of symptom improvement (Table 2). It was found that the most frequent category of mental

disorders according to the index of certainty of the PSE-10 is mood disorders (4.8%), followed by anxiety disorders (4.3%) (Table 3). The most frequent diagnosis is the dythymic disorder (3.4%), followed by generalized anxiety disorder (1.7%), major depressive disorder (1.5%) and obsessive compulsive disorder (1.4%) (Table 4). Around 14% of all women have a mental health problem sufficiently severe to be considered a case of mental disorder, this figure compared to almost 8.5% of men. The difference is statistically significant (Table 5). The quality of life score for the ranged from 15-45 with a median of 31 for the cases compared to a median of 37 for noncases showed a statistically significant difference Table (6). The range for the global Sheehan disability scores for the cases is 12-30 while 0-24 for non-cases with a statistically significant difference (Table 6).

Table 2. Sociodemographic characteristics and Correlates of Mental Disorder of 810 household sample in Dakahlia.

	-	TOTAL D		CASE	NESS	GIGNIEIGANGE	
		TOTAL N=810	Percent of TOTAL	Non-case N (%)	Case N (%)	- SIGNIFICANCE TEST	OR (95%CI)
Sex	Male	518	64.0	474(91.5)	44(8.5)	2 60 B 0 000	r
	Female	292	36.0	250(85.6)	42(14.4)	$\chi^2 = 6.8$, P=0.009	1.8(1.1-2.9)
Age*	<25	140	17.3	130(92.9)	10(7.1)	$\chi^2 = 2.1$, P=0.2	r
	25- 34	202	25.0	178(88.1)	24(11.9)	$\chi = 2.1, P=0.2$	1.8(0.8-4.1)
	35-44	169	20.9	150(88.8)	19(11.2)	$\chi^2 = 1.5$, P=0.2	1.7(0.7-3.96)
	45-54	168	20.8	149(88.7)	19(11.3)	$\chi^2 = 1.6$, P=0.2	1.7(0.7-3.99)
	55+	128	15.9	116(90.6)	12(9.4)	$\chi^2 = 0.4$, P=0.5	1.3(0.5-3.5)
Residence	Rural	516	63.7	469(90.9)	47(9.1)		r
	Urban	294	36.3	255(86.7)	39(13.3)	$\chi^2 = 2.4$, P=0.12	1.4(0.9-2.3)
Marital status	married	624	77.0	556(89.1)	68(10.9)	•	r
	single	142	17.5	129(90.8)	13(9.2)	$\chi^2 = 0.4$, P=0.5	0.8(0.4-1.6)
	Others**	44	5.5	39(88.6)	5(11.4)	FET, P=0.8	1.1(0.4-2.9)
Education	illiterate	204	25.2	177(86.8)	27(13.2)		r
	read and write	51	6.3	47(92.2)	4(7.8)	$\chi^2 = 1.1, P = 0.3$	0.6(0.2-1.8)
	middle education	362	44.7	324(89.5)	38(10.5)	$\chi^2 = 0.96$, P=0.3	0.8(0.4-1.3)
	University & above	193	23.8	176(91.2)	17(8.8)	$\chi^2 = 2$, P=0.2	0.6(0.3-1.3)
Employment	Full time	392	48.4	358(91.3)	34(8.7)		r
status	Part time	114	14.1	100(87.7)	14(12.3)	$\chi^2 = 1.3$, P=0.2	1.5(0.7-2.98)
	House wife	199	24.6	173(86.9)	26(13.1)	$\chi^2 = 2.8$, P=0.09	1.6(0.9-2.8)
	Others***	105	13.0	93(88.6)	12(11.4)	$\chi^2 = 0.8$, P=0.4	1.4(0.6-2.9)
Socio-economic level	Very low	366	45.2	320(87.4)	46(12.6)		r
	Low	189	23.3	173(91.5)	16(8.5)	$\chi^2 = 2.1$, P=0.15	0.6(0.3-1.2)
	Middle	179	22.1	158(88.3)	21(11.7)	$\chi^2 = 0.1$, P=0.8	0.9(0.5-1.7)
	high	76	9.4	73(96.1)	3(3.9)	$\chi^2 = 4.8$, P=0.03	0.3(0.1-0.99)

OR Odds Ratio, CI Confidence Interval, X^2 chi square, FET Fisher Exact Test, r reference group

^{*3} missed subjects (total no is 807). ** Divorced, separated or widow. *** Unemployed, pension or student.

Table 3. Overall Scan -PSE- psychiatric morbidity (caseness) of 810 household sample in Dakahlia.

Caseness	Number	Percent	
No mental disorder	673	83.1	
Subclinical symptoms	51	6.3	
Likely a case	56	6.9	
Definite case	28	3.5	
Case in remission	1	0.1	
Case under treatment	1	0.1	
Total	810	100	

Table 4. Main categories of mental disorder according to index of certainty of 810 household sample in Dakahlia

Caseness		Somatoform and disorders dissociative		Anxiety, phobias obsessions and		Mood disorders		Psychotic disorders	
	No	%	No	%	No	%	No	%	
No symptoms	760	93.8	658	81.2	706	87.2	784	96.8	
Subclinical	39	4.8	117	14.4	65	8	21	2.6	
Probable case	7	0.9	34	4.2	25	3.1	4	0.5	
Definite case	4	0.5	1	0.1	14	1.7	1	0.1	
Total	810	100	810	100	810	100	810	100	

Table 5. Differential rates of mental disorders according to final diagnosis of 810 household sample in Dakahlia.

Diagnosis	Number	Percentage	
Generalized anxiety disorder	14	1.7	
Major depressive Disorder (single and recurrent)	12	1.5	
Obsessive compulsive disorder	11	1.4	
Conversion disorder	2	0.2	
Panic disorder	7	0.9	
Bipolar disorder (manic, depressed and mixed)	5	0.5	
Social phobia	1	0.1	
Schizophrenia	3	0.4	
Possession disorder	2	0.2	
Mixed anxiety depressive disorder	8	1	
Dythymic disorder	28	3.4	
Brief psychotic disorder	1	0.1	
Depersonalization	2	0.2	
Total	86	100	

Table 6. Impact of caseness on disability and quality of life of 810 household sample in Dakahlia.

		Sheehan Work/School	Sheehan Social Life	Sheehan Family	Sheehan GLOBAL	Quality of Life Score
CASE	Median	3.5	4	4	12	31
CASE	Minimum-Maximum	0-10	0-10	0-10	0-30	15-45
NON CASE	Median	0	0	0	0	37
	Minimum-Maximum	0-10	0-8	0-10	0-24	15-45
Mann-Whitney	Z	13.3	13.7	13.7	13.4	6.6
	P	≤0.001	≤0.001	≤0.001	≤0.001	≤0.001

DISCUSSION

The 12-months prevalence of mental disorders was found to be almost 1 in 10 respondents (10.6%). This figure is more or less similar to some reported by Ghanem and colleagues⁴ for some of the northern governorates of Egypt (11% for Alexandria, 11.5% for Giza and 13% for Ismailia). However, there are much higher rates reported from some other governorates in the same previous study (23.3% for Qualiobia and 24.9% for Fayoum). Ghanem et al.4 explained the increased risk of mental disorders in some governorates as a result of the poorer health services, which may be reflected in the greater numbers of undiscovered and/or untreated cases in these regions. Differences in lifestyle and ability to tolerate stress may also result in increased risk of mental disorders in some regions. In addition, the difference in the used diagnostic instrument (PSE-10 in our study and MINI-Plus in Ghanem study) may result in a different diagnostic sensitivity that let the prevalence to be different. This study can be also compared to the mental health survey conducted by Hamdi and colleagues³ for Upper Egypt governorates. It was found again that there are great differences among the governorates of Upper Egypt with an overall prevalence of 19 %. The sample characteristics of Upper Egypt are somewhat different from that of Dakahlia. In Upper Egypt 90% at least were of a very low socioeconomic standard (45% only in Dakahlia), 42.6% were illiterate (25% in Dakahlia) and only 26.2 % were full time employee (48.4% in Dakahlia). Hard living circumstances that were clearly represented in the Upper Egypt sample may explain the higher prevalence of mental illness in Upper Egypt.

Two comparable large-scale epidemiological studies of adult mental disorders in the Arab world; the 12-month Iraq Mental Health Survey (IMHS)¹⁴ estimate that was 13.6% and the WHO mental health (WMH) survey in Lebanon¹⁵ where lifetime and 12-month prevalence estimates were (25.8% and 17.0%). Both surveys used the CIDI. A critical point to be taken into consideration while comparing our survey with any of the WMH survey initiatives is that substance related disorders and impulse control disorders (sometimes also behavioral disorders) are assessed in the later while that is not the case in Dakahlia survey.

The prevalence of mental disorders varies widely among different countries. In the present study, the overall one year prevalence of 10.6% was similar to that of Israel (10%), Germany (11%) and Spain (9.7%). It was also comparable to Mexico (13,4%), Belgium (13.2%) and Netherlands (13.6%). The figure is higher than that reported from Nigeria (6%), China (7.1%), Japan (7.4%) and Italy (8.8%). The figure is much lower than those from USA (27%), France (18.9%), New Zealand (20.7%) and Columbia (21%) 16.

The findings of this study that the most prevalent psychiatric disorders are mood disorders and anxiety disorders (4.8% and 4.3% respectively) mean that approximately at any given year 1 in 10 individuals living in Dakahlia Governorate suffers from a clinically significant mood or anxiety disorder. Our results are supported by the previous findings obtained from other mental health surveys in Egypt indicating that mood disorders are the most common disorders and anxiety disorders are the second common disorders ^{3,4}.

Contrary to common conceptions based on clinical experience, the total caseload in the studied sample of somatoform and dissociative disorder did not exceed 1.4%. This figure is an intermediate one between that reported by Hamdi et al.³ (4.6%) and Ghanem et al.⁴ (0.7%). Psychotic disorder- as defined by the PSE-ICD system- one year prevalence was 0.6%, the majority of them suffer from schizophrenia. This figure again is an intermediate one between that reported by Hamdi et al.³ (1.8%) and Ghanem et al.⁴ (0.19%) and is comparable to what has been reported from Dubai (0.7%)¹⁷. The probability of an underestimated figure may be the result of cultural denial of psychosis because of the stigma related to that group of disorders.

The risk of mental disorder among women was over 1.8 times higher than among men, consistent with many reports from both developing and developed countries ^{18,19}. Apart from the possible biological factors which may explain the differences in all societies, in many developing countries women bear the brunt of the adversities associated with poverty: less access to education, physical abuse from husbands, forced marriages, fewer job opportunities and, in some societies, limitation of participation in activities outside the house²⁰. Hence, they should be more subject to strains and stress.

More than 63% of the households visited within this study were rural households, and there is no discernible difference in psychiatric morbidity in this study based on this demographic variable. In developing countries, the relationship between urban/rural residence and the prevalence of mental disorders is inconsistent. An early study in Egypt showed that depressive disorders were more prevalent in rural residents²¹. In contrast, in Latin America lower rates have been found in rural villages than in urban areas²². However, in our study, in Ghanem et al study⁴, in Hamdi et al study³ and in a similar study in the Islamic Republic of Iran²³, no differences were found between living in urban and rural areas where psychiatric disorders are concerned. In Dakahlia, many rural residents migrate to urban areas and this may create two matching communities with the same socioeconomic standards; as a consequence the urbanrural differences found by others may be masked.

A notable non-finding in this survey is the absence of the typically found inverse association between socio-economic status (SES) and the mental disorders which might mean that advantaged socio-economic position was incapable of protecting people from exposure to the enormous stresses on the Egyptian population due to various socioeconomic problems. This data is supported by similar finding both from other Egyptian studies^{3,4} and from other Arab epidemiological mental health surveys in both Iraq and Lebanon^{13,14}. Despite the previously mentioned finding, if we compare the extremes of the socioeconomic status we will find that very low socioeconomic standard group has three times the risk of developing a psychiatric disorder in comparison to the high socioeconomic standard group.

To the best of our knowledge, this is first mental health survey in both Egypt and the Arab world that try to search for the impact of psychiatric disorders on the quality of life and disability in an epidemiologic setting as most of previous research addressing these points were in clinical studies. It was found that there is a statistically significant affection of the quality of life for those diagnosed as cases in comparison to non-cases. This finding is in agreement with other studies from many parts of the world. These studies either didn't include a structured psychiatric interview but relied on self-report, or used a measure of psychiatric distress or depression screening questions. However, the substantial impact of psychiatric disorders was evident even when these crude measures were used²⁴. There was also a significant impact for psychiatric disorders on the disability measured by Sheehan disability scale. This was relevant as regard both the global disability and the disabilities related to the three subscales (work\school, social life and family). WHO health report²⁵ has estimated that over 20% of all years lived with disability (YLD) globally can be attributed to psychiatric conditions.

The results mentioned before should be interpreted in the light of the following limitations: First, the study was a cross-sectional study which didn't involve children under 15 years and those over 65 years. The study also excluded people who were homeless, institutionalized or prisoners. Most of these exclusions apply only to a small proportion of the population (except for the age considerations), yet it would be inappropriate to generalize our results. Second, systematic survey nonresponse (i.e., people with mental disorders having a higher survey refusal rate than those without disorders) or systematic non-reporting (i.e., recall failure, conscious non-reporting, or error in diagnostic evaluations) could lead to bias in the estimates of disorder prevalence. From what we know about non-response and non-reporting bias in other surveys²⁶, it is likely that disorder prevalence was underestimated at least to some extent because of

these biases. The response rate of 82.6 % in this study is acceptable but still can be associated with some underestimation of mental illness. Third, the study only assessed disorders thought to be common. A clear distinction has been remarked on in the literature between common and severe mental disorders, especially in the context of findings that the annual prevalence of common mental disorders exceeds 10 percent in many countries²⁷. Severe mental disorders (such as schizophrenia), have much lower prevalence and require specialized studies rather than multipurpose surveys to identify, and most likely require a separate policy-response.

The strengths of this study were using a valid and reliable structured psychiatric interview instrument (PSE-10) administered by trained specialist psychiatrist under supervision of consultant psychiatrists. This was administered to a representative randomized sample from 27 sites all over Dakahlia Governorate including both urban and rural setting with a wide range of age.

[Disclosure: Authors report no conflict of interest]

REFFERENCES

- WHO International Consortium in Psychiatric Epidemiology. Cross-national comparisons of the prevalences and correlates of mental disorders. WHO International Consortium in Psychiatric Epidemiology. Bulletin of the World Health Organization, 2000; 78: 413-26.
- Kessler RC, Frank RG. The impact of psychiatric disorders on work loss days. Psychol Med. 1997; 27: 861-73.
- 3. Hamdi E, Ramy H, Sabry N, Rakhawy Mo, Rakhawy Mu, Loza N. Psychiatric Morbidity in Upper Egypt: One Year Prevalence., Cairo: WHO EMRO Report available from the author. December, 2007.
- 4. Ghanem M, Gadallah M, Meky FA, Mourad S, El-Kholy G. National Survey of Prevalence of Mental Disorders in Egypt: preliminary survey. Eastern Mediterr Health J. 2009; 15 (1): 65-75.
- El-Zanaty F, Way A. Egypt Demographic Health Survey 2008(EDHS 2008). Cairo: Ministry of Health and Population, National Population Council. 2009.
- World Health Organization Division of Mental Health SCAN: Schedules for Clinical Assessment in Psychiatry, Version 2 Geneva: WHO, 1992.
- Hamdi E, El-Rashidi A, Amin Y, Halim Z, Askar M. The English-Arabic Version of the Present State Examination 10th Edition. Cairo: Unpublished Manual (available from the authors), 1995.
- Hamdi E, Sabry N, Rakhawy M, Ramy H, Rakhawy M. Present state Examination (Short English-Arabic Version). Cairo: (Unpublished manuscript), 2007

- Sabry N. Inter-rater reliability of the short Arabic form of the Present State Examination (PSE-10). Egypt J Psychiatry. 2009; 29 (2): 45-54
- Sheehan DV, Harnett-Sheehan K, Raj BA. The measurement of disability. Int Clin Psychopharmacol. 1996; 11(3): 89-95.
- Fahmy S, El-Sherbini A. Determining simple parameters for social classification for health research. Bull High Inst Pub Health. 1983; 23 (5): 1-14.
- Flanagan JC. Measurement of quality of life: current state of the art. Arch Phys Med Rehabil, 1982; 63 (2): 56-9.
- Wing JK, Cooper JE, Sartorius N. "Measurement and Classification of Psychiatric Symptoms: An Instruction Manual for the PSE and Catego Program. London: Cambridge University Press; 1974.
- Alhasnawi S, Sadik S, Rasheed M, Baban A, Al-Alak M, Othman A, et al.. The prevalence and correlates of DSM-IV disorders in the Iraq Mental Health Survey (IMHS). World Psychiatry. 2009; 8: 97-109.
- Karam EG, Mneimneh Z, Karam A N, Fayyad J, Soumana, Nasser S, et al. Prevalence and treatment of mental disorders in Lebanon: A national epidemiological survey. Lancet. 2006; 367 (9515), 1000-6.
- 16. Kessler RC, Aguilar-Galxiola S, Alonso J, Angermeyer MC, Anthony JC, Brugha TS, et al. Prevelance and severity of mental disorders in the world mental health survey intiative. In Kessler R C, Ustun TB. The WHO mental health surveys: Global perspectives on epidemiology of mental disorders, 1st Ed. New York: Cambridge University press; 2008.
- Abou-Saleh MT, Ghubash R, Daradkeh TK. Al Ain community psychiatric survey I. Prevalence and socio-demographic correlates. Soc Psychiatry Psychiatr Epidemiol. 2001; 36: 20-8.

- Awas M, Kebede D, Alem A. Major mental disorders in Butajira, South Ethiopia. Acta Psychiatr Scand. 1999; 100: 56-64.
- Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, Severity, and Comorbidity of 12-Month DSM-IV Disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 2005; 62 (6): 617-27.
- Patel V, Kleinman A. Poverty and common mental disorders in developing countries. Bulletin of the World Health Organization, 2003; 81 (8): 609–618.
- Okasha A, Khalil AH, El Fiky MR, Ghanem M, Abdel Hakeem R. Prevalence of Depressive Disorders in a Sample of rural and urban Egyptian Communities, Egypt J Psychiatry. 1988; 11:167 - 81.
- 22. Canino GJ, Bird HR, Shrout PE, Rubio-Stipec M, Bravo M, Martinez R, et al. The prevalence of specific psychiatric disorders in Puerto Rico. Arch Gen Psychiatry. 1987; 44 (8): 727-35.
- Noorbala AA, Bagheri YSA, Yasamy MT, Mohammad K. Mental health survey of the adult population in Iran. Br J Psychiatry, 2004; 184: 70-3.
- 24. Saarni SI, Harkanen T, Sintonen H, Suivisaari J, Koskinen S, Aromaa A, et al. The impact of 29 chronic conditions on health related quality of life: A general population survey in Finland using 15D and EQ-5D. Qual life Res. 2006; 15: 1403-14.
- WHO World Health Report. Mental health: new understanding, new hope. World Health Organization: Geneva, 2001.
- Eaton WW, Anthony J C, Tepper S, Dryman A. Psychopathology and attrition in the Epidemiologic Catchment Area Study. Am J Epidemiol. 1992; 135: 1051-9.
- WHO World Mental Health Survey Consortium. Prevalence, severity, and unmet need for treatment of mental disorders in the world health organization world mental health surveys. JAMA. 2004; 291 (21): 2581-90.

الملخص العربي

تهدف الدراسة إلى تقدير نسبة انتشار الأمراض النفسية الشائعة في محافظة الدقهلية وتأثيرها على العجز ونوعية الحياة باستخدام عينة احتمالية مستمدة من إطار العينة المجتمعية المستخدمة في التعداد السكاني لسنة 2008. تم مقابلة وتقييم 810 فرداً بالغاً من الجنسين (من سن ح60-65) منتقين عشوائيا من 810 بيت في 27 موقعاً في الريف والحضر باستخدام مقياس الحالة العقلية الراهنة (PSE 10). كما تم قياس مستوى العجز و تأثر نوعية الحياة. 64% من العينة كانوا ذكوراً و 63% يسكنون الريف. وكانت نسبة الانتشار السنوية لاضطرابات المزاج (4.8%) وانفطر (4.1%) وانفطر (4.1%) وانفلق (4.3%) واضطرابات الجسدنة والاضطرابات الانشقاقية (4.1%) والاضطرابات الذهانية (6.0%). كما عانت نسبة 6.3% من أعراض تحت إكلينيكية. عانت الإناث من الاضطرابات النفسية أكثر من الذكور (8.1 = OR). وكان العجز وتأثر نوعية الحياة أكثر شدة في المرضى مقارنة بغير المرضى. وقد خلصت الدراسة إلى أن نسبة انتشار الأمراض النفسية الشائعة في محافظة الدقهلية هي (10.6%) مقاسة في عينة مجتمعية ممثلة لمحافظة الدقهلية مع ازدياد العجز وتأثر نوعية الحياة لهؤلاء المرضى.