Characterization of depressive syndrome in schizophrenic outpatients*

Caracterização de uma síndrome depressiva em pacientes esquizofrênicos ambulatoriais

Flávio Soares de Araújo, Kátia Petribú and Othon Bastos

Universidade Federal de Pernambuco e Faculdade de Ciências Médicas da Universidade de Pernambuco, PE, Brasil

Abstract **Objective:** The authors carried out a cross-sectional study with the aim of characterizing and describing depressive pictures in schizophrenic patients seen at the Psychiatry Outpatient Clinic of the Federal University of Pernambuco (HC-UFPE). The patients had the diagnosis of schizophrenia confirmed on the basis of the operating criteria of the DSM-IV.

Methods: Those who where in the period of stabilization of the clinical picture were selected for the study defined according the following criteria:the last psychotic episode must be happened two months before at least, and during this period the alterations of the antipsychotics doses had been lower than 5 mg of haloperidol or equivalent doses of others neuroleptics. A total of one hundred and four patients took part. Following the identification of the depressive symptoms using the Calgary Depression Scale for Schizophrenia (CDSS), thirty-one patients (29.8%) fulfilled the diagnostic criteria described in the DSM-IV. Of these, 22.1% had the diagnosis of major depression and 7.7% of minor depression according the DSM-IV. Two groups were constituted: Group A, schizophrenics with a depressive syndrome, and Group B, schizophrenics without such a syndrome. An assessment was made of the distribution of the symptoms of the CDSS scores in both groups, the sociodemographic, clinical and therapeutic variables in relation to the frequency of the depressive syndrome, and the patients clinical course. For the investigation of certain clinical features, the following tools were used: problem list (psychosocial stressors) contained in axis IV of the DSM-IV intended to detect the presence of factors triggering the initial episode of schizophrenia and the Global Assessment of Functioning (GAF – Axis V – DSM-IV) to characterize the current functioning of the patients.

Conclusions: The results obtained allowed the authors to draw the following conclusions: all the items that comprise the Brazilian version of the CDSS were statistically significant in characterizing the depressive syndrome; a comparison of the sociodemographic and therapeutic variables revealed no statistically significant differences between the two groups, and this was also the case with the majority of the clinical features. Statistically significant differences, however, were found in relation to the greater frequency of life events (psychosocial stressors) in triggering the first episode of schizophrenia and the higher incidence of affective disorders antecedents in family members (first and second degree) among the depressed patients. The mean duration of the depressive syndrome during follow-up of the patients was 5.30 months. The patients in whom there was a recurrence of the psychotic episode presented a delusional-hallucinatory clinical picture. This study seeks to contribute to the inclusion of the Postpsychotic Depressive Disorder (PSD) of Schizophrenia (DSM-IV), in the group of Schizophrenic Disorders.

Keywords Schizophrenia. Depression. Depressive symptoms.

Resumo **Objetivo:** Os autores realizaram estudo de corte transversal com o objetivo de caracterizar e descrever quadros depressivos em pacientes esquizofrênicos atendidos no ambulatório de psiquiatria do Hospital das Clínicas da Universidade Federal de Pernambuco (HC-UFPE). Os doentes tiveram o diagnóstico de esquizofrenia do DSM-IV.

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Métodos: Foram selecionados pacientes que se encontravam no período de estabilidade do quadro clínico, definido de acordo com os seguintes critérios: o último episódio psicótico ter ocorrido há no mínimo dois meses e durante esse período as alterações nas doses dos antipsicóticos tenham sido inferiores a 5 mg de haloperidol ou doses equivalentes de outros neurolépticos. Participaram do estudo 104 pacientes. Após a identificação dos sintomas depressivos pela utilização da versão em português da Escala Calgary de Depressão para Esquizofrenia, 31 doentes (29,8%) preencheram os critérios diagnósticos para quadros depressivos. Desses, 22,1% preencheram os critérios para episódio depressivo maior pelo DSM-IV e 7,7% para episódio depressivo menor. Foram constituídos dois grupos: A (pacientes esquizofrênicos com depressão – DSM-IV) e B (sem síndrome depressiva). Avaliaram-se as distribuições dos sintomas e dos escores da ECDE em ambos os grupos, as variáveis sociodemográficas, clínicas e terapêuticas em relação à freqüência da síndrome depressiva e a evolução clínica dos pacientes. Foram empregados os seguintes instrumentos: estressores psicossociais contido no eixo IV do DSM-IV e a Escala de Avaliação Global do Funcionamento (AGF - Eixo V- DSM-IV).

Conclusões: Os resultados obtidos permitiram aos autores elaborarem as seguintes conclusões: todos os itens que compõem a versão brasileira da ECDE foram estatisticamente significantes na caracterização da síndrome depressiva; as variáveis sociodemográficas e terapêuticas não obtiveram diferenças estatisticamente significantes quando comparadas entre os dois grupos, assim como a maioria das características clínicas; entre os doentes deprimidos, diferenças, com significância estatística, foram assinaladas em relação a maior freqüência de eventos vitais (estressores psicossociais) no desencadeamento do primeiro surto esquizofrênico e a maior incidência de antecedentes familiares de portadores de transtornos do humor (primeiro e segundo graus). O tempo médio de duração da síndrome depressiva durante o período de acompanhamento dos pacientes foi de cinco meses e dez dias; os doentes que tiveram recidivas do episódio psicótico apresentaram quadros clínicos delirante-alucinatórios. Esse estudo busca contribuir para a inclusão do transtorno depressivo pós-psicótico da esquizofrenia no grupo dos transtornos esquizofrênicos.

Descritores Esquizofrenia. Depressão. Sintomas depressivos.

Introduction

Current studies on the occurrence of a depressive syndrome in the post-psychotic period of schizophrenia (residual phase according to DSM-IV description) generally describe this clinical picture under the general name of Depression on Schizophrenia.[1,2,3,4] The fact that depressive symptoms had been described as one of the psychopathological dimensions of the schizophrenic disease [5,6,7] quite favored this trend.

The authors agree that depressive symptoms could be present anytime in the course of the schizophrenic process, either in the prodroms of a new episode,[8,9] concurrently with the acute episode[10-12] or in the post-psychotic period.[13-15] The phenomenology of the depressive symptoms in the post-psychotic period represents more than a mere psychopathological manifestation, as most patients have a well-characterized syndrome, which starts to integrate the common course of the psychosis, with moderate or severe intensity.

The acknowledgement of depression as part of the phenomenology of schizophrenic disorders, along with its negative, positive and disorganizing symptoms,[16,17,18] contributed to the inclusion of these symptoms as components of the structure and of the disease's natural course.

Therefore, ICD-10 decided to integrate the post-psychotic depressive picture to the schizophrenic disorders group. However, in its diagnostic guidelines, the operative criteria of this characterization were not well outlined and they lack a better description of the clinical picture and of the evolutive course.

The difficulty to phenomenologically distinguish between the presence of "simple affective symptoms in schizophrenic patients"[19,20] and the depressive syndrome is reflected in the controversies and polemics involved in this subject. Indeed, most of the depressive symptoms present in other periods of the schizophrenic process and, sometimes, even in the post-psychotic period, evolve without fulfilling the diagnostic criteria of a major depressive episode with moderate or severe intensity. The therapeutic approach here is different, and , according to Siris, does not require the use of antidepressants.[21,22]

The authors believe, after having analyzed other studies, that the controversies related to this subject stem from the fact that many of these investigations focused on patients at different moments of the psychotic process.[8,9,23] Consequently, contradictions about the depressive syndrome prognostics arise. Some authors consider it as a factor that improves the prognosis of the clinical evolution of schizophrenia,[13-15] while others do not agree and list it as a sign of bad prognosis. [2,4,24,25] Besides, the methodologies are very distinct, mainly when we compare cross-sectional with longitudinal studies, being the latter decisive to assess the depressive syndrome prognosis value.

The first author, during his Medical Residence in Psychiatry at the Clinical Hospital of the Federal University of Pernambuco, noted that part of schizophrenic patients presented depressive symptomatology somewhere during the

disease's course. Thus, this research aimed to characterize and describe the clinical evolution of depressive pictures that occurred in the stable phase of schizophrenia. We took into account three aspects to choose specifically this phase of the disease:

1. Current nosographic systems contain operating criteria to diagnose the depressive syndrome in the stable phase of schizophrenia, and there are no criteria to make a characterization in other phases of the disease;
2. Reliability tests of the Brazilian version of the Calgary Depression Scale for Schizophrenia - CDSS (ECDE in Portuguese) had demonstrated good results between examinators.[26] After we started our field research the validation study of the scale was concluded and considered as reliable, valid and specific to check depression in stable schizophrenic patients;[25]
3. The definition of a secondary depressive syndrome in schizophrenia allows the development of somatic and psychosocial interventions to improve the assistance and to decrease the patient's suffering.[21]

We used the operative criteria of the DSM-IV, as they are better outlined. According to this classification, the essential characteristic of this clinical picture is the occurrence of a major overlapped depressive episode that occurs only in the disease's residual phase. However, the current literature refers to the possible presence of depressive symptomatology that does not fulfill criteria for a major depressive episode.[10,27] In these cases, we used DSM-IV's operating criteria for Minor Depressive Disorder.

After the identification of the depressive symptoms by the ECDE, the schizophrenic patients that fulfilled the diagnostic criteria for depressive pictures in the DSM-IV were gathered in a group and the patients who had not been characterized as depressive in another one. We studied, in both groups the distribution of symptoms and total scores of ECDE, the sociodemographic, clinical and therapeutic variables, and the clinical evolution.

Methods

Sample

We assessed 104 patients diagnosed as schizophrenic according to the DSM-IV criteria, seen only by one investigator (the first author) in the psychiatric outpatient clinic of the HC-UFPE, from May/1997 to may/1999.

Inclusion criteria: outpatients of both sexes, aging from 15 to 50 years, diagnosed as schizophrenic according to the DSM-IV, having the disorder lasted for at least one year and having their psychopathological picture stabilized at least for the last two months.

The criterion used to characterize stability was that the last acute psychotic episode had occurred at least two months before and during this period the alterations in the doses of antipsychotics were less than 5mg of haloperidol or equivalent doses of other neuroleptics.

Exclusion criteria: presence of clinical diseases that might be associated with depression, organic mental disorders, alcohol dependence or abuse and severe mental retardation.

Study design

In the first phase, we did a cross-sectional inquire. The first author who collected the anamnesis data (sociodemographic characteristics, clinical history, background, life curve and mental examination) examined patients. We also assessed the occurrence of triggering factors using the list of psychosocial and environmental problems of the axis IV - DSM-IV; we also performed the global assessment of the functioning using the Global Assessment of Functioning (GAF Scale of the axis V - DSM-IV) and the presence of depressive symptoms using the Brazilian version[25] of the Calgary Depression Scale for Schizophrenia (ECDE).[28]

After the depressive symptoms were identified two groups were formed: *group A* for patients who fulfilled the DSM-IV diagnostic criteria for major depressive episode or minor depressive disorder and *group B* for those who presented one or none depressive symptom.

Group A patients were followed since the first interview up to the end of the observation period predetermined for the study (18 months). The reassessments were fortnightly made and we used the ECDE, the PANSS scale[29] to check positive and negative symptoms, the extrapiramidal symptom scale (ESS),[30] and a follow-up psychiatric interview. We assessed the mean time of observation of patients, the mean duration of the depressive syndrome, the recidivation of psychotic episodes, the rehospitalization and the compliance.

Instruments

1. Semi-structured anamnesis: was elaborated to collect the main sociodemographic, clinical and therapeutic data. In the anamnesis we investigated the presence of schizophrenic and mood disorders among 1st and 2nd-degree relatives, the basis for this differentiation being the diagnostic criteria of the DSM-IV.
2. Diagnostic criteria of the DSM-IV: Schizophrenia, Major Depressive Disorder, Minor Depressive Disorder and Post-psychotic Depressive Disorder of Schizophrenia.
3. Brazilian version of the Calgary Depression Scale for Schizophrenia (ECDE).
4. Global Assessment of Functioning scale(GAF – Axis V – DSM-IV)
5. List of psychosocial and environmental problems of axis IV - DSM-IV
6. Positive and Negative Syndrome Scale for Schizophrenia (PANSS)
7. Extrapiramidal Symptoms Scale (ESS)

Statistical analysis

For statistical analysis we used the software (SAS-Statistical Analysis Systems), version 6.12. We studied the associations between categorical variables with independent Chi-Square (X^2) or Fisher's Exact test, provided the conditions to use the first test were not fulfilled. The associations between

numeric variables were verified with Mann-Whitney test for the two independent samples, and we choose this test due to the lack of data normality per group. The verification of the hypothesis of normality was performed through the specific Shapiro Wilks test. The level of significance considered for the statistical tests was 5%.

Results

Depressive symptoms identified by the brazilian version of the CCDS and characterization of the depressive syndrome by the DSM-IV

Table 1 - Distribution of patients according to the diagnosis of depression by DSM-IV per group.

Group	Number of patients	%
Group A		
Major depressive episode	23	22.1
Minor depressive disorder	08	7.7
Group B		
Absence of depressive symptoms	62	59.6
At least one depressive symptom	11	10.6
Total	104	100%

As shown in Table 1, of the total sample of 104 patients diagnosed with schizophrenia, 42 (40,4%) presented at least one depressive symptom identified by the ECDE and 62 (59,6%) did not present any symptom. Of the 42 patients who had at least one depressive symptom, 23 (22,1%) fulfilled the diagnostic criteria for major depressive episode and were characterized as having Post-Psychotic Depressive Disorder of Schizophrenia. Eight (7,7%) presented depressive symptoms although they did not fulfill the criteria for a major depressive episode and were characterized as having minor depressive disorder. Seventy-three patients (70,2%) did not present depressive disorders.

As shown in Table 2, the association between the presence of depressive symptoms and the characterization of Depression (DSM-IV) is statistically significant for all ECDE items, according to the results of p (Independence Chi-square test).

Total ECDE scores obtained in Group A had a mean of 10.22 and median of 10 whereas in Group B they were quite inferior, with a mean of 0.18. When we analyzed differences of total ECDE scores for patients with major depressive episodes compared to minor depressive episode and without depressive episode, with the Mann-Whitney test, we confirmed that there is a statistically significant difference, that is, the better the depressive conditions are characterized according to DSM-IV criteria, the greater are the ECDE scores obtained with patients.

Table 2 - Distribution of depressive symptoms identified by the ECDE.

ECDE symptoms	Group A		Group B	
	N	%*	N	%
1. Depressed mood	31	100.0	-	-
2. Hopelessness	31	100.0	-	-
3. Self-depreciation	31	100.0	2	2.7
4. Guilt reference ideas	23	74.2	2	2.7
5. Pathological guilt	23	74.2	1	1.4
6. Morning depression	31	100.0	3	4.1
7. Early awakening	20	64.5	5	6.8
8. Suicide	19	61.3	-	-
9. Observed depression	24	77.4	-	-

**Percentages were obtained considering as a basis the 31 patients of group A and the 73 of group B.*
Note: for all items p<0.001.

Sociodemographic, clinical and therapeutic variables in relation to depression frequency according to the DSM-IV criteria (Table 3)

Clinical evolution of depressive syndrome during the period of study

All schizophrenic patients with depressive pictures (group A) at the initial interview were regularly followed for an eigh-

Table 3 - Sociodemographic, clinical and therapeuthic variables by depression (DSM-IV).

Variables	Group A N=31	Group B N=73	Statistical test	
Sociodemographic				
Sex (male/female)	20/11	42/31	χ^2=0.19	0.66
Age (years – mean (SD)	26.71(6.52)	27.36(6.32)	Z=-0.58	0.56
Marital status (married/not married)	4/27	11/62		0.39
Education (years) – mean (SD)	5.1(2.6)	5.8(2.8)	Z=-0.59	0.56
Clinical				
Schizophrenia onset type (abrupt/insiduous)	25/6	57/16	χ^2=0.09	0.77
Schizoprenia age of onset (years) – mean (SD)	20.23(3.93)	21.34(3.81)	Z=-1.39	0.16
Age of the 1th hospitalization (years) – mean (SD)	20.58(3.79)	21.97(3.77)	Z=-1.70	0.55
Schizophrenia duration (years) – mean (SD)	6.48(3.24)	6.15(3.84)	Z=0.91	0.31
Time after the last psychotic episode- mean (SD)	4.23(6.20)	15.08(5.41)	Z=-1.79	0.07
Number of recidivations of psychotic episode- mean (SD)	3.10(1.30)	2.75(1.36)	Z=0.98	0.32
Number of hospitalizations- mean (SD)	2.19(1.11)	2.49(1.24)	Z=-1.33	0.18
Factors to trigger schizophrenia (1th episode) – (yes/no)	20/11	30/43	χ^2=4.78	0.03
Current functioning (AGF points)- mean(SD)	59.2(4.8)	52.3(6.4)	Z=-1.34	0.18
Suicide attempts (yes/no)	13/18	24/49	χ^2=0.33	0.57
Schizophrenic Disorders in 1st-and 2nd-degree relatives (yes/no)	13/18	28/45	χ^2=0.12	0.73
Mood Disorders in 1st- and 2nd-degree relatives (yes/no)	15/16	16/57 OR=3.34 (CI):1.36 to 8.19)	χ^2=7.28	0.007
Terapheutic				
Regularity of previous treatments (yes/no)	19/12	36/37	χ^2=1.25	0.26
Current Neuroleptic doses (clorpromazine equivalent) mean(SD)	396.77(62.79)	380.14(32.80)	Z=-0.11	0.91

Table 4 - Depressive syndrome duration.

	Group A
Depressive syndrome duration (in months)	N=31
Minimum value	4
Maximum value	7
Mean	5.30
Standard deviation	0.82
Median	5.00
IQQ (amplitude interquartílica)	1.00

teen-month period. Of 31 patients, four withdrew from the study before its end. All of them had had their depressive symptoms remitted.

The average duration of the depressive syndrome presented in Table 4 is restricted to the period in which patients were regularly assessed by the first author. These reassessments were performed using the follow-up interview and ECDE.

When we studied the average depressive syndrome duration between men and women of group A, we did not observe any statistically significant difference (Z=1.09 and p=0.2747).

When analyzing the average depressive syndrome duration among group A patients who presented major depressive episode compared to those who presented minor depressive episode, we did not observe any significant statistical difference (Z=0.535 and p=0.5924).

Recidivation of psychotic episodes

Of 27 patients who finished the research, five presented recidivation of psychotic episodes, typical of paranoid schizophrenia. The average time between the resolution of the depressive syndrome and the new outbreak was 12,2 months. These patients did not present depressive symptoms in the prodrom period of the new psychotic episode (according to the assessment by ECDE).

One patient had its new depressive syndrome started 45 days after the remission of the productive symptoms. This patient was still depressed at the end of the research.

Among the remaining other four patients, two had their productive symptomatology remitted (did not present a new depressive syndrome) and two were still in the overt delusive-hallucinatory state at the end of the study.

No patient of group A (among the 22 ones who concluded the study and did not present a new psychotic episode) had recidivation of the depressive syndrome after its resolution.

Discussion

Studies that assess the frequency of depression in schizophrenic patients present quite distinct rates, due to the great variation in their methodology.[21] Other aspects also favor the disparity in results, such as the utilization of several definitions for depressive conditions, the use of different diagnostic criteria for schizophrenia and the assessment of patients in distinct phases of the schizophrenic disease, i.e., in its prodroms, the acute psychotic phase, the post psychotic period and the residual phase.[4]

The 22,1% - frequency found for patients which had a major depressive episode15, necessarily including depressed mood, is therefore the Post Psychotic Depressive Disorder of Schizophrenia rate of the current research. The DSM-IV reported that up to 25% of schizophrenic patients could present this clinical condition.

Regarding the distribution of total scores of ECDE and of depressive symptoms in the groups, we observed that symptoms such as depressed mood, hopelessness, self-depreciation and morning depression were prominent, as they were present in all group A patients .The importance of these symptoms was also emphasized in other authors' researches.[2,3,14,25,28] On the other hand, the symptom that reached the highest percentage among group B patients was early awakening. Becker[25] reported that, among other symptoms, insomnia may occur in schizophrenic patients with or without depression. Researchers such as Bastos 14 and Addington et al[28] emphasized that, among insomnia types, the terminal one (early awakening) would be more common among depressed schizophrenic patients.

After performing statistical tests, we observed that total ECDE scores were significantly higher in group A. The score interval in our research was 0 to 16 points. Addington et al[31] found a greater spectrum of depressive symptoms (score interval of 0 to 23) and Bressan 25 reported a 0-12-interval. The ECDE, in the current study, was able to discriminate, in a statistically significant way, the minor depressive conditions from the severe ones (patients with Post Psychotic Depressive Disorder of Schizophrenia), as described by other author in their studies.[25,31]

Sociodemographic characteristics

The proportion of male patients was greater than the female ones, although this difference was not statistically significant. Studies with schizophrenic patients generally show this trend.[14,25,31]

The mean age of the total sample was between 16 and 47 and this is a remarkable characteristic of the schizophrenic patients seen at the psychiatric ambulatory of the HC-UFPE as they are mostly young patients. Mcglashan & Carpenter[13] reported that for most patients the depressive symptoms start in their youths.

Regarding the marital status, there are more singles in both sexes and in the groups but there are no significant differences regarding this variable. The fact that most patients are single points out the difficulty of these patients to establish affective links. These patients generally depend on their parents and on siblings. Among singles there is a lack of ability and loss of confidence to establish relationships with the other sex.[32] Most patients of this study have difficulties to maintain a sexual relationship or do not have a sexual life at all. Divorced and widower patients also live with some kind of relative. Only one patient divorced from her husband (group A) lived alone.

All sociodemographic variables did not obtain statistically significant differences between depressed and non-depressed schizophrenic patients, in accordance to others.[9,17,25,33]

Clinical features

Differences in the age of onset of schizophrenia were not statistically significant between sexes and groups. Men had earlier onset, before 20, than women. These data confirm reports that schizophrenia is a disease that affects young adults with a slight trend to have an earlier onset among male patients.[32,34,35]

When we compared the age of the first hospitalization and the age of onset , we observed that in both groups there was a trend to a first hospitalization just after the psychosis' onset. After the beginning of psychiatric assistance this fact changed, that is, when we analyzed the number of subsequent acute phases and hospitalizations, we verified that the latter decreased. Patients, even while in acute phases, were kept in ambulatorial treatment, assisted by a multidisciplinary team that aimed to treat them in their own social environment. There were no significant differences in the number of relapses and hospitalizations between groups. These results agree with several authors[14,15,25] and disagree with others.[9]

As mainly young patients composed the sample, this was directly reflected in the mean duration of schizophrenia and there were not significant differences between sexes and groups.

As for the mean time elapsed since the last psychotic episode, it is important to remember that at the time of the cross-sectional study, patients that entered group A were already depressed. Probably, the depressive condition began earlier after the last acute phase. All patients had not any productive symptoms.

In this research we used a list of psychosocial and environmental problems to assess the presence of triggering factors of the schizophrenic disease, described by axis IV - DSM-IV. A psychosocial or environmental problem could be a negative life event, an environmental difficulty or deficit, a family or interpersonal stressor, inadequate social support or personal resources or any another problem related to the context in which the person's difficulties have developed. The so-called "positive stressors", such as a job promotion, should be listed only if they constitute or lead to a problem, as when it is difficult for someone to adapt to a new situation.

The psychosocial problems have a role in the onset or in the exacerbation of a mental disorder and may also interfere in the treatment plan. An important feature was the observation of the presence of triggering factors for the first schizophrenia episode in almost half of the population studied (48.1%); therefore, we obtained a statistically significant difference in favor of group A. Thus, we considered the risk factors for the development of the depressive syndrome. Some studies that assessed the presence of psychosocial stressors also found this trend.[14,15]

The most frequent types of problems were those related to the primary support group and to the social environment reflecting the reality of the studied population, inserted in non-structured families, without appropriate work, nutrition, hygiene and home conditions.

We used the Global Assessment of Functioning scale(GAF – Axis V – DSM-IV) to assess the current functioning of patients. The GAF is particularly useful to follow up the global patient's clinical progress and it must be rated concerning the psychological, social and occupational functioning.

The Global Assessment of Functioning scale showed the already reported characteristics, that is, patients who have a disease that compromises their whole psychical life. There were no significant differences between the groups. The scores obtained by schizophrenic patients of this study's total sample agree with that of other researches that used this scale as an assessment tool.[32,36]

We found a higher number of patients who attempted suicide in group A, as well as others.[28,37,38,39] There was no statistically significant difference for this variable between the groups. As this is a cross-sectional study, some group B patients who attempted suicide could have done it in a depressive moment, what prevents us to infer anything about this subject.

We found considerably more first- and second-degree relatives of patients with depressive syndrome who also had mood disorders and this difference between groups was statistically significant. The Odds Ratio analysis shows, thus, a strong association of this characteristic to group A. Some researchers[14,15,21,33,40] reported a greater genetic predisposition and emphasize that among schizophrenic patients with depressive syndrome there are more first-degree relatives with unipolar depression. Others disagree with this statement.[41-43]

Therapeutical characteristics

One of the most important aspects of this research was the evidence that, although all patients have already been medicated at the first interview, most of them had never taken antidepressants, even when there was reference to previous depressive pictures. Siris[44] reported that long-term maintenance treatments with antidepressants would be beneficial for patients who responded favorably to the initial treatment. He stated that besides the fact that some patients were resistant and even refractory to pharmacological treatment, it would be also probable that therapists found it difficult to administer high doses of anti-depressants to these patients. The fear of recidivation of psychotic symptoms would lead either to the regular use of subtherapeutical doses of antidepressants making it difficult to cure this syndrome and to a subsequent chronification of patients or to not much efficient and very long treatments.

Group A patients underwent treatments more regularly than those of group B, although this difference was not significant. What made treatments irregular was the poverty in which patients lived, added to non-compliance. There was no significant statistic difference in the average daily dose of the antipsychotic used by patients of both groups. Several studies in the area[10-12,21,25] presented similar results.

Clinical evolution of the depressive syndrome

After the cross-sectional study patients who had depressive syndrome started to be regularly followed-up. The follow-up average time was 22,61 months. As in this second phase of the

study there was not a comparison group, the data analysis has a much more descriptive characteristic. Besides the follow-up psychiatric interviews we used the Brazilian version of the ECDE to reassess the depressive symptoms.

An important finding was that the duration of the depressive syndrome was very similar between men and women and between patients with major and minor depressive episodes. We had previously revised several works that presented various results about the depression evolution time.[4,13] The comparisons of these studies with our own is limited for several reasons: utilization of distinct methodologies; observation of the depressive syndrome at different moments; utilization of different instruments to assess mood alterations and employment of distinct therapeutics.

We did not perform clinical trials. All group A patients used imipramine as antidepressant (in doses from 100 mg/day to 150 mg/day) associated with a neuroleptic (most of them used haloperidol, for its availability at the hospital's pharmacy). Recommendations contained in Siris' works[44] were respected.

The four patients who withdrew from the research had their depressive symptoms remitted and were, therefore, included in the statistic analysis of the average duration of depression. For two of these patients we had doubts about the diagnosis of schizophrenia because they had greater social and occupational autonomy; one of them had finished Law school (although being retired, with a schizophrenia diagnosis three years before). Thus, they had a good score in the GAF. Diagnostic doubts arose from the fact that, when we revised their clinical histories with information from the patients and their relatives, the existence of manic symptoms became evident. However, these patients' depressive syndrome elapsed without any productive symptoms. For some researchers the safer procedure to make a differential diagnosis with schizoaffective disorder would be the patients' long-term clinical observation,[15,45] giving priority to the clinical course instead of the symptomatology. This follow-up was not possible because they withdrew from the ambulatorial treatment.

Five out of twenty-seven patients who concluded the study had a recidivation of the acute phase with overt delusive-hallucinatory states 12,2 months after resolving their depressive disorder. According to ECDE, there was no sign of depressive symptoms neither in the prodroms nor in the psychotic period. All patients had already stopped taking antidepressants for at least five months and were only taking antipsychotics. These patients, aged 20 to 25, presented an episodic evolutive course of schizophrenia without residual symptoms between episodes. They had resumed school activities before they had the new episode and four of them had the presence of stressing factors in their families and social environment that probably triggered a new crisis. At the time we finished this study, two out of five patients had their productive symptomatology remitted at least 60 days before. One of them was still in an overt acute phase and another one had a new depressive state, forty-five days after the remission of his/her productive symptoms.

The remaining 22 patients who, after resolving their depressive syndrome did not present a new psychotic episode, evolved clinically with remarkable characteristics of schizophrenic pathology. Some of them had predominantly negative symptoms and others, extrapiramidal symptoms, caused by typical antipsychotics. Through ECDE reassessments, there were mild depressive symptoms that, however, did not characterize a full syndrome.

The authors consider, as Mcglashan & Carpenter,[13] that the duration of this study would not allow greater contributions concerning these patients' prognosis. Besides, we did not have a comparison group in the research's second phase, what might be done latter on. Furthermore, there are several characteristics, related or not to the prognosis, to be better studied in this population.

Referências

1. Siris SG, Rifkin A, Reardon GT, Endicott J, Pereira DH, Hayes R, Caser E. Course: related depressive syndromes in schizophrenia. Am J Psychiatry 1984;141:1254-7.
2. Becker RE, Colliver JA, Verhulst SJ. Diagnosis of secondary depression in schizophrenia. J Clin Psychiatry 1985;46:4-8.
3. Becker RE, Singh MM, Meisler N, , Shillcutt S. Clinical significance, evaluation, and management of secondary depression in schizophrenia. J Clin Psychiatry 1985;46:26-32.
4. Bartels SJ, Drake RE. Depressive symptoms in schizophrenia: comprehensive differential diagnosis. Comprehensive Psychiatry 1988;29:467-83.
5. Kay SR, Opler L, Lindenmayer JP. The positive and negative syndrome scale (PANSS). Rationale and standardisation. Br J Psychiatry 1989;155:59-65.
6. Minas IH, Klimidis S, Stuart GW, Copolov DL, Singh BS. Positive and negative symptoms in the psychoses: principal componente analysis of the items from the scale for the assessment of positive symptoms and the scale for the assessment of negative symptoms. Comprehensive Psychiatry 1994;35:135-44.
7. Dollfus S, Langlois S, Assouly-Besse F, Petit M. Symptômes dépressifs et symptômes négatifs. L'Encéphale 1995;3:23-7.
8. Norman RMG, Malla AK. Correlations over time between dysphoric mood and symptomatology in schizophrenia. Comprehensive Psychiatry 1994;35:34-8.
9. Herz M, Melville C. Relapse in schizophrenia. Am J Psychiatry 1980;137:801-5.

10. House A, Bostock J, Cooper J. Depressive syndromes in the year following onset of a first schizophrenic illness. Br J Psychiatry 1987;151:773-9.
11. Leff J, Tress K, Edwrds B. The clinical of depressive symptoms in schizophrenia. Schizophrenia Res 1988;1:25-30.
12. Green MF, Nuechterlein KH, Ventura J, Mintz J. The temporal relationship between depressive and psychotic symptoms in recent-onset schizophrenia. Am J Psychiatry 1990;147:179-82.
13. McGlashan TH, Carpenter WT Jr. An investigation of the postpsychotic depressive syndrome. Am J Psychiatry 1976;133:14-9.
14. Bastos O. Contribuição ao estudo clínico da depressão pós-esquizofrênica [Tese]. Recife: Faculdade de Ciências Médicas da Universidade de Pernambuco; 1981.
15. Bastos O. Depressão pós-esquizofrênica: estudo catamnéstico [Tese]. Recife: Universidade Federal de Pernambuco; 1998.
16. Peralta V, De Leon MJ, Cuesta M. Are there more than two syndromes in schizophrenia: a critique of the positive-negative dichotomy. Br J Psychiatry 1992;161:335-43.
17. Lindenmayer JP, Bernstein-Hyman R, Grochowski S. Five-factor model of schizophrenia: initial validation. J Nervous Mental Dis 1994;182:631-8.
18. Lezenweger MF, Dwordin RH. The dimensions of schizophrenia phenomenology. Not one or two, at least three perhaps four. Br J Psychiatry 1996;168:432-40.
19. Marneros A, Deister A, Rohde A, Steinmeyer EM, Junemann H Long-term outcome of schizoaffective and schizophrenic disorders: a comparative stydy. I. Definitions, methods, psychopathological and social outcome. European Arch Psychiatry Neurological Scien 1989;238:118-25.
20. Marneros A, Deister A, Rohde A, Steinmeyer EM, Junemann H Long-term outcome of schizoaffective and schizophrenic disorders: a comparative study. II. Causal - Analytical Investigations. European Arch Psychiatry Neurological Scien 1989;238:126-34.
21. Siris SG. Diagnosis of secondary depression in schizophrenia: implicartions for DSMIV. Schizophrenia Bull 1991;7:75-98.
22. Siris SG, Cutler J, Owen K, Mason S, Gingerich S, Lang MP Adjunctive imipramine maintenance treatment in schizophrenic patients with remitted postpsychotic depression. Am J Psychiatry 1989;146:1495-7.
23. Norman RM, Malla AK, Cortese L, Diaz F Aspects of dysphoria and symptoms of schizophrenia. Psychological Med 1998;28:1433-41.
24. Becker RE. Depression in schizophrenia. Hospital Community Psychiatry 1988;39:1269-75.
25. Bressan RA, Chaves AC, Shirakawa I, de Mari J. Validity study of the Brazilian version of the calgary depression scale for schizophrenia. Schizophrenia Res 1998;32:41-9.
26. Bressan RA, Chaves AC, Shirakawa I, de Mari J. Estudo de confiabilidade da versão brasileira da escala Calgary de depressão para esquizofrenia. Rev ABP-APAL 1997;19(4):149-54.
27. Johnson DAW. The significance of depression in the prediction of relapse in chronic schizophrenia. Br J Psychiatry 1988;152:320-3.
28. Addington D, Addington J, Schissel B. A depression rating scale for schizophrenia. Schizophrenia Res 1990;3:247-51.
29. Kay SR, Fizsbein A, Opler LA. The positive and negative syndrome scale for schizophrenia (PANSS). Schizophrenia Bull 1987;13:261-76.
30. Chouinard G, Ross-Chouinard A, Annable L. The estrapyramidal symptom rating scale. Canadian J Neurological Scien 1980;7:2333.
31. Addington D, Addington J, Maticka-Tyndale E, Joyce J. Reliability and validity of a depression rating scale for schizophrenics. Schizophrenia Res 1992;6:201-8.
32. Shirakawa I. O ajustamento social na esquizofrenia. São Paulo: Lemos-Editorial; 1992.
33. Henn S, Bass N, Shields G, Crow TJ, DeLisi LE. Affective illness and schizophrenia in families with multiple schizophrenic members: independent illness or variant gene. European Neuropsychopharmacol 1995:31-6.
34. Mallat-Tostes LRM; Moraes LRN. Esquizofrenia: curso, evolução e prognóstico. J Bras Psiquiatria 1989;38(4):233-9.
35. Mari JJ. A epidemiologia da esquizofrenia. In: Shirakawa I, Chaves AC, Mari JJ, editores. O desafio da esquizofrenia. São Paulo: Lemos-Editorial; 1998.
36. Hintikka J, Saarinen P, Tanskanen A, Koivumaa-Honkanen H, Viinamaki H. Gender differences in living skills and global assessment of functioning among outpatients with schizophrenia. Australian New Zealand J Psychiatry 1999;33(2):226-31.
37. Roy A. Depression, attempted suicide, and suicide in patients with chronic schizophrenia. Psychiatric Clin N Am 1986;9:193-206.
38. Drake FE, Gates C, Whitaker A. Suicide among schizophrenics: a review. Comprehensive Psychiatry 1985;26:90-100.
39. Jones JS, Stein DJ, Stanley B, Guido JR, Winchel R, Stanley M. Negative and depressive symptoms in suicidal schizophrenics. Acta Psychiatrica Scandinavica 1994;89:81-7.
40. Pope Jr HG, Yurgelun-Todd D. Schizophrenics individuals with bipolar first-degree relatives: analysis of two pedigrees. J Clin Psychiatry 1990;51:97-101.
41. Guze SB, Cloninger CR, Martin RL, Clayton PJ. A follw-up and family of schizophrenia. Arch Gen Psychiatry 1983;40:1273-6.
42. Roy A, Thompson R, Kennedy S. Depression in chronic schizophrenia. Br J Psychiatry 1983;142:465-70.
43. Berrios GE, Bulbena A. Post psychotic depression. Acta Psychiatrica Scandinavica 1987;76:89-93.
44. Siris SG. Assessment and treatment of depression in schizophrenia: a depression-like syndrome offen occurs during the longitudinal course of patients with operationally diagnosed cases of schizophrenia. Psychiatric Ann 1994;24:463-7.
45. Roger KL, Winokur G. Diagnostic separateness of schizophrenia and affective disorders. In: DeLisi LE, ed. Depression in schizophrenia. Washington, DC. American Psychiatric Press;1980.

Correspondência
Flávio Soares de Araújo
Rua Anibal Falcão, 127 Graças
52011-150 Recife, PE, Brasil
E-mail: katia@elogica.com.br (Kátia Petribú)