Depressive Illness in the Elderly Psychosocial and Demographic Study

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Sociodemographic, clinical and psychometric assessment of 24 elderly patients with late onset depression and 22 middle aged depressed patients demonstrated that elderly persons were more likely to suffer from a single episode of depression often precipitated by stressful life events. Middle aged depressives were more likely to suffer recurrent episodes of relatively more severe depression. Few differences in symptoms emerged between geriatric depressives and their younger counterparts, these involved: greater self blame and suicidal ideation in middle aged patients and greater weight loss, somatic preoccupation, hypochondriacal worries and psychomotor retardation in the elderly. Agitation and paranoid symptoms long thought to be typical of elderly depressives did not emerge as hallmarks of elderly depressed patients in the present study. Psychotic features did not distinguish the elderly depressives from their younger contemporaries. The findings of the present study indicated that neuroticism and stressful life events were important underlying factors in evolution of depressive illness in the elderly.

(Egypt.J. Psychiat.,1993, 16: 68-76).

Introduction

Depressive illness is common in the elderly and has recently become the focus of much research. It is generally believed that depressions in the elderly display special characteristics: greater agitation (Winokur et al., 1973), a high number of somatic symptoms (Saltzman & Shader, 1978), suspicious attitude and ideas of reference (Placidi et al., 1984), and a tendency to chronic evolution (Kukull et al., 1986). In Egypt, Shaheen and Rakhawy (1971) stated that depression in elderly is not usually associated with guilt and suicide. However, foreign literature considers suicide as a high risk even among mildly depressed elderly (Brink, 1977; Kolb & Brodie, 1982 and Fawzy, 1982).

There is evidence that adverse life events occur with greater than chance frequency where there is depression in younger patients (Paykel et al., 1969; Brown et al., 1973) and that similar factors contribute to the onset of depression in old age (Murphy, 1982). Post (1978) pointed out that the kind of life events shortly preceding nearly 80% of depression, are the common experiences of all old people. The present study is a trial for reassessment of some controversial points regarding psychosocial

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and demographic aspects of late onset depression and determination of its characteristics and salient features.

Subjects and Method

A sample of 46 patients with major depressive illness was selected from outpatient clinic and in-patient Psychiatric Department of Mansoura University Hospital. Diagnosis was done according to the criteria described by DSM III R (American Psychiatric Association, 1987).

Patients were divided into two Groups

Group I: Comprised 24 elderly patients with mean age 63.14 ± 2.34 (16 females and 8 males), suffering from late onset depression (onset of first episode above the age of 60 years). 14 patients were married, 2 divorced and 8 widowed. Social standard was of average level in 8 patients, below average in 12 and above average in 4. Positive family history of affective disorders was encountered in 2 patients.

Group II: Comprised 22 middle aged depressed patients with mean age 36.27 ± 4.18 (14 females and 8 males). 10 patients were married, 5 divorced and 3 widowed. Social standard was of average level in 7 patients, below average in 10 and above average in 5. Positive family history of affective disorders was encountered in 4 patients. No statistically significant difference was found between the two groups regarding sex distribution ($x^2 = 0.05$, $p > 0.10$), marital status ($x^2 = 3.48$, $p > 0.10$) or social standard ($x^2 = 1.61$, $p > 0.10$).

Patients with pre-existing or concurrent dementia, established neurological diseases or serious physical disabilities were excluded.

The whole sample was subjected to the following study:

1) Clinical psychiatric examination.

2) Psychometric assessment including

a- Beck Depression Inventory (Beck, 1967 and Griest & Griest, 1979).

b- Life Events Questionnaire (LEQ): (Horowitz et al., 1977). The short form of this questionnaire consists of 37 items grouped into 7 sets: death of a loved one, change in a relationship, other changes, work changes, illnesses or injuries, legal or financial troubles and moves. The items represent life changes, both positive and negative, found stressful by some people.

Subjects would have, for each discrete event, five columns for time periods to check how long it happened. In the weight assignment system that leads to single presumptive stress score, remote events have less influence than recent events.

C) Eysenck Personality Inventory (EPI): the Arabic Version of Gaber & El-Eslam (1971) was used.

3) Medical and Neurological examinations were done and occasionally brain CAT scan was required for diagnosis of established neurological diseases or serious physical disabilities.

Statistical Analysis

As appropriate, the Chi square test, Student t test for comparison of independent samples means (Surwillo, 1980) and t test for comparison of independent samples proportions (Koenker, 1976) were used.

Results

Depressive illness in the elderly is more likely to present in the form of single episode characterised by: hypochondriacal worries, psychomotor retardation

Table 1
Features of Depression in the Elderly and Middle Aged Patients

Characteristics	Elderly Depressed. Pat. (24)		Middle Aged Pat. (22)			
	No	%	No	%	X^2	Sig
Number of previous depressive episodes						
-No / or one.	18	75	5	22.72	12.55	p <0.001
-More than one.	6	25	17	77.27		
Duration of illness						
-> 24 months.	8	33.33	15	68.18	5.58	p < 0.02
-< 24 months.	16	66.66	7	31.18		
Psychomotor Retardation	18	75	10	45.45	4.21	p < 0.05
Agitation.	6	25	12	54.54	4.21	p < 0.05
Hypochondriasis.	13	53	8	37	1.47	p > 0.10
Psychotic symptoms	2	8.33	3	13.63	0.61	p >0.10
- Congruent to mood.	1	4.16	2	9.09		
- Incongruent to mood.	1	4.16	1	4.5		

Table 2
Mean Scores of Beck's Depression Inventory (BDI) in Depressed Elderly and Middle Aged Patients.

B.D.I. Scores	Elderly Dep. Pat. (24) Mean ± S.D.		Middle Aged Dep. Pat. (22) Mean ± S.D.		Sign. t
1 - Sadness.	1.63	0.56	2.26	0.42	4.24**
2- Pessimism.	1.77	0.63	1.36	0.51	2.38*
3- Sense of failure.	0:71	6.51	0.95	0.63	0.18
4- Dissatisfaction.	0.94	0.45	0.79	0.61	0.92
5- Guilt.	0.89	0.71	1.23	0.47	1.89
6- Sense of punishment.	0.61	0.34	0.93	0.41	2.80***
7- Self dislike.	0.92	0.42	0.89	0.56	0.20*
8- Self accusation.	0.68	0.34	1.69	0.61	6.70**
9- Suicidal ideas.	0.74	0.39	1.74	0.33	9.21**
10- Crying.	1.32	0.48	1.81	0.63	2.88***
11- Irritability.	0.92	0.62	1.14	0.71	1.09
12- Social withdrawal.	1.02	0.37	0.98	0.44	0.33
13- Indecisiveness.	0.87	0.46	0.79	0.57	0.51
14- Body-image change.	0.79	0.57	0.87	0.31	0.59
15- Work difficulty.	0.91	0.49	1.15	0.62	1.42
16- Insomnia.	1.35	0.72	1.46	0.43	0.62
17- Fatiguability.	1.13	0.56	1.76	0.67	3.37****
18- Loss of appetite.	1.05	0.81	1.32	0.51	1.34
19- Weight loss.	1.93	0.42	0.85	0.49	7.81**
20- Somatic preoccupation.	1.85	0.35	0.84	0.61	6.65**
21- Loss of libido.	0.97	0.63	1.86	0.43	5.51**
Total Scores	22.58 ± 9.66		28.31 ± 10.17		9.12**

* $p < 0.05$ *** $p < 0.01$
** $p < 0.001$ **** $p < 0.002$

Table 3
Severity of Depression in Elderly and Middle Aged Patients, Using Total Scores of (BDI.)

Total Scores of (BDI)	Elderly Dep. pat. (24)		Middle Aged pat. (22)	
	No	%	No	%
Normal Range (0 - 12)	0	0	0	0
Mild Depression (13 - 20)	3	12.5	1	4.5
Moderate Dep. (21 - 30)	13	54.1	9	40.9
Severe Dep. (31 +)	8	33.3	12	54.5
Total	24	100	22	100

$X^2 = 2.45$ $p > 0.10$

Table 4
Results of Eysenck Personality Inventory (EPI) in Elderly and Middle Aged Patients.

	Elderly Dep. Pat. (24)		Middle Aged Pat. (22)		t
	No	%	No	%	
Lie scale					
0 +	21	87.5	18	81.81	
4 +	3	12.5	4	18.18	-
Extraversion scale	21	100	18	100	
0 +	14	66.6	11	61.1	
12.07 +	7	33.3	7	38.8	
M ± S.D.	10.45 ±3.17		11.27 ±2.35		0.902*
Neuroticism scale	21	100	18	100	
0 +	6	28.57	6	33.33	
9.07 +	15	71.42	12	66.66	
M ± S.D.	14.62 ±4.36		12.69 ±2.87		1.611*

* P > 0.05 (non Sig.).
N.B. In each group results of patients with high lie scale on EPI were discarded.

Table 5
Total Scores of Life Events Questionnaire in Elderly and Middle Aged Depressed Patients

Total Scores	Elderly Dep. Pat. (24)		Middle Aged Pat. (22)	
	No	%	No	%
No life crisis (0 - 149)	1	4.1	14	63.6*
Mild to moderate life crisis (150 - 299).	13	54.1	6	27.2**
Major life crisis (300 +)	10	41.6	2	9.09***
Total Number	24	100	22	100

* $t = 5.396$ $p < 0.001$
** $t = 1.934$ $p > 0.05$
*** $t = 2.760$ $p < 0.01$

Table 6
Different Items of L.E.Q. in Elderly and Middle Aged Depressed. Patients.

Items of L.E.Q.	Elderly Dep. Pat. (24)		Middle Aged Pat. (22)		
	No	%	No	%	t
1.Death of loved person	9	37.5	3	13.63	1.941*
2.Marital problems or change in familial relationship	3	12.5	6	27.27	1.268*
3.Work changes	4	16.6	2	9.09	0.770*
4.Financial troubles	10	41.6	7	31.81	0.693*
5.Major illness of the patient or one of his near relatives	5	20.8	1	4.54	1.730*

* $p > 0.05$

and weight loss. Agitation, psychotic features and chronicity did not emerge as salient features of elderly depression (Tables 1 and 2).

Both middle aged and elderly depressives showed the full spectrum of severity of depression, however elderly group was less severely depressed (Table 3).

Increased neuroticism and introversion were found among both middle aged and elderly depressives (Table 4).

Life events particularly death of dear person or financial troubles precipitated the onset of depressive episode in majority of elderly patients (Tables 5 and 6). Yet, the difference from the middle aged depressives did not reach statistical significance.

Discussion

Depression was reported by several studies to be the most frequent psychiatric problem and the single commonest symptom found in older persons (Kleh et al., 1978; Brandon, 1979). It was found that 30% of persons over the age of 65 might be expected to experience an episode of depression severe enough to interfere with daily function (Fikry et al., 1982). Geriatrics are not only prone to depression but also to memory deficits, intellectual deterioration, cognitive impairment and pseudodementia (Rashed et al., 1987). In the present study neurological, psychiatric examinations and occasionally brain CAT scan were required to exclude patients with pre-existing or established neurological diseases.

It is generally believed that depression in the elderly displays special characteristics: greater agitation (Winokur et al., 1973), atypical and masked features (Goldfarb, 1967; Finlayson & Martin, 1982; Shamoian, 1985), a high number of somatic symptoms (Saltzman & Shader, 1978; Nielsen & Williams, 1980; Winokur et al., 1980; Katon, 1982) and hypochondriacal worries (Gurland, 1976; Goldstein, 1979; Steuer et al., 1980; Busse & Blazer, 1980; Pichot & Full 1981), a suspicious attitude and ideas of reference (Placidi et al., 1984) and a tendency to chronic evolution (Kukull et al., 1986).

In the present study chronicity of depression was not related to old age. It is possible that the clinical picture of greater chronicity of depression in old age

previously reported in the literature was derived from clinical samples in which depressions have been mixed with other psychiatric and physical disorders.

It is also noteworthy that the psychomotor differences were in the opposite direction from predictions in the literature, and that agitation and paranoid symptoms, both thought to be typical of elderly depressives (Saltzman & Shader, 1978; Goldstein, 1979 and Steuer et al., 1980) did not emerge as hallmarks of elderly depressed patients in the present study. Psychotic features did not distinguish the elderly depressives from their younger contemporaries. Furthermore, our elderly depressives rather than being agitated, displayed greater motor retardation. It would appear that the classic clinical description of agitated depression in old age was based on more severe inpatient depressive samples, or the inclusion of out-patients with mixed anxiety and depressive disorders.

Few relatively minor differences in symptoms emerged between geriatric depressives and their younger counterparts: these involved greater self-blame and suicidal ideation in the younger patients and greater weight loss, somatic preoccupation and hypochondriacal worries in the elderly.

Stressful life events were more likely to precipitate depression in introverted and in those with excessive neuroticism (Burvill et al., 1989).

Research over many years suggested that there was a strong association between stressful life events and the onset of depressive illness. Brown & Harris (1978) argued that the association was in fact a causal link. They found that in 68% of onset cases of depression among adult women in the community, at least one severe life event was reported for the 38 weeks before onset, compared with 20% of normal women in a comparable period of time.

Brown & Harris (1978) established these findings using the Bedford life Events and Difficulties Schedule. Post (1972) wrote that, in his experience, most depressive illness in elderly people appeared within few days, weeks or months of some outstanding or incisive occurrence in their lives. Murphy investigated the association of life events with the onset (Murphy, 1982) and the outcome (Murphy, 1983) of depression in the elderly. She found that difficulties, especially those involving personal health, had a strong association with both the onset and the outcome of depression in the elderly.

It is clear that early onset depressed patients can continue to become depressed until a later age and conversely that some people can reach a fairly old age before first becoming depressed. Late onset depression occurs in those who survived into old age without developing depression at an earlier age. Hence, it is reasonable to postulate that they need something extra to precipitate depression after having lived for most of their long life without the occurrence of any depressive illness. It is quite likely that the occurrence of these precipitants, especially if they are life crises increases with age. In the present study there was a significantly greater number of life events in elderly with late onset depression. Stressful life events, particularly death of dear person or financial troubles precipitated the onset of depressive episodes in majority of patients. Both middle age and late onset depression in elderly showed the full range of severity of depression,

however the late onset group was clearly less severely depressed judged by Beck's depression inventory scores.

References

American Psychiatric Association (1987). Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised Form (DSM III R). Washington: American Psychiatric Association.

Beck, A.T. (1967): Depression, Clinical, Experimental and Theoretical Aspects. London: Staples Press. P. 333 - 338.

Brandon, S. (1979): The organic psychiatry of old age. Recent advances in clinical psychiatry. Granville-Grossman, K., ed. Vol. III. Edinburgh: Churchill Livingstone. P. 135 - 56.

Brink, T.L. (1977): Depression in the aged: Dynamics and treatment. *J. Nat. Med. Assoc.*, **69** (12): 891 - 3.

Brown, G.W.; Sklair, F.; Harris, T.O. (1973): Life events and psychiatric disorders. Part I. Some methodological issues. *Psychol. Med*, **3**: 74 - 87.

Brown, G.W. and Harris, T.O. (1978): Social Origins of Depression: A Study of Psychiatric Disorder in Women. London: Tavistock.

Burvill, P.W.; Hall, W.D.; Stampfer, H.C. and Emmerson, J.P. (1989): A comparison of Early-Onset and Late Onset Depressive illness in the Elderly. *Brit. J. Psychiat.* **155**, 673 - 679.

Busse, E.W. and Blazer, D.C. (1980): Disorders related to biological functioning. Handbook of Geriatric Psychiatry. New York: Van Nostrand Reinhold.

Fawzy, M.H. (1982): Depression in elderly medical outpatients. Paper presented to ICMHE, Cairo.

Fikry, E.; Rashed, S. and El-Gueneidy, M. (1982): Depression and anxiety in a geriatric population. paper accepted in *J. of High Institute of Public Health* Alex. Univ.

Finlayson, R.E. and Martin, L.M. (1982): Recognition and Management of depression in the elderly. *Mayo Clinic Proceedings*, **57**, 115 - 120.

Gaber, A.C. and El-Eslam, M.F. (1971): Eysenck Personality Inventory (Arabic Version) Cairo: Dar El-Nahda.

Goldfarb, A.I. (1967): Masked depression in the old. *Amer. J. Psychother*, **21**, 791 - 903.

Goldstein, S.E. (1979): Depression in the elderly. *J. Amer Geriatric Society*, **27**, 38 - 42.

Griest, J.H. and Griest, T.H. (1979): Depression Questionnaires. In Antidepressant Treatment: The Essentials. Baltimore. Williams and Wilkins Company. P. 24 - 27.

Gurland, B. (1976): The comparative frequency of depression in various adult age groups. *J. Gerontol*, **31**, 283 - 292.

Horowitz, M.; Schaefer, C.; Hiroto, D.; Wiener, N. and Levin, B. (1977): Life Events Questionnaire for Measuring Presumptive Stress. *Psychosom. Med.* Vol. 39, N.6.

Katon, W. (1982): Depression: Somatic symptoms and medical disorders in primary care. *Compreh. Psychiat.* **23**, 274 - 287.

Kleh, J.I; Lange, P. and Karu, E. (1978): Differential diagnosis of the disturbed elderly patients. Hosp. *Community Psychiat*, **29** (II): 735 - 8.

Koenker, R.H. (1976). Simplified Statistics for Students in Education and Psychology. Totowa: Littlefield, Adams & Co.

Kolb, L.C. and Brodie, H.K. (1982): Modern Clinical Psychiatry. 10th ed. P. 157, 232 - 4, 410 - 2. Philadelphia: W.B. Saunders Company.

Kukull, W.A.; Koepsell, T.D.; Inui, T.S. (1986): Depression and physical illness among elderly general medical clinical patients. *J. Affective Disorders*, **10**, 153 - 162.

Murphy, E. (1982): Social origins of depression in old age. *Brit. J. Psychiat*, 141: 136 - 338.

Murphy, E. (1983): The Prognosis of Depression. *Brit. J. Psychiat*, 142, 111 - 119.

Nielsen, A.C. and Williams, T.A. (1980): Depression in ambulatory medical patients: Prevalence by self report questionnaire and recognition by non-psychiatric physicians. *Arch. Gen. Psychiat*, 37, 999 - 10004.

Paykel, E.S.; Myers, J.K.; Dhmtt, M.N. (1969): Life events and depression: a controlled study. *Arch. Gen. Psychiat*, 21, 753 -776.

Pichot, P. and Full, C. (1981): Is there an involutional melancholia? *Comprehen. Psychiat.*, 22, 2 - 10.

Placidi, C.F.; Rampello, E. and Cassano, C.B. (1984): 1-a depressione nell'eta' senile: aspectti clinici e terapeutici. Quaderni Italiani di Psichiatria, III, 3-36.

Post, F. (1972): The management and nature of depressive illnesses in later life. *Brit. J. Psychiat*, 121, 393 - 404.

Post, F. (1978): The functional psychoses. In studies in Geriatric Psychiatry (eds. A.D. Isaacs and F. Post). Chichester: John Wiley.

Rashed, S.; Refaat, Y.; Mansour, S. El-Din and Fikry, E. (1987): Combined presentation of Depression and Demential Behaviour Among Elderly Patients. *Eypt. J. Psychiat*, 10: *25 - 40.*

Saltzman, C. and Shader, R.I. (1978): Depression in the elderly-1-Relationship between depression, psychologic defense mechanism and physical illness. J. of Amer. Geriatr. Societ, 26, 253 - 260.

Shaheen, O. and Rakhawy, Y. (1971): ABC of Psychiatry. Cairo EL-Ahram Press. P. 86.

Shamoian, C. A. (1985): Assessing depression in elderly patients. *Hosp. Comm. Psychiat*, 36, 338-339.

Steuer, J.; Bank, L.; Olsen, E.J. (1980): Depression, physical health and somatic complaints in the elderly: a study of the Zung Self Rating Depression scale. *J. Gerontology*, 35, 683 - 688.

Surwillo, W.W. (1980). Experimental Design in Psychiatry. New York: Grune & Stratton, Ine.

Winokur, .; Behan, D. and Schlesser, M. (1980): Clinical and biological aspects of depression in the elderly. In Psychopathology in the Aged (eds. J.O. Cole & J. E. Barrett). New York: Raven Press.

Winokur, G.; Morrison, J.; Clancy, J. (1973): The familial and clinical findings favor two kinds of depressive illness. *Compreh. Psychiat*, 14, 99 - 10.

La Maladie Dépressive Chez les Individus Âgés

La détermination sociodémographique, clinique et psychométrique de 24 malades depressés âgés, ayant un commencement retardé de depression, et 22 malades depressés, d'âge moyen, a démontré que les âgés souffrent plus d'épisodes singuliers de dépression, souvant précipités par les évênements stressants de la vie; tandis que les plus jeunes souffrent plus d'épisodes récurrentes, relativement plus fortes, de dépression.

Il y a eu peu de différences de symptômes entre les malades agés depressés et ceux qui sont plus jeunes. Ceci comprend: plus de blâme de soi, et d'idées de suicide chez les plus jeunes; tandis que les plus agés maigrissent plus, ont plus de préocupations somatiques, d'inquiétude hypochondrique, et de retard psycho-moteur. Les symptomes paranoiaques et l'agitation qui avaient été considérés comme caractéréstiques chez les personnes depressées âgées, n'étaient plus pareil dans cette étude. Les traits psychotiques n'ont pas distingué les depressés âgés de leurs jeunes contemporains. Cette étude conclut aussi que la neuroticisme et les évênements stressants de la vie attribuent fortement au développement de la maladie dépressive chez les personnes âgées.

مرض الاكتئاب فى السن المتأخر

أجرى هذا البحث على ستة وأربعين مريضا بمرض الاكتئاب اختيروا من عيادة الأمراض النفسية والقسم الداخلى بمستشفى المنصورة الجامعى. وقد قسمت العينة إلى مجموعتين. الأولى: تشمل أربعة وعشرين مريضا فى سن متأخر. والمجموعة الثانية: تتكون من اثنين وعشرين مريضاً فى سن متوسط العمر، وقد أجريت لهم مقارنة من الناحية الاجتماعية وشدة مرض الاكتئاب من الناحية الاكلينيكية ونتائج اختبار بيك للاكتئاب.

كما أجريت مقارنة بين المجموعتين فى تعرضهم لمصاعب الحياة وقد توصل البحث الى أن المرضى كبار السن يعانون أكثر من التوهم المرض وفقدان الوزن وقلة الحركة بينما يتعرض المرضى متوسطو السن أكثر إلى شدة لوم النفس وأفكار محاولة الانتحار كما لوحظ أن التعرض لمصاعب الحياة فى السن المتأخر يعتبر من الأسباب التى تؤدى إلى مرض الاكتئاب.