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Schizophrenia and Affective Psychoses: II- A Polydiagnostic Approach

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ABSTRACT

Departing from the traditional diagnostic groups, 32 patients with schizophrenia and affective psychoses were compared using independent variables regardless of their diagnostic stand. These variables were type of course, recurrence, phase of depression and level of delusional elaboration.

Results suggest that differences between subgroups classified according to clinical variables could be meaningful and fruitful when perceived on a continuum of a march of psychotic decompensation. Grouping of patients according to the level of developing delusional elaboration was on the whole the most rewarding classification than other classifications. The implications of our results are discussed.

INTRODUCTION

In a previous report we found minimal symptomatological and personological difference but significant intellectual variations between diagnostic groups including schizophrenia and affective psychosis (Mahfouz *et al.* 1990). We concluded that there must be further clinical studies that use other nosological and clinical approaches to compare subgroups of recurring psychotic disorders.

Since Kraeplin used a disease entity concept to define the two major functional psychoses, there have been many subsequent studies using other clinical variables to validate new nosological classes (Carpenter and Stephens, 1982).

Still there is no compelling evidence that the universe of psychotic disorders falls naturally into schizophrenia and affective disorders (Brockington *et al.* 1979; Stephens *et al.* 1982; Clayton, 1982). Recently, Okasha *et al.* (1990) have suggested that psychosis could be perceived along a continuum with schizophrenia on one pole and affective psychoses on the other.

In this report (part II of the original study) we have attempted to use a polydiagnostic approach including many of the clinical correlates and variables that have been used to differentiate major recurring psychoses.

MATERIAL AND METHOD

The sample consisted of 32 male Egyptian psychiatric inpatients with the DMP-I diagnoses (Diagnostic Manual of Psychiatric Disorders) of either schizophrenia or affective psychosis (Egyptian Psychiatric Association, 1975). The procedures and details of symptomatological, intellectual, personological assessment, predictors and follow-up measures were described (Mahfouz *et al.* 1990).

Patients were reclassified according to the following five defined variables regardless of their diagnostic stand:

1- Type of course of disorder: Complete remission (n= 10), partial remission (n= 12) and nonremission (n=10). Complete remission indicates the return of psychiatric, social and occupational dysfunctioning to the baseline of adjustment following the last psychotic episode and during the previous twelve months prior to the index episode. Nonremission constitutes continuous (or exacerbations) psychiatric, social and occupational dysfunctioning during the previous twelve

months and following the last psychotic episode.

2- *Type of recurrence:* This includes regular (periodical) recurrence with evidence that at least two psychotic episodes have occurred at a particular time of the year, i.e. within the same two or three months, or more than two episodes that occurred at regular intervals (n= 15). Irregular recurrence (non-periodical) was composed of patients showing the occurrence of psychotic episodes in an irregular temporal pattern during the course of their illness (n=17)

3- *The phase of psychotic decompensation:* The clinical criteria used to categorize patients according to this variable were based reviewed by Docherty *et al.* (1978). Early psychotic decompensation (n= 15) manifests either partial disorganization or a clear demarcated initial onset with or without a precipitating event. Late psychotic decompensation (n=17) showed insidious onset of the index episode, predominantly delusions and hallucinations and patients were less distressed by their symptoms.

4- *The degree of severity of depression:* The presence and severity of depression were assessed by the patient's score on the PSE items (from 19 to 40 except 26&39) constituting the depressive syndrome. Patients were considered to have a mild PSE depression if they scored 7 or less (n=14), moderate depression is indicated by a score from 10 to 18 (n=14). Only four patients scored 20 or more on PSE depressive syndrome and this was considered as the severe PSE depression.

5- *The level of developing delusional elaboration:* This variable was constructed from the PSE items and based on the concept of hierarchy of development of delusions (Donlon and Blacker; 1973; Docherty *et al.* 1978), briefly:

Level 1 (n=7): Absence of delusions or the presence of minimal ideas of reference. No evidence of systematization on PSE item 93.

Level 2 (n=9): Absence of systematized delusions, and if delusions are present they were not the predominant symptoms.

Level 3 (n=11): Systematized delusion, PSE item 93=2.

Level 4 (n=5): Systematized delusions with evasiveness and preoccupation. This group was composed of patients with delusions which were minimal in number (delusion and hallucinatory syndromes is from 0 to 2) and scored positively on PSE item 94 (evasiveness) and 95 (preoccupation).

RESULTS

Comparison of groups according to the type of course - complete remission vs. partial remission vs. nonremission - showed that the group with partial and non-remission have a significantly higher Wechsler Deterioration Quotient (WDQ) (14.6 ± 8.1 and 15.7 ± 9.4 respectively) than the group with complete remission (6.2 ± 7.1) ($t=2.6$ and $t=2.6$, $P<0.05$) (Table 1). In addition, those with partial remission have a significantly lower score on the SI (social introversion) scale of MMPI (30.8 ± 9.5) and a significantly higher score on the MMPI subscale denial of symptoms (9.9 ± 4.5, $P<0.01$) than the group with complete remission (39.3 ± 5.8 for SI and 6.7 ± 1.6 for denial of symptoms respectively) (Table 1).

Also, Table (1) shows that the predictor variables appeared to be statistically higher in the complete remission group than the partial remission and the non-remission group for both the psychiatric condition and the previous social contact predictors (4.2, 2.9, 1.8 for psychiatric condition and 3.6, 2.6, 1.9 for the previous social contact in the three groups respectively).

Patients classified as showing evidence of early psychotic decompensation obtained a significantly higher mean PSE Specific Neurotic syndrome (7.4), Non-Specific Neurotic Syndrome (12.9) and Neurotic Subscore (20.3) than the

TABLE I

Means (± SD) of Significant Differences among Subgroups According to Type of Recurrence and Course

Subgroup / Type of Recurrence / Variable	Regular (n= 15)	Irregular (n= 17)	T- value
MMPI			
F Scale	12.9 (±4.0)	19.6 (±10)	2.6*
Pa Scale	13.2 (±3.1)	17.9 (±6.5)	2.7*
Predictors			
Psychiat. Condition	3.5	2.5	2.6*
Social Contact	3.0	2.3	2.6*
Total Predictors	9.9	7.5	2.6*

Subgroup / Type of course / Variable	Complete remission (n= 10)	Partial remission (n= 12)	Non remission (n= 10)
WAIS DQ.	6.2* (±7.1)	14.6 (±8.1)	15.7 (±9.4)
MMPI			
Si	39.3* (±5.8)	30.8 (±9.5)	33.9 (±14.8)
Denial of symptom	6.7* (±1.6)	9.9 (±4.5)	9.4 (±3.8)
Predictors			
Psychiatric condition	4.2	2.9**	1.8***
Prev. social contact	3.6	2.6*	1.9**

* = Statistically significant at level of 0.05
* * = Statistically significant at level of 0.01
*** = Statistically significant at level of 0.001

TABLE II

Means (±SD) of Significant Differences among Subgroups According to PSE Depression

Subgroup / Degree of Depression / Variable	Mild (n= 14)	Moderate (n= 14)	Severe (n= 4)	T- value
PSE Total score	33.1 (±12.6)	52.1 (±19.5)	52.5 (±17.3)	5.2**
PSE Neurotic Subscore	5.7 (±3.3)	21.5 (±7.9)	31.3 (±13.4)	
PSE specific neurotic				27.7***
syndrome	1.6 (±1.4)	8.2 (±2.9)	11.0 (±4.1)	32.9***
MMPI				
D scale	25.8 (±5.9)	29.2 (±7.2)	35.5 (±6.2)	3.6*
Pt scale	31.1 (±9.2)	36.0 (±6.5)	43.5 (±3.7)	4.4**
2-7-8 Profile	98.4 (±19.9)	105.0 (±21.6)	127 (±21.3)	3.1*
Anxiety sign	17.9 (±10.6)	24.8 (±9.5)	30.3 (±6.0)	3.2*
Admission of symp.	10.9 (±4.1)	11.2 (±5.0)	18.3 (±5.9)	4.1*

* = Statistically significant at level of 0.05
* * = Statistically significant at level of 0.01
*** = Statistically significant at level of 0.001

TABLE III

Means (±SD) of Subgroups: Level of Delusional Elaboration

Subgroup / Variable	Level I (n=7)	Level II (n=9)	Level III (n=11)	Level IV (n=5)	F-ratio
WAIS DQ	7.0(±7.8)	11.4 (±8.7)	13.6 (±9.7)	18.8 (±6.4)	5.0**
PSE total score	31.9(±21.4)	50.0 (±13.5)	5.0 (±17.1)	32.4 (±12.9)	3.1*
PSE psychotic subscore	4.3 (±2.1)	18.4 (±7.0)	17.4 (±9.5)	12.4 (±3.8)	6.6**
PSE Delusional Hallu.. Syndrome	0.4 (±0.8)	9.8 (±6.4)	11.5 (±6.3)	0.8 (±1.1)	9.9**
PSE Behaviour, Speech, Other Syndromes	3.9 (±1.6)	8.5 (±3.9)	7.7 (±3.7)	11.6 (±4.8)	4.7**
MMPI Variables					
L	4.4 (±2.1)	5.6 (±1.9)	5.9 (±3.7)	9.2 (±4.1)	3.6*
K	10.3 (±4.2)	10.4 (±4.3)	9.7 (±4.9)	20.4 (±4.9)	7.2**
Dominance-submission	25.9(±15.9)	21.2 (±11.5)	18.7 (±11.8)	11.8 (±13.0)	6.2**
Love-hate	31.4(±16.9)	31.4 (±17.7)	23.7 (±17.3)	4.6 (±20.1)	16.9***
Psychosocial alienation	9.4 (±3.2)	10.4 (±3.3)	7.9 (±3.9)	5.2 (±3.4)	3.7**
Self alienation	8.9 (±3.6)	9.1 (±2.8)	6.7 (±3.9)	4.0 (±2.9)	3.9***
Schizophrenic alienation	8.3 (±3.7)	9.0 (±3.3)	9.1 (±3.9)	3.4 (±2.9)	3.4**
Cognitive lack of ego mastery	4.7 (±2.8)	5.6 (±2.1)	3.2 (±2.6)	2.4 (±1.7)	3.6**
Conative lack of ego mastery	7.4 (±2.1)	7.2 (±2.8)	5.1 (±2.8)	3.6 (±2.7)	3.2*
Denial of symptoms	6.9 (±3.0)	7.0 (±2.7)	8.1 (±4.7)	16.0 (±5.1)	6.8**
Personal and emotional sensitivity	8.1 (±3.3)	6.9 (+2.5)	6.9 (±2.8)	4.4 (±2.7)	3.7**
Inhibition of aggression	1.9 (±1.1)	1.8 (±1.6)	2.9 (±1.4)	5.2 (±1.3)	7.6**
Paranoid, subtle	5.7 (±1.6)	5.3 (±2.6)	6.2 (±3.0)	9.2 (±2.4)	4.7**
Amorality	8.1 (±3.8)	11.2 (±2.0)	7.4 (±3.3)	4.8 (±1.5)	4.7**

* = Statistically significant at level of 0.05
** = Statistically significant at level of 0.01
*** = Statistically significant at level of 0.001

group with evidence of late psychotic decompensation (4.1, 7.4 and 11.5 respectively) (t= 2.3, 2.1, 2.3, P<0.01).

Also, the former group with early psychotic decompensation obtained a significantly higher means on the MMPI subscales of conative lack of ego mastery (7.3) and personal and emotional sensitivity (7.9) than the latter group (4.8 and 5.8 respectively) (t=2.6, t=2.0, P<0.01 and P<0.05). The latter group with late psychotic decompensation obtained a significantly higher mean on the denial of symptoms subscale (10.4) than the former group (6.9) (t=2.2, P<0.05).

Table (2) shows the statistically significant differences of the means (±SD) and F ratio of one-way ANOVA contrasting the four groups of patients classified according to their level of developing delusional elaboration. Table (3) shows the statistically significant differences of the means (±SD) and F ratio of one-way ANOVA between the three groups.

DISCUSSION

In the previous paper we have concluded that the traditional diagnostic classification needs further study and we suggested a departure from the conventional schizophrenia-affective dichotomy into a more clinically useful polydiagnostic approach that could help in further understanding and studying of recurring psychoses. However, reclassification and approaching diagnosis from the type of recurrence, regardless of their diagnoses, into groups with periodical or irregular recurrence did not show any symptomatological differentiation on the PSE indicators. The group with periodical recurrence presumably represented those affective and/or possibly mixed forms of psychotic disorders. In addition, comparison of patients according to their type of course showed that the three groups of patients did not show any differentiation at their PSE symptomatological level. This suggests that although the course of illness is a crucial component in the diagnostic formulation, however, it is not necessarily associated with differentiated symptomatological indicators.

Thus, current diagnostic formulations of psychotic disorders (schizophrenia vs. affective psychoses) (e.g. formal thought disorder in schizophrenia, Jampala *et al.* 1989) do not appear helpful enough to differentiate the cross-sectional dimensions which might be helpful in conveying the information necessary to organize the descriptive data into a cohesive clinical picture. It seems that there is an emerging need for a more different approach than, and possibly complementary to, diagnosis to help in therapeutic planning and research. It should be emphasized that this approach is not an alternative to diagnosis but rather a cohesive formulation that clarifies and encompasses the differences and similarities of the recurrent psychotic disorders. Considering that different nosological psychotic states have similar cross-sectional symptomatic profiles might lead us to view psychotic disorders as exhibiting the same psychotic phenomena during any particular episodes. In other words, recurring major functional psychoses might present with clinical states rather than diagnostic profiles. The importance of this approach is that it can explain many controversies regarding the finding of cross-sectional similarities across schizophrenia and affective psychoses (Okasha *et al.* 1990). The polydiagnostic approach appeared to be a valid and clinically useful tool not to be discarded in future comparative diagnostic studies (Tsuang *et al.* 1990). These quantitatively heterogenous models of classifying psychotic patients could lead to refinement of diagnostic criteria and its implications in research and treatment.

Current multiaxial classification systems, e.g. DSM-III-R (American Psychiatric Association, 1987) and possibly future ICD-10 have attempted to circumvent these controversies by including personological features and physical status (possibly neuropsychological findings)

on axis II and III.

In addition, studies are conducted to refine the utility and contribution of axes IV and V in the diagnosis and presentations of recurring psychoses (Skodol *et al.* 1988).

There is no true evidence that the theory of a unitary psychosis is out dated.

Possibly, the march of psychotic decompensation gives rise to various clinical phases and states with varying degrees of impairment (Mahfouz *et al.* 1990). Affective psychoses on one end of the spectrum with no intellectual (neuropsychological) deterioration and schizophrenia with intellectual impairment on the other end. In support of these assumptions, studies that pointed out that the differences between chronic schizophrenia and (predominantly nonchronic) affective disorders might be associated with diagnostic symptomatology rather than premorbid prognostic status (Erickson *et al.* 1989).

In conclusion, we think that the current dichotomy of major recurring psychoses might be an artificial boundary that might interfere with the perception, research and assumption of the underlying neurobiological mechanisms (Dworkin *et al.* 1988). The polydiagnostic approach appeared to be a valid and clinically useful tool not to be discarded in future comparative diagnostic studies.

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ABSTRAIT

Schizophrénie et Psychoses Affectives
II - Une Approche Polydiagnostique

A part des groupes diagnostiques traditionels, on a comparé 32 patients avec schizophrénie et psychoses affectives, en utilisant des variables independants,sans regarder leur diagnostics.

Les variables étaient: le type du cours, réapparition, phase de depression, et le niveau d' élaboration du délire.

Les resultats suggérent que les différences entre les sous - groupes classifiés du point de vue des variables cliniques peuvent être significatifs et fructueux quand on les aperçoit en continence avec le marche de la décompenstion psychotique.

Grouper les patients délirés, était en somme la classification la plus récompensante. Les implications de nos résultas ont été discutés.

الموجز

الفصام والذهانات الوجدانية : الجزء الثانى -
تناول تشخيصى متعدد الأبعاد

الهدف من هذه الدراسة هو محاولة استخدام تناول تشخيصى متعدد الأبعاد ، والذى يشتمل على مجموعة من المتغيرات والعوامل الإكلينيكية للتمييز بين الذهانات الكبرى الراجعة . وتكونت عينة البحث من ٣٢ مريضا بمرض الفصام أو الذهان الوجدانى . وبغض النظر عن التشخيص التقليدى السائد ، أعيد تقسيم هؤلاء المرضى عن طريق استخدام المتغيرات المستقلة الآتية : نوع المسار المرضى - النوابية - طور الاكتئاب - مستوى تشكل الضلالات .

وأظهرت نتائج هذا البحث مدى جدوى وفائدة الفروق بين المجموعات الناتجة عن إعادة التقسيم على أساس الأبعاد الإكلينيكية سابقة الذكر عندما ننظر إليها من خلال متدرج للتفكك الذهانى ومن بين هذه الأبعاد كان تقسيم المرض على حسب درجة تحدد معالم الضلالات ذا فائدة واضحة عن التقسيم القائم على التشخيص التقليدى . وفى النهاية ناقشنا الأهمية التطبيقية المحتملة لنتائج هذا البحث .