COMMUNICATIVE BEHAVIOR OF INDIVIDUALS WITH A DIAGNOSIS OF SCHIZOPHRENIA*

Comportamento comunicativo de indivíduos com diagnóstico de esquizofrenia

Ariana Elite dos Santos[1], Luiz Jorge Pedrão[2], Nelma Ellen Zamberlan-Amorim[3], Ana Maria Pimenta Carvalho[4], Alessandra Marino Bárbaro[5]

ABSTRACT

Purpose: to describe the communicative behavior of individuals diagnosed with schizophrenia in psychosocial rehabilitation. **Methods:** a descriptive and exploratory study with a convenience, cross-sectional sample. 50 individuals diagnosed with schizophrenia, of both sexes, aged between 19 and 75 years, users of a mental health unit in the interior of the state of São Paulo, Brasil participated in the study. Survey was conducted in the medical records for personal data and subtype of schizophrenia. To evaluate the communicative behavior, the instrument Montreal Battery of Evaluation of Communication (Drums MAC) was used, which is consisted of 14 tasks that assess discursive aspects: pragmatic-inferential, lexical-semantic and prosodic language. **Results:** most participants were males, with low education, Catholics, with schizophrenia paranoid type. The assessment through Battery MAC showed changes in all tasks evaluated and most participants said they were aware of the difficulty related to communication. The biggest changes occurred in the tasks of lexical evocation with semantic criteria, indirect speech acts, conversational discourse and narrative discourse, and the smallest changes occurred in the prosodic components related to understanding, highlighting that the level of production related to linguistic and emotional aspects of prosody also showed considerable change. **Conclusion:** all tasks evaluated presented changes. The most affected aspects were the discourse and pragmatics, which should not only be related to linguistic aspects, but also the characteristics of changes in thought and cognition, the affective blunting and social issues of this disorder.

KEYWORDS: Communication; Schizophrenia; Mental Health; Psychiatric Nursing; Speech, Language and Hearing Sciences.

INTRODUCTION

From the dialogue between knowledge and practice in Speech Language Pathology, psychiatry and public health, communication plays an important interface role in these areas. The relationship between language and psychism can be organic, from the language-brain relationship,

(*) Derived from the Dissertation: *"Comportamento Comunicativo de indivíduos com diagnóstico de esquizofrenia",* Ribeirão Preto College of Nursing of the University of São Paulo, 2012.

(1) Postgraduate Program in Psychiatric Nursing of the Ribeirão Preto College of Nursing of the University of São Paulo, Ribeirão Preto, SP, Brazil.

(2) Department of Psychiatric Nursing and Human Sciences of the Ribeirão Preto College of Nursing of the University of São Paulo, Ribeirão Preto, SP, Brazil.

(3) Postgraduate Program in Public Health Nursing of the Ribeirão Preto College of Nursing of the University of São Paulo, Ribeirão Preto, SP, Brazil.

(4) Department of Psychiatric Nursing and Human Sciences of the Ribeirão Preto College of Nursing of the University of São Paulo, Ribeirão Preto, SP, Brazil.

(5) Postgraduate Program in Psychiatric Nursing of the Ribeirão Preto College of Nursing of the University of São Paulo, Ribeirão Preto, SP, Brazil.

Financial Assistance: Social Demand Scholarship - Coordination for the Improvement of Higher Education Personnel (CAPES)

Conflict of interest: non-existent

behavioral, in terms of learning and development, and psychodynamic, with the inseparability between the workings of language and the psyche[1]. In this study, the perspective adopted comes from the understanding that physical, psychological and/or cognitive alterations can interfere with language and communication, may seriously compromise the social relationships, and cause exclusion[2].

Communication difficulties are associated with various diseases, however, there is little epidemiological data about these alterations in the area of mental health. There is evidence of a correlation between mental disorders and alterations in the cognitive, communicative and linguistic abilities[3]. These alterations may involve four main communicative processes: discursive, pragmatic, lexical-semantic and prosodic, at the comprehension and expressive levels[4].

The alterations of discursive production include lack of coherence, reduced informative content and difficulty changing themes[4].Difficulty in following conversational rules, such as communicative interchange, and adequately considering contextual clues for understanding non-literal emissions, such as metaphors or sarcasm, are some of the alterations in the pragmatic-inferential skills[4].Regarding the disturbance of the lexical semantic processing, the author states that the comprehension and production of words can be altered, especially regarding those words of lower frequency and concreteness. Finally, the prosodic processing disorders include deficits in the comprehension and production of emotional intonations, such as speech with diminished or absent intonation or inadequate distinction of linguistic intonations[4].

Of the communication changes related to mental disorders observed in the clinical practice, individuals with a diagnosis of schizophrenia present stable traits, such as disorganized discourse and reduced verbal production[5].Schizophrenia is a mental severe disorder, classically characterized by a set of cognitive and emotional dysfunctions, including perception, thinking, communication, behavior, affection, and desire, however, none of these symptoms, when observed alone, guarantee the presence of disorder[6].It mostly affects young adults[7], its prevalence is variable, with estimates between 0.1 and 0.7 per one thousand inhabitants peryear[8], and its causes have not yet been elucidated. There is, however, agreement regarding the alterations present in the framework of the schizophrenic individual, which include genetic and biopsychosocial components[6,8-10], as well as anatomical and physiological cerebral alterations and the influence of pre and perinatal factors[6,10].

There is significant evidence that schizophrenia involves a primary rupture of the language, although the processes that enable the disturbances of language to be disassociated from the disturbances of thought are unclear[11].Studies regarding alterations in language lateralization, suggest that schizophrenia is associated with a reduction in this lateralization in the left hemisphere, while others indicate structural and functional changes of the brain in regions related to language functions[11,12]. However, it is difficult to indicate physical causes that justify the schizophrenic symptomatology that leads to the indication of a possible “cognitive impairment” that would be located in the processing of information and content, and consequently in the presentation of the discourse[13].

In the clinical practice, it is relatively common to find verbal dysfunctions in patients with schizophrenia, with the inferences about the thoughts being primarily based on the discourse of the subject[6].This discourse is of such importance, that its disorganization is a criterion with diagnostic value, according to the DSM-IV-TR classification[14].The characteristics of language and speech alterations present in individuals diagnosed with schizophrenia are: disordered language and discourse, derailment, going off at a tangent, neologisms, poverty in the content of the discourse, incoherence, pressured speech, loss of ideas, and delayed speech or even remaining mute[8].In addition, people with this diagnosis, demonstrate a generalized cognitive deficit, i.e., they tend to present lower levels of performance than control subjects in various cognitive tests, with deficits in attention, memory and the resolution of problems being more prominent[8].

The disruptions in the socialization process of the individual with schizophrenia are more prominent in the negative symptomatology of the disease and, considering that communication is the result of a human socialization process, it can be predicted that this will be more impaired in individuals who manifest these symptoms.

The negative symptoms include apathy, lack of motivation, reduced activity level, psychomotor retardation, poverty of the discourse, neglect of appearance, problems with attention and concentration, and the reduction of social awareness, among others[8,14].Individuals with predominantly negative symptoms present fewer academic achievements, less success in obtaining employment, lower performance in cognitive tasks, and have worse prognoses than those with more positive symptoms[6].

It is important to evaluate the presence or absence of communication alterations in individuals diagnosed with mental disorders, especially schizophrenia, because the communicative dynamics of

the subject stem from interactions with others and from the social experience linked by language, due to the interpersonal relationship being intimately linked to the communication processes[15].In mental health, it is by communicating with others that the disturbances can be perceived and the psychiatric treatment should predominantly aim to reestablish effective communication[16].In this scenario, the importance of communication emerges in the maintenance of the social life for individuals with schizophrenia.

Thus, this study intends to provide contributions for better targeting the type of phonoaudiological care that can be provided, and for future research in Speech Language Pathology within the mental health context, especially in relation to people with schizophrenia. Given the limited number of studies conducted in Brazil on this issue, and considering its growing projection, the aim of this study was to describe the communicative behavior of individuals diagnosed with schizophrenia in the psychosocial rehabilitation process.

METHODS

This quantitative descriptive exploratory study included 50 individuals diagnosed with schizophrenia, of both sexes, with 59% male and 41% female. The participants were between 19 and 75 years of age, with at least two years of schooling and users of a mental health unit (NSM) within the State of São Paulo, Brazil. The study design was examined and approved by the Ethics Committee for Research Involving Human Subjects of the Ribeirão Preto College of Nursing, University of São Paulo, Protocol No. 1438/2011, satisfying the standards established by Resolution 196/96 of the National Health Council.

Initially, a general survey was conducted in the archives of the NSM, where a search was performed in order to verify the number of registered users and their diagnoses, which resulted in 1281 users. Subsequently, all the records of users with schizophrenia were extracted from this survey, which totaled 231 users, thus providing the total sample that could be included in the study.

From the list of users with a diagnosis of schizophrenia, each of the individuals was invited to participate in the study and presented with general information about its aims and procedures, immediately after the medical consultation when attended the NSM for medical care. Upon acceptance they were offered the Terms of Free Prior Informed Consent for their signature, and then performed the evaluation through the Montreal Communication Evaluation Battery – MCE Battery, version of the *Protocole Montréal d'Evaluation de la Communication*[17] adapted to Brazilian Portuguese[4].

Individuals with schizophrenia, of both sexes, aged between 19 and 75 years who had undergone treatment in the NSM within the previous five years were included in the study. This diagnosis was made by psychiatrists of the NSM team. Users of the service that were aged under 19 or over 75 years, and who had other psychiatric diagnoses, associated or not with the schizophrenia were excluded from the study. All the users were undergoing pharmacological treatment with the use of antipsychotic drugs. A detailed study on the types of medication was not carried out, however, users who were using psychotropic drugs prescribed for other symptoms were excluded.

The evaluation took place every day of the week in the NSM, using a room reserved for this purpose, over a period of three months. It was possible to include 50 users in the convenience sample, as previously reported. The family members who accompanied the participants at the time of evaluation were asked not to interfere with or influence their responses, only to observe.

In order to complement the data, at the end of each evaluation a search in the records of the participating user was carried out, in which general information was collected such as:full name of the participant; gender; marital status; religion; education; diagnosis; and individual and group treatment established by the multidisciplinary team of the NSM.

The MCE Battery was developed with the aim of evaluating four communicative processes: discursive; pragmatic-inferential; lexical-semantic; and prosodic. This instrument was developed primarily for individuals with right hemisphere damage, however, it can also assist in the investigation of sequelae in the communication in cases of traumatic brain injury, dementia, bilateral frontal damage, left hemisphere damage, and psychopathologies, such as schizophrenia, among others.

It was considered that the MCE Battery would a useful tool to achieve the aim of this study, as it evaluates communicative aspects that, according to the clinical practice, are commonly altered in patients with mental disorders, in addition, it is a standardized and validated instrument, the reliability of which has been confirmed.

The MCE Battery is composed of 14 tasks related to: awareness of the difficulties; conversational discourse; interpretation of metaphors; free lexical evocation, linguistic prosody comprehension; linguistic prosody repetition; narrative discourse; lexical evocation spell with discretion; emotional prosody comprehension; emotional prosody

repetition; interpretation of indirect acts of speech; lexical evocation with semantic criteria; emotional prosody production; and semantic judgment.

The results were analyzed, in relation to the communication elements, by means of simple descriptive statistics to quantify the number of occurrences of each element, using the Statistical Package for the Social Sciences (SPSS) version 16.0,and related to the information extracted from patient records concerning the personal data of the participants, thus enabling an analysis of any relationships between the data obtained through the MCE Battery and the characteristics of the participating subjects.

RESULTS

Of the 50 participants, 52% were male. Regarding age, the majority of the users evaluated were between 40 and 59 years of age (42%), 36% were between 19 and 39 years, and the minority (22%) between 60 and 75 years of age. The predominant religion was Catholic (68%), followed by Evangelical (10%), Spiritualist (6%) and non-religious (16%).

The education level of the sample was low, with 62% of the participants evaluated presenting educational levels ranging from two to seven years of study, while only the remaining 38% presented eight or more years of study.

Regarding the diagnosis, the paranoid subtype (70%) was predominant among the individuals diagnosed, followed by the residual subtype (14%), and undifferentiated schizophrenia (12%).

In the analysis of the awareness of the difficulties closed questions were applied that refer to the individual's perception of their communication skills with family and friends, at the expressive and receptive level, and the impact of communication difficulties in their daily lives, in their work and leisure. A total of 52% of the respondents had difficulty communicating with people, 78% responded that the husband/wife or their family members understood what they said most of the time, and 82% of the participants understood what other people said most of the time. Therefore, according to the research participants themselves, most replied that they presented difficulties communicating with others most of the time, but understood what people said and were understood by their family members.

In conversational discourse, 84% of the subjects presented a score equal to or lower than the alert point, which is indicative of deviant communicative behavior in the conversation.

In the ability to interpret metaphors which assesses the ability to interpret the figurative or non-literal meaning of metaphorical sentences, 62% of the users presented scores equal to or lower than the alert point, which is indicative of difficulties regarding the comprehension of figurative or non-literal language. The score and percentage of correct answer were also observed in this task. From a total of 20 alternatives involving new metaphors and idiomatic expressions a mean of 13.46 correct responses, or 67.3%, was observed. The majority of correct responses were in the alternatives regarding idiomatic expressions (7.24).In this test, 52% of the participants achieved over 75% of correct responses, versus 48% of the participants who obtained a result of less than 75% accuracy.

The lexical evocation test indicated that of all the participants, 58% of the individuals presented difficulties in evoking words without a pre-established criterion.

In the linguistic prosody- comprehension aspect, 42% of the participants presented difficulties in the ability to perceive and identify the patterns of linguistic intonation (affirmative, interrogative and imperative), similar performance was identified in the linguistic prosody - repetition aspect, in which 38% presented difficulty in orally reproducing the patterns of linguistic intonation (affirmative, interrogative and imperative).

From the instrument, the narrative discourse was subdivided into three other tests: A - Retelling part of the story; B - Retelling the full story; and C - Evaluation of the comprehension of the text.

In both the complete and the partial retelling of the story abilities72% of the participants had difficulty concerning storage capacity and comprehension of complex linguistic material, as well as difficulty in the production of the narrative discourse and in synthesizing and inferring the Information.

The majority (62%) presented difficulty in the comprehension of the text and possibly difficulty in storing information.

For the lexical evocation, 60% of the participants had difficulty evoking words with orthographic restriction. With the semantic criterion, 90% presented exploration of the lexical-semantic memory, evoking words from a categorical semantic criterion: clothing/garments.

In the emotional prosody (comprehension and repetition) similar results were also found, in the comprehension aspect44% had difficulties in the ability to perceive and identify the patterns of emotional intonation (happiness, sadness and anger) and in the repetition aspect 58% had difficulty in orally reproducing the emotional intonation patterns (happiness, sadness and anger).For the emotional prosody – production, 68% presented difficulty in the oral production of emotional intonations

based on the affective and communicative context of a particular situation.

The interpretation of indirect acts of speech evaluates the ability to understand indirect acts of speech, according to the situational context, with 88% of the individuals having difficulty using the context to comprehend the acts of speech, whether direct or indirect.

In the analysis of the semantic judgment, 58% presented difficulties in identifying semantic relationships, as well as in the explanations given to these relationships and 48% had difficulties identifying the semantic relationships between the words or in explaining what the relationships were when they existed.

Figure 1demonstrates that all the results of the tasks presented abnormalities in over 50% of the subjects evaluated, with the exception of the linguistic prosody tasks –comprehension, linguistic prosody - repetition and emotional prosody - comprehension.

DISCUSSION

The analysis of the results related to the communicative aspect of individuals with schizophrenia evidenced impairment of these people to socialization. Nevertheless, they can interact in society and develop daily living activities.

There are still a limited number of publications regarding the communicative behavior characteristics of individuals with mental health disorders. This is probably due to the work of the Speech language pathologist still not being consolidated in the role of constructor of the dialogue in this area of knowledge. The inclusion of Speech Language Pathologits in the area of mental health requires professionals that are committed to the principles of humanization, acceptance, bonding and responsibility for the area in which they operates and the community in which they live[18].Therefore, the present study has the aim of initiating a discussion regarding the characteristics of the communicative behavior of people with schizophrenia and may potentiate the

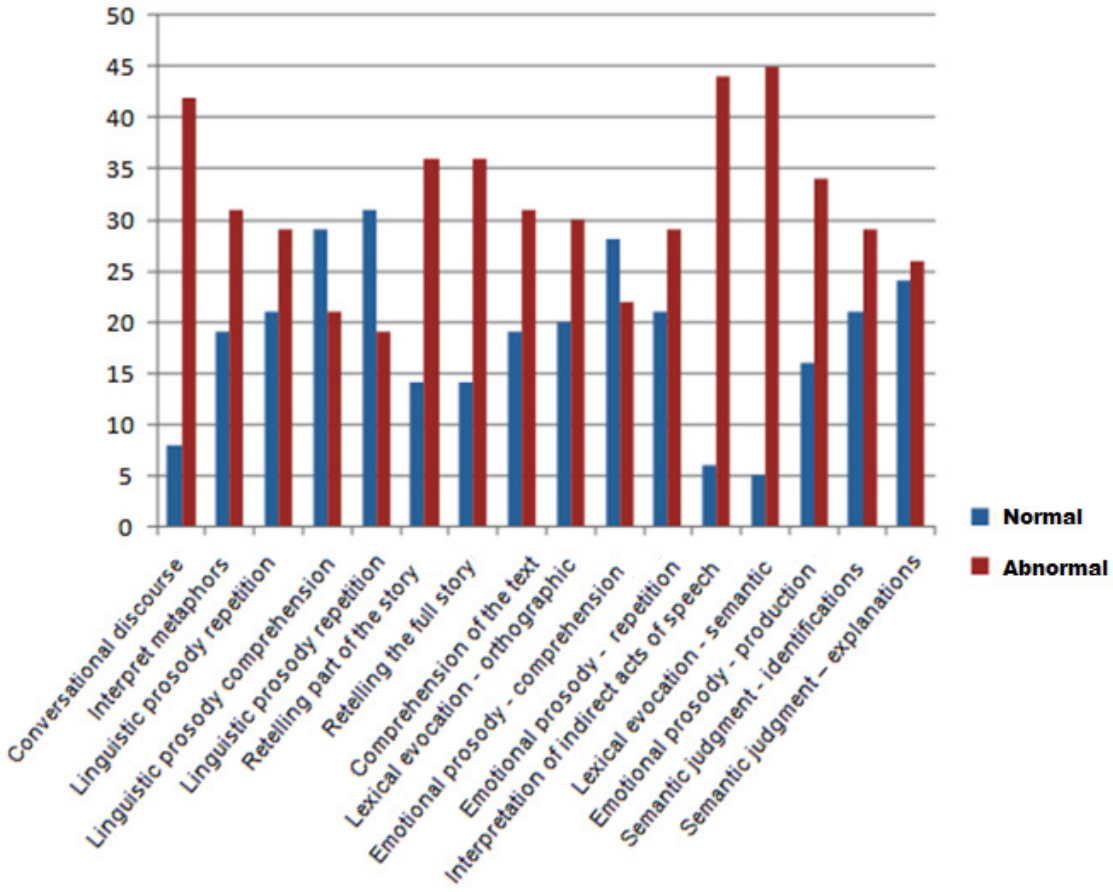

Figure 1 - Communicative behavior of individuals with a diagnosis of schizophrenia

development of public policies directed toward this subject in this group, understanding that this issue will add important data to the scientific literature.

Importantly, the MCE Battery more specifically evaluates communicative characteristics for individuals with right hemisphere damage, however, is also indicated for evaluations for other alterations, among them schizophrenia. There are systematic relationships between the discourse of the individual with schizophrenia and the discourse produced by the individual with right hemisphere damage. Individuals with schizophrenia, as well as those with a diagnosis of right hemisphere damage, present inadequate associations with the overall meaning of a discourse, and often present limited and fragmented comprehension based on personalization, as well as other incorrect associations[19]. Furthermore, the observation of problems with non-literal language, stories, jokes, and conversations is common in these two groups of alterations[20].

Sociodemographic factors are significantly associated with the "social adjustment" of people diagnosed with schizophrenia[21], therefore, factors such as gender, age, education, and others, influence the process of social inclusion and should be discussed.

The gender prevalence difference in this study was considered to have little significance. There was a slightly higher percentage of males (52%). In the literature, there is no consistency in possible differences in the prevalence of schizophrenia between the genders, regardless of the methodology employed in different epidemiological surveys, with schizophrenia prevalence rates similar for both genders[22-24].Some studies indicate a higher incidence for men than for women[25,26], however, these claims are empirical, as many epidemiological studies have not rigorously addressed the issue of gender in schizophrenia.

The most prevalent age group was that of 40 to 59 years, however it is important to consider the high percentage of individuals between 19 and 39 years of age who participated in this study.

With the general increase in longevity, the number of older individuals diagnosed with schizophrenia tends to increase, and the prevalence of schizophrenia in the elderly population is estimated at 1%.Of these, 10% had late onset schizophrenia, while the other 90% had the onset in adolescence or earlyadulthood[12].One study noted that the most affected age group in males was 20 to 24 years and 40to 44 years in females[27].New cases of schizophrenia rarely occur before puberty or after 50 years of age. When the beginning is insidious, it is difficult to accurately establish the onset of disease[22,23].

Regarding education, the majority of those evaluated had incomplete elementary education (two to seven years of study).This finding is convergent with the literature that shows that the majority of people in psychological distress have low levels of education.

Individuals with less than elementary education have higher scores for dementia compared to those with high school or higher education, which suggests that, relative to the mental disorders, the same may occur, i.e., the lower the educational level of the individual, the more likely they are to present a mental disorder[28],this being sufficient grounds to conduct studies to investigate this possibility.

It is therefore understood that low education is a factor that contributes to language alterations and, not having made a comparative study with non-schizophrenics, it cannot be said that the language impairments found occurred only as a result of the diagnosis of schizophrenia. However, other studies will be discussed below that present the relationship of communication alterations in various linguistic aspects with schizophrenia, even highlighting the low level of education factor, the observed alterations may occur due to this disorder.

Regarding the diagnosis, the prevalent subtype of schizophrenia was the paranoid subtype. Paranoid schizophrenia is mainly characterized by the presence of delusions, often of persecution, usually accompanied by hallucinations, particularly auditory, and disturbances of the perceptions[12]. Individuals with paranoid schizophrenia have the best prognosis and generally behave well socially, presenting positive symptoms in a more pronounced way in relation to the negative symptoms[22].However, in this study, the majority of the individuals with the paranoid subtype of schizophrenia presented communication alterations which are associated with negative symptoms.

The incidence of religious delusions in people with schizophrenia is significant, with about a third of the psychoses having religious content. However, not all religious experiences are psychotic, in fact, they can have positive effects on the course of the severe mental disorders, leading to the need for professionals to decide whether they should discourage religious experiences or support them[29].

Of the tasks evaluated in this study, the participants only showed a higher percentage of adequate performance in the prosody tests (linguistic-repetition; linguistic-comprehension and emotional-comprehension).Conversely, in the conversational discourse tasks, partial and full retelling of a story, interpretation of indirect acts of speech, and lexical evocation with semantic criteria, the participants obtained the worst results. The results of all tasks

applied will be discussed next, primarily considering the linguistic aspects covered in each test.

Regarding the discursive aspects, the tasks evaluated were: conversational discourse and narrative discourse (partial and full retelling of a story and comprehension questions).Attempts have been made to analyze the structures of the discourse of individuals with schizophrenia, because individuals suffering from this disorder use less cohesive ties than normal, furthermore, the use of ambiguous verbal references appears to be a stable characteristic in schizophrenia[20].

In these individuals, difficulties in discourse processing are generally observed, with impairments in interchange, in the maintenance of the subject, and in retaining the intent of the speaker and guiding the discourse based on this[30].In the narration, impairments in the construction of stories based on disordered visual stimuli are also described[31], as well as deficits in retelling stories, and omissions of important information from the text[32].

The discourse of individuals with schizophrenia is also seen as an aspect related to factors such as thought disturbances or deficits in information processing, i.e., as a reflection of the thought disorder and not as a primary characteristic of the language[20].Despite these issues, it is unanimously agreed that the discourses of individuals with schizophrenia present alterations in cohesion and the syntactic structure complexity, and reduced verbal production[33], which could be observed in the conversational discourse and partial and full retelling of a story tasks.

The pragmatics subfield involves diverse rules that support the appropriate use of language in specific social contexts and is the branch of linguistics that can best explain the adjustment between the subjectivity of language and the pragmatism of the context[6].It is known that in schizophrenia one of the competences most affected is related to the difficulties in the integration of contextual information, and that pragmatic competence possibly constitutes one of the language components most affected in this disease[33-35].

The linguistic tasks that evaluate pragmatic competence in this study were conversational discourse (which was discussed above), the interpretation of metaphors, and the interpretation of indirect acts of speech.

There have been attempts to introduce, through pragmatics, an explanation for the inconsistency in the speech of psychotic patients, directing the problem toward the lack of attention and concentration of the subject, i.e., the individual misuses the "instrument of the language"[36].It has been observed that individuals with schizophrenia are less able to benefit from the context of the moment to recognize words in and out of contextual situations when compared to non-schizophrenic people[20].

The lexical-semantic dimension of the language refers to the ability to comprehend and express words, i.e. it is related to the linguistic processing at the word level. The lexical-semantic skill tasks selected for this study were: free lexical evocation, lexical evocation with an orthographic criterion, lexical evocation with a semantic criterion, semantic judgment, and interpretation of metaphors, the latter having already been discussed in the pragmatic abilities.

The lexical-semantic skills were the most altered in this study, with 90% of the subjects presenting alterations at the moment of exploring the lexical memory, evoking words that required a semantic criterion (clothing/garments).For a long time alterations in the semantic and syntactic components of the language have been referred to in the clinical description of schizophrenia, with this being described as difficulties in the construction of phrases. In 1913, Kraepelin noted that the speech of individuals with schizophrenia presented incoherence, with a lack of construction of sentences[37].

It is important to highlight that syntactic simplifications occur most commonly in people who present more negative symptoms than positive symptoms, and that the syntactic complexity decreases with their chronic deterioration[35].With respect to the lexicon, individuals with schizophrenia tend to use a limited vocabulary, which results in poverty of discourse[38]. The access to the lexicon is clearly affected in these individuals, with the occurrence of neologisms andparaphasia[20].Poverty in the discourse, with limited vocabulary, was mainly observed in the narrative discourse and semantic judgment tests, the paraphasia and neologisms were observed in the interpretation of metaphors test.

Alterations in the prosody make up one of the symptomatological elements in the majority of psychological disorders, of which schizophrenia is highlighted[39].Prosody is the component of language that allows different forms of meaning to be expressed through variations of accent, rhythm and intonation, and can be categorized as linguistic or emotional prosody. Emotional prosody is necessary to facilitate the recognition of emotions while linguistic prosody serves to clarify syntactic ambiguities in certain enunciations, affirming whether they should be treated as questions, orders, or statements[40].Prosodic deficits encompass emotional prosody in a more pronounced way, however, the impairment is also noticed in the linguistic prosody processing. The prosodic ability tasks of this

study were: linguistic prosody –comprehension; linguistic prosody - repetition; emotional prosody –comprehension; emotional prosody – repetition; and emotional prosody - production. In the evaluation with the MCE Battery, the prosodic components were the least altered at the comprehension level, however, the production in the linguistic and emotional aspects of the prosody was altered, which corroborates the studies on this theme.

From the clinical practice standpoint, at the expressive level, a monotonous tone is observed in individuals with a diagnosis of schizophrenia due to a flattening of the prosodic curve, characterized by a substantial reduction in the variations of intensity and frequency. At the receptive level, they may present difficulties comprehending the communicative intention transmitted by the prosody of the speaker, i.e., the identification of the feeling transmitted may be inadequate if the spoken phrase has neutral linguistic content[4].Thus, not only the speech production is affected in schizophrenia, but also the comprehension of the prosody. Individuals with a diagnosis of schizophrenia present worse results in the use, repetition and comprehension of prosodic elements[40].In this study, it was observed that participants presented greater difficulty in expressing their emotions or even repeating phrases with different intonations.

The literature also indicates that the relationship between communication and psychism can be comprehended by other references as a process that is affected by the context in which the interlocutors are included[1,5,33].

The present study used a small sample in relation to the total number of users of the NSM, the place where it was developed, since the sample required the consent of the family members. A study that includes a larger number of individuals diagnosed with schizophrenia, who are users of mental health care services with the same characteristics as the NSM in different regions of the country, will allow a more precise comprehension of the study theme and grater robustness in the descriptive and statistical analysis of the results. Thus, understanding that the fact presented constituted a limitation in this the study and that the evaluation of cognitive potential was not the its focus, no instruments were applied to evaluate this aspect.

CONCLUSION

The results showed that the majority of the sample consisted of males with low education levels, practitioners of Catholicism, with the paranoid schizophrenia subtype. The communicative behavior of the individuals diagnosed with schizophrenia is deviant in every aspect of language. The aspects most affected were the discourse and pragmatics, which should also be related to the characteristics of thought and cognition alterations, as well as to affective numbness and to the social issues involved in this disorder. The prosodic components were the least altered at the level of comprehension, however, production in the linguistic and emotional aspects of the prosody was altered, which corroborates the studies on this theme. The study participants presented greater difficulty in expressing their emotions or even repeating phrases with different intonations.

Given these findings, it should be noted that the Speech language pathologist can contribute significantly in the clinical care and the formulation of intervention programs for individuals diagnosed with schizophrenia, in an interdisciplinary team (physicians, nurses, psychologists, occupational therapists and Speech Language Pathologists).In contrast, it can be observed that in Brazil few studies addressing Speech Language Pathology approach the work with this group from this perspective. For this reason, it is important to scientifically establish the need for Speech language pathologist in the various mental health services through assessments of the aspects of the Speech Language Pathology domain in these services, such as communication. Investing in other phonoaudiological studies on the topic is suggested, as this could scientifically support the interventions directed towards these individuals.

RESUMO

Objetivo: descrever o comportamento comunicativo de indivíduos com diagnóstico de esquizofrenia em processo de reabilitação psicossocial. **Métodos:** estudo descritivo-exploratório, com amostra por conveniência de recorte transversal. Participaram 50 indivíduos com diagnóstico de esquizofrenia, de ambos os sexos, com faixa etária entre 19 e 75 anos, usuários de um Núcleo de Saúde Mental de uma cidade do interior do estado de São Paulo, Brasil. Foi realizado levantamento nos prontuários para obter dados pessoais e o subtipo da esquizofrenia. Para avaliar o comportamento comunicativo utilizou-se a Bateria Montreal de Avaliação da Comunicação (Bateria MAC), constituída por 14 tarefas que avaliam os aspectos discursivo, pragmático inferencial, léxico-semântico e prosódico da linguagem. **Resultados:** os indivíduos, em sua maioria, eram do sexo masculino, com baixa escolaridade, praticantes do catolicismo e com esquizofrenia do subtipo paranoide. A avaliação pela Bateria MAC apontou alterações em todas as tarefas avaliadas e a maioria dos participantes respondeu que é consciente da dificuldade comunicativa. As maiores alterações ocorreram nas tarefas de evocação lexical com critério semântico, atos de fala indiretos, discurso conversacional e discurso narrativo, e, as menores alterações, ocorreram nos componentes prosódicos no nível de compreensão, destacando-se que, o nível da produção nos aspectos linguísticos e emocionais da prosódia, também apresentou alteração considerável. **Conclusão:** todas as tarefas avaliadas apresentaram alterações. Os aspectos mais prejudicados foram o discurso e a pragmática, que não devem ser relacionados somente aos aspectos linguísticos, mas também às características de alteração do pensamento e da cognição, ao embotamento afetivo e questões sociais desse transtorno.

DESCRITORES: Comunicação; Esquizofrenia; Saúde Mental; Enfermagem Psiquiátrica; Fonoaudiologia

REFERENCES

1. Cunha MC. Linguagem e Psiquismo: considerações fonoaudiológicas estritas. In: Fernandes FDM, Mendes BCA, Navas ALPGP Tratado de Fonoaudiologia. 2ªed. São Paulo: Roca; 2009. P. 414-8.

2. Gonçalves MS, Tochetto TM, Primo, MT. Fonoaudiologia em saúde coletiva: prioridades detectadas pelos usuários de unidades básicas de saúde. Rev Fonoaudiol Brasil. 2005;3(2):1-3.

3. Sylvia A, Ramirez S, Matiz SC. Papel del Fonoaudiólogo en el Área de Salud Mental: una experiencia professional en el Hospital Militar Central. Rev Faculdad Medicina. 2009;17(1):26-33.

4. Fonseca RP, Parente MAMP, Côté H, Ska B, Joanette Y. Apresentando um instrumento de avaliação da comunicação à Fonoaudiologia brasileira: Bateria MAC. Pró-Fono R Atual Cient. 2008;20(4):285-92.

5. Bowie CR, Harvey DP. Communication abnormalities predict functional in chronic schizophrenia: differential associations with social and adaptive functions. Schizophr Res. 2008;103(1-3):240-7.

6. Rocha J. Análise da componente pragmática da linguagem de pessoas com esquizofrenia. [Dissertação]: Aveiro, Universidade de Aveiro; 2007.

7. Matos MB, Bragança M, Souza R. Esquizofrenia de A a Z. Lisboa: Climepsi Editores; 2003.

8. Silva RCB. Esquizofrenia: uma revisão. Psicologia USP. 2006;17(4):263-85.

9. Tizón JL, Ferrando J, Artigue J, Parra B, Parés A, Gomà M, et al. Psicosis y diferencias sociales: Comparando la prevalencia de las psicosis en dos medios urbanos diferenciados. Rev. Asoc. Esp. Neuropsiq. 2010; 30(106):193-218.

10. Aguilar-Valles A. Identificación de factores genéticos en la etiología de la esquizofrenia. Acta biol.Colomb. 2011;16(3):129-38.

11. Walder DJ, Seidman LJ, Cullen N, Su J, Tsuang MT, Goldstein JM. Sex Differences in Language Dysfunction in Schizophrenia. Am j psychiatr. 2006;(163):470-7.

12. Mitchell R, Crow T. Right Hemisphere Language functions and Schizophrenia: The forgotten hemisphere? Brain. 2005;(128):963-78.

13. Brito MAP, Cavalcante MM. A fala do esquizofrênico – uma interface entre linguística de texto e psicanálise. Letras de Hoje. 2012;47(1):65-75.

14. APA. American PsychiatricAssociation. DSM-IV-TR: Manual de Diagnóstico e Estatística

das Perturbações Mentais (Versão Portuguesa). 4ª Edição. Lisboa: Climepsi; 2002.

15. Leão ER, Flusser V. Música para idosos institucionalizados: percepção dos músicos atuantes. São Paulo. Rev Esc Enferm USP. 2008;42(1):73-80.

16. Aranha e Silva AL, Guilherme M, Rocha SSL, Silva MJP. Comunicação e enfermagem em saúde mental – reflexões teóricas. Rev. Latino-Am. Enferm. 2000;8(5):65-70.

17. Joanette Y, Ska B, Coté H. Protocole MEC : Protocole Montreál d´Évaluation de la Communication. Montreal: Ortho Édition; 2004.

18. Bernardi APA. Fonoaudiologia na saúde coletiva: uma área em crescimento. Rev. CEFAC. 2007;9(2):146-7.

19. Brownell HH, Potter HH, Bihrle AM, Gardner H. Inference deficits in right brain-damaged patients. Brain Lang. 1986;(29):310-21.

20. Kuperberg GR, Caplan D. Language dysfunction in schizophrenia. Schiffer. 2003.

21. Silva TFC, Legay L, Abelha L, Santos JFC, Lovisi GM. Avaliação do ajustamento social em pacientes portadores de esquizofrenia atendidos em um ambulatório de hospital geral no Rio de janeiro. Cad. saúde colet. 2010; 28(4):587-96.

22. Kaplan H. Compêndio de psiquiatria: ciência do comportamento e psiquiatria clinica. 7ª edição. Porto Alegre: Artmed; 1997.

23. Mari JJ, Leitão RJ. A epidemiologia da esquizofrenia. Rev. Bras. Psiquiatria. 2000;(22):7-15.

24. Häfner H, Van Der Heiden W. Course and outcome of schizophrenia. In: Hirsch SR, Weinberger DR. (eds.). Schizophrenia. Oxford, Victoria, Berlin: Blackwell Science; 2003.101-41.

25. Santana VS. Estudo epidemiológico das doenças mentais em bairros de Salvador. Série de estudos número 3. Instituto de Saúde do Estado da Bahia; 1982.

26. Goldstein JM, Tsuang MT, Faraone SV. Gender and schizophrenia: Implications for understanding the heterogeneity of the illness. Psychiatry Res. 1989;(28):243-53.

27. Sampaio PA, Silva VC, Delmondes WA. Estudo epidemiológico de pacientes com esquizofrenia, no Hospital de Clínicas Gaspar Vianna, janeiro de 2004 a janeiro de 2006. Rev. Para. Med. 2008;22(1):73.

28. Souza AR. Centro de atenção psicossocial: perfil epidemiológico dos usuários. [Dissertação]: Fortaleza (CE), Universidade Federal do Ceará; 2007.

29. Koenig HG. Religião, espiritualidade e transtornos psicóticos. São Paulo. Rev psiquiatr clín. 2007;34(1):95-104.

30. KasherA, Batori G, Soroker N, Graves D, Zaidel E. Effects of right and left hemisphere damage on understanding conversational implicatures. Brain lang. 1999;(68):566-90.

31. Marini A, Carlomagno S, Caltagirone C, Nocentini U. The role played by the right hemisphere in the organization of complex textual structures. Brain lang. 2005;(93):46-54.

32. Bartels-Tobin LR, Hinckley JL. Cognition and discourse production in right hemisphere disorder. J neuroling. 2005;6(18):461-77.

33. Meilijson S, Kasher A, Elizur, E. Language Communication in Chronic Schizophrenia: A Pragmatic Approach. J speech lang hear res. 2004;(47):695-713.

34. Hemsley DR. The development of a cognitive model of schizophrenia: placing it in context. Neurosci Biobehav Rev. 2005;29(6):977-88.

35. Covington M, et al. Schizophrenia and the structure of language: The linguist's view. Schizophr res. 2005;(77):85-98.

36. Brito MAP. Reflexões sobre a (in) coerência na fala do esquizofrênico. In: Cavalcante MM, Brito MAP, Miranda TP. (Orgs.). Teses e dissertações: Grupo Protexto. Fortaleza: Protexto – UFC, 2005.

37. Kraepelin E. Dementia Praecox and Paraphrenia. Leipzig: Barth, 1913.

38. Manschreck TC, Maher BA, Rosenthal JE, Berner J. Reduced primacy and related features in schizophrenia. Schizophr Res. 1991;(5):35-41.

39. Murphy D, Cutting J. Prosodic comprehension ad expression in schizophrenia. J neuro neurosurg psych. 1990;(53):727-30.

40. Leentjens AFG, Wielaert SM, Harskamp FV, Wilmink FW. Disturbances of affective prosody in patients with schizophrenia; a cross sectional study. J neuro neurosurg psych. 1998;(64):375-8.

Received on: January 02, 2013
Accepted on: August 07, 2013

Mailing address:
Ariana Elite dos Santos
Rua Marques da Cruz, 1797 – Bairro Monte Alegre
Ribeirão Preto – SP – Brasil
CEP: 14051-150
E-mail: arianelite@hotmail.com