Prevalence of Depressive Disorders in a Sample of Rural and Urban Egyptian Communities

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ABSTRACT

This study met the criteria of community samples in which the respondents have been directly contacted. The prevalence of depression among selected sample of an urban and rural population were found to be 11.4% and 19.7% respectively. Adjustment disorder was the must common category of depression in rurals., while dysthymic disorder.was the most frequent diagnosis in urbans, Demographic data revealed that depression is more prevalent in the age groups (18 - 35 years). A high risk of depression was associated with female sex. The authors believe that such information will be necessary for planning mental health programs and for calculating the costs and allocations of health resources in the future.

INTRODUCTION

Depressive disorders constitute one of the major, mental health problems. The cross intracultural difference in aetiology, clinical features, course and outcome vary maximally in depressives,more than in any other mental illness (Frerichs et al., 1981). The published prevalence rates of depressive disorders have steadily increased during the last twenty years. Despite many methodological and socio-cultural influences, the increase seems to be real (Weyerer, and Dilling 1984).

Many scientists have asserted that the true prevalence of depressive disorders is rising due to noxious factors that characterize life in the present day societies (Garcia Alvarez 1986).

The prevalence of depression varies widely from one country to another, and depends upon samples, methods, measures and classifications used (Kivela, et al., 1988).

At the present time, the true frequency of depression cannot be found, and it is advisable as Gastpar stated, to close with the ancient Socrates, saying that we know many things about epidemiology of depression, but we also know that we do not know the truth (Gastpar 1986).

Epidemological investigations of depression face two major problems; incomplete or biased ascertainment of cases, and study population of limited size and variety (Babigian, et al., 1965).

A major progress in studies of epidemiology was made when standardized instruments or interviews were introduced which are more helpful than symptom check-lists which depend upon an artificial cut-off point that does not respect the individuality of the patient and they lead to an overestimation of depressive disorders (Gastpar, 1986). So it is generally agreed that the most valid diagnosis of clinical depression in the community are those made by psychiatrists (Comstock and Helsing, 1976).

Moreover, the use of an observer introduces observer variation, a phenomenon that plagues virtually the epidemiological studies (Zubin and Fleiss 1971).

Thus, the aim of this research was to find the prevalence of depressive disorders (as diagnosed by experienced psychiatrists) in selected samples of two Egyptian communities providing a contrast between a city and a rural area and to study what relationships we can demonstrate between depression and certain sociodemographic variables.

SUBJECTS AND METHODS

The study was conducted in a selected geographical area in Mounoufia Governorate. The sample was not designed to represent the whole Egyptian population. The rural area is a village (Kapher El-Bagour), which is one of the forty-eight villages belonging to El Bagour city.

The distance between it and Cairo is about 55 kilometres. It has approximately 5000 citizens living in about 400 houses.

The urban area is El Bagour city which has been industrialized within the last 25 years, it has a population close to 40.000 living in about 4500 houses. The city is about 65 kilometres from Cairo.

Sampling

A systematic random sample of individuals between (8-60 years) from both rural and urban areas were chosen for inclusion in the study, and an in - person household interview was conducted with each respondent. Of the 1813 individuals contacted in the village, 86% were interviewed (N0= 1560), the rest refused to cooperate with the research team. The response rate in the city was 75% (No = 1744) from a target population of 2375, 18% refused to be included in the study and 7% could not be reached at home to be contacted. The research team composed of four psychiatrists, one with a master degree who had had previous clinical experience, and three with a doctorate degree was helped by an expert in community health, and general practitioners of the local health offices in the investigated areas.

Informations for making diagnostic judgement were collected using the Modified Ain Shams Psychiatric Interview which is a semistructured psychiatric interview to record information about the subjects functioning, symptomatology and overall mental status with special emphasis on depressive symptoms, Diagnosis was carried out using the diagnostic criteria in the DSM-III (1980).

RESULTS

The Background Data:-

Data presented in (table I) are from the population which completed the psychiatric interview; those who refused or did not cooperate with the researchers were excluded. 77.2% of the respondents in the urban area were males compared with 67.2% of the rural area. Owing to the internal emigration, the urban sample is strickingly skewed towards the younger ages, 77.9% are between 18-25 years, compared to 57.7% of the rurals ($P< 0.01$). The high percentage of illiterates (25%) and those who received basic compulsory education (34.5%) in the village could be explained by the fact that they have to earn and work at an earlier an age to help their families in

agriculture. Those who were living in an urban community had a significant higher educational level than rurals (P<0.01). 57.2% were graduated from secondary school and universities.

Housing problems may be more prominent in the urban area, it is difficult to find a house, and to supply it with modern furniture, so that the percentage of those who remain unmarred is significantly higher in urban versus rural. Despite that Islam permits divorce, yet only 0.3% of the urban respondents compared to none of the rural areas were divorced, this because of the strong family ties in our culture and also because of the high costs of remarriage. 40% rurals were working in agriculture, 37% were considered professionals and 38.9% were students, housewives and unemployed subjects. The corresponding figures in the urban were 25% working in industry and contstruction, 8.5% professionals (P<0.01).

Table(I) : Demographic characteristics of the respondents

Item	Urban(no = 1744)		Rural (no = 1560)		Test used	P
Age:	18-25	46.21	29			
	77.9%		57.7%		x^2=99.2	
26-35	31.7		28.7			<0.01
36-45	15.9	%	21.8	%	df=3	
46-60	6.2	%	19.9	%		
Sex: males	77.2	%	67.2	%	x^2=2006	<0.01
females	22.8	%	32.8	%	df=1	
Education:						
illiterate	18.7	%	25	%	x^2=87.3	
						<0.01
prim.school		19.1	%	34	% df=4	
prep. school		5.4	%	5	%	
sec.school		45	%	28.8	%	
high education	12.2	%	6.7	%		
Employment:						
professionals	8.5	%	3.7	%	x^2=24.15	
						<0.01
semi-profess.	26.6	%	17.4	%	df=4	
skilled workers	17	%	6.5	%		
	25		40			
unskilled workers	8	%	33.5	%		
unemployed(students & H.wives)	39.9	%	38.9	%		
Marital status:						
single	47	%	26.2	%	x^2=80.48	
						<0.01
married	52	%	72.9	%	df=3	
widow	0.7	%	0.9	%		
divorced	0.3	%	0.0	%		

$x^2 = 65.9$
df = 1 P<0.01

Fig. 1 (a, b, c) shows that 11.4% of the urban community could be diagnosed according to the DSM III criteria as having depressive disorders compared to 19.7% of the rural population. The overall estimate of depression in both communities is 15.3%.

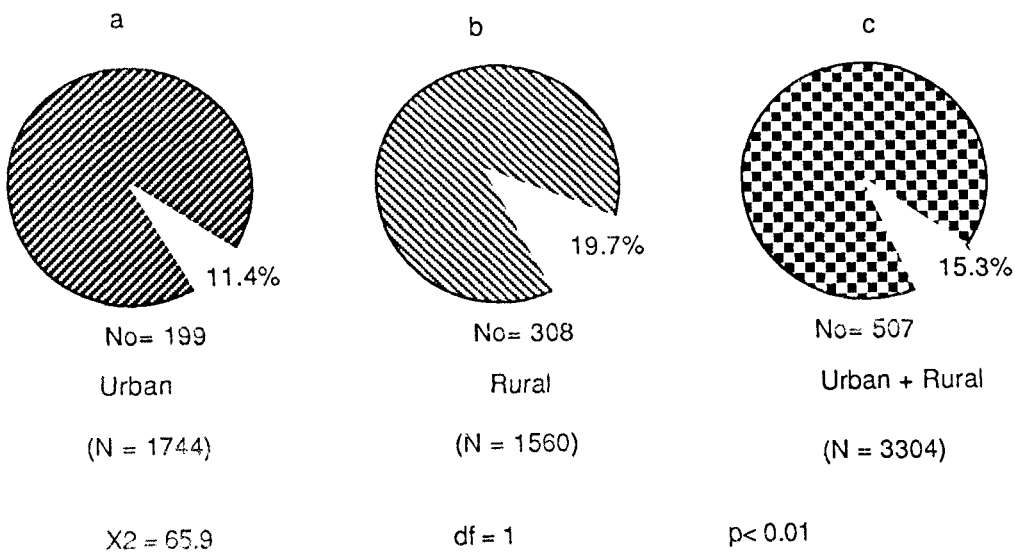

Table (2) : Category of depressive disorders

	Urban (n0 = 1744)		Rural (n0 = 1500)		Total (n0 = 3304)	
Maj.Aff.D.:	No	%	No	%	No	%
Bipolar	12	0.7	20	1.3	32	1
Maj.Dep.	20	1.2	31	2	51	1.5
Other specific Aff.D.						
Cyclothymic	16	0.9	30	1.9	46	1.4
dysthymic	71	4.1	85	5.4	156	4.7
Atypical Aff.D.	1	0.6	15	1	26	0.8
Adj.D.with dep. mood	57	3.2	1.4	6.7	161	4.9
Others	12	0.7	23	1.4	35	1
No Dep. illness	1546	88.6	1252	80.3	2797	84.7

The prevalence rate of depression is substantially higher in the rural area ($P<0.01$). Adjustment disorder was the most common category of depression in rurals, while Dysthymic disorder ranked as the first most common category of depression in the urban area. The percentage of Bipolar affective disorders in rural area is approximately.

Atypical affective disorder was quite uncommon in both communities.

Table III demonstrates that depressive illness as a whole is more prevalent in the age of 18-35 years. Those of urban population tend to suffer from depressive symptoms in a significant younger age than those of rural.

The occurrence of depression was associated with sex ($P<0.05$), being more common in urban females. There was a significant difference in the prevalence of depression between urban and rural. Data revealed that depression is more pronounced in the married, rural population.

There was no significant association between educational level and depression.

Table III shows that depression is more commonly prevalent in those who were graduated from secondary school than others ($P<0.05$). Those who are

unemployed, housewives and students, presented with depressive symptomatology more than other groups.

Table (3): percentage distribution of some demographic characteristics of the depressed subjects.

	Urban (n0 = 199)	Rural (n0 = 308)	Test used (n0 = 507)	P
Age group:			χ^2	
18-25	40%	22%	29%	
26-35	32%	28%	30%	
			df=3	<0.01
36-45	16%	25%	21%	
46-60	12%	25%	20%	
Sex :				
Females	70%	58%	63%	
			df=1	<0.05
Males	30%	42%	37%	
Marital status:				
Single	44%	22.5%	30.5%	
			df=3	<0.01
Married	54%	75.5%	67.5%	
Widow	1.3%	2%	1.8%	
Divorced	0.7%	0%	0.2%	
Education :				
Illiterate	19%	29%	25%	
			df=4	>0.05
Prim.school	19%	32%	27%	
Prep. school	7%	6.6%	6.6%	
Sec.school	42%	24.4%	31.4%	
University	13%	8%	10%	
Employment :				
Professional	10%	3%	6%	
			df=4	<0.01
Semi-profess..	29%	22%	25%	
Skilled	13%	7%	9%	
Unskilled	9%	17.5%	14%	
Unemployed (Students & H.wives)	39%	50.5	46%	

DISCUSSION

Prevalence of Depression.

Although several studies allover the world in varying populations have been carried out to estimate the prevalence of depression, but they are still far from being truly representative because of nosological and diagnostic controversies (Kielholz, Poldinger and Adams 1982).

By 1974, the World Health Organization (WHO) estimated that around 100 million people in the world were depressed (Sartorious 1975), but by 1983, that figure has risen to 200 million (Gulbinat, 1983).

The prevalence of depression varies from one country to another, the estimated life time prevalence in Europe ranged from 14-27% and in North America is 26.6% (Weissman and Myers 1978). In Argentina the point prevalence is 12.8%, Chile 15.3% Cuba 14.3%, Peru 12.6%, Mexico 19%, Colombia 10.8% (Garcia, 1986), in India 22.5% (Sethi and Gupta 1970) and (Shah, et al., 1980).

The overall estimates of depressive disorders in Egypt is 15.3%, the point prevalence seems to be not much higher than in third world countries. Blozer et al., (1985), and O' Hara et al., (1985), in Europe and North America and Dubey (1964) in India could clearly show that rural areas have a lower frequency in depressive disorders than urban, however, in our study, a striking observation deserve mention, that is the depressive disorders are commoner in rural than in urban population (19.7% and 11.4% respectively).

Results indicate that a major change has taken place in our rural community. The current socioeconomic situations, the emigration of the young population to cities, the changing social values, the tendency for individualization and the rapid civilization of the rural areas, may be important determinants of this high rate.

Demographic Characteristics of Depressed Subjects:

The prevalence of depression was higher in women than men 63% compared to 37%. Our culture generally accepts a greater expression of the feeling among females than among males, cultural norms restrict men in the affective behaviour and make it less socially desirable for men than women.

Rural females expressed less depressive symptoms than urban females who have to face multiple duties, different role functions and problems arising from the pseudo-emancipation of women and the dominance of the oriental man.

Venkoba-Rao (1978) found that Indian rural females remain occupied in their house-hold activities and intrafamily attachments which continue to protect them from depression more than urban women.

Our results are not far from those of Wartheit, et al., 1973, Biumenthal, 1975 and Frerichs, et al 1981. Findings about the relationships between age and depressive symptoms have been inconsistent. Weissman, 1(988) found that the rates of moderate depression were higher in younger women and tended to decrease with age, the opposite pattern was found for men, where the prevalence of depression was lower in young men and increased with age.

We are in substantial agreement with Silva Reisco 1985, who found that the prevalence of depression is slightly higher in the younger age group due to the increased ambition, rising expectations and aspirations with inability of fulfilling these wishes.

It is clearly apparent from table III that the rates of depression were high in the youngest age group (18-25 years) in the urban community and tended to decrease with the increase of age, while in the rural community the rates of depression did not differ greatly among various age groups being slightly higher in the older age group.

Paykel et al. 1970, and Winkur 1973 stated that the association between age and depression in epidemiologic studies is most probably due to methodological artifacts than a true reflection of increase in depressive spectrum disease.

There is little agreement on the relationship of marital status to depression (Silverman, 1963). To the contrary of Comstock and Helsing (1976), who found that marriage was associated with markedly decreased levels of depression, the authors found in the present study that rates of depression were significantly higher in the rural married individuals ($P<0.01$). Depression rates in the single urban subjects were found to be approximately double that of the single rurals. Findings let one wonder to what extent differences among

the study communities in the association of marital status with depression might be accounted for by the stresses afforded by marriage.

A number of studies have found a greater frequency of depression among the well-to-do (Silverman, 1968) but this is not universally true (Pederson et al. 1972). The major population based studies that have looked at depression and socio-economic status have been unanimous in findings that symptoms related to depression are least common among the upper socio-economic group (Strole et al. 1962). A notable but not surprising expectation was the high frequency of depressed persons among the educated professionals and semi-professionals, this is because the recent social changes that take place in our Egyptian community, education or high professional occupation do not guarantee high income, this discrepancy may be of course a major source of frustration.

Category of Depression and Clinical Profile

1.9% of the urban population were labeled the diagnosis of major affective disorder according to the DSM III criteria compared to 3.3% of the rurals. The total prevalence is 2.5%.

Dysthymic disorder was the most common diagnostic category in the urban population 4.1% while adjustment disorder with depressed mood was more frequently encountered in rural population (6.7%).

The cross cultural comparison between western population and ours revealed starling differences. As was found previously in Egypt by Okasha (1977), and Gawad and Arafaa (1980) depression is manifested mainly by agitation, somatic symptoms, by hypochondriasis, and physiological changes such as decreased libido, anorexia and insomnia, but this is not characterized by early morning awakening. Symptoms such as ideas of guilt, sin and reproach are not common in our community. The expression of depressed mood is not a common feature, Egyptian subjects are unable to verbalize their mood and translated their feelings to body language. They mask their affect with multiple somatic symptoms which occupy the foreground and the affective component of their illness receeds in the background. Accordingly they either resort to the general practitioner or the primary health care physician asking unneeded investigations which cost a lot for a developing

country or they asked the traditional healers to alleviate their sufferings. A considerable number did not ask help at all especially in rural population in which absceintism from work or inability to face day to day affairs are not much criticized by their community. Thus somatization of depression is thought to be due to culturally determined attitudes, conventions, and social stigmata.

It seems that efforts to train the general practitioners and the primary health care physicians should be a major strategy of the mental health programs in an attempt to reduce the pain of sufferers of depression and to minimize the irrelevant costs and the decreased productivity caused by depressive disorders in our developing country.

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LA PRÉVALENCE DE LA DÉPRESSION DANS ÉCHANTILLON REPRÉSENTANT UNE COMMUNAUTÉ ÉGYPTIANNE RURALE ET UNE AUTRE URBAINE

ABSTRAIT

Cette étude satisfait les critères des échantillons de communauté donc les répondeurs sont directement contactés. La prévalence de dépression a été éstimé d' être 11.4% et 19.7% dans l' échantillon rural et urbain respectivement. La sous-categorie diagnostique la plus frequente dans le premier groupe était les désordres d' ajustment tandis que désordres dysthymiques présentaient plus fréquemment dans le deuxième. Les informations déographiques ont clarifié que l'âge d'atteinte était entre 18 et 35 ans avec une prépondérence chez les femmes. Nous croyons que notions sont nécessaires pour organiser des programmes de santé mentale ainsi que calculer les frais et les sources des allocations sanitaires.

الموجز

نسبة أنتشار اضطرابات الإكتئاب في عينة من مواطني مصر في الريف والحضر

هذه الدراسة جاءت محققة لمعايير العينات البيئية والتي تم فيها الإتصال بأفراد البحث مباشرة. وضمن العينة المختارة وجد أن اضطرابات الإكتئاب تنتشر بين ١١.٤٪ من مواطني الحضر و ١٩.٧٪ من مواطني الريف وأن اضطراب التكيف كان الصنف الأكثر حدوثاً بين اضطرابات الإكتئاب في الريف، بينما كان اضطراب عسر المزاج أكثر التشخيصات تكراراً في الحضر. وقد أوضحت معلومات الدراسة الإحصائية لهؤلاء السكان أن أوسع انتشار للإكتئاب كان في فئة العمر بين ١٨-٣٥ سنة وكانت الإناث محفوفات بارتفاع خطر الإصابة. ويعتقد الباحثون أن هذه المعلومات سوف تكون ضرورية عند التخطيط لبرامج الصحة العقلية ولحساب التكاليف والحصص من موارد البرامج الصحية مستقبلاً.