



## ORIGINAL ARTICLE

### **Raising awareness of values in the recognition of negative symptoms of schizophrenia**

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*What we call today negative symptoms are thought to descend from the very deficits that the earliest scholars of schizophrenia (such as Kraepelin and Bleuler) considered to be the key, fundamental symptoms of the disorder. In the latter half of the 20th century, delusions and hallucinations received greater prominence, which eventually changed both the concept of schizophrenia and its diagnostic criteria by placing positive symptoms at the forefront. The first decade of the 21st century witnessed a resurgence of interest in negative symptoms of schizophrenia. Persistent and clinically significant negative symptoms were declared an unmet therapeutic need in a large proportion of cases by several schizophrenia experts, who, with the support of the NIMH, held a consensus development conference in 2005 to discuss negative symptoms and how to proceed in this area. The Consensus Statement read that improved recognition and awareness of negative symptoms are the first step to improving function in patients with negative symptoms of schizophrenia. According to the principles of Values-Based Practice that also means improving recognition and awareness of the diverse values involved in the conceptualization and practical assessment of negative symptoms. By analyzing selected conceptual papers on negative symptoms, instruments developed for the assessment of this area of psychopathology, and clinical vignettes, we intend to point out some values-related issues in the diagnosis of negative symptoms as well as to make the case that these symptoms may be a particularly complex aspect of schizophrenia, vis-à-vis understanding the role played by values.*

**Keywords:** values, schizophrenia, negative symptoms

***DIAL PHIL MENT NEURO SCI 2010; 3(2): 35-41***

#### **INTRODUCTION**

What we call today negative symptoms are thought to descend from the deficits that the earliest scholars of schizophrenia considered to be the fundamental symptoms of the disorder. According to Kraepelin (1899/1990) who was the first to describe - under the name of *dementia praecox* - what we know now by schizophrenia, in *dementia praecox*:

“we observe a weakening of those emotional activities which permanently form the mainsprings of volition [...]. Mental activity and instinct for occupation become mute. The result of this highly morbid process is emotional dullness, failure of mental activities, loss of mastery over volition, of endeavor, and ability for independent action” (p. 74)

Bleuler (1911/1950), who coined the term *schizophrenia*, attempted to describe what he thought to be pathognomonic symptoms of the “group of schizophrenias”. In his opinion the

fundamental symptoms of schizophrenia syndrome were: loss in the continuity of associations, loss of affective responsiveness, loss of attention, loss of volition, ambivalence and autism. Hallucinations, delusions, catatonic symptoms were considered to be unspecific accessory symptoms that could even be absent. Those latter manifestations are nowadays collectively called “positive symptoms”.

The origins of the terms “positive symptoms” and “negative symptoms” can be traced back to various sources, but one of the earliest and most acknowledged was John Hughlings Jackson (1881-1887/1931) who proposed the terms within a model of brain function organized in hierarchical evolutionary layers, referring to neurological as well as to mental disorders. In Jackson’s model some symptoms represented loss of function resulting by brain injury (nega-

tive symptoms) while others, such as hallucinations and delusions, represented an exaggeration of normal function and might represent release phenomena (positive symptoms) - an over-functioning of a primitive substrate that is for some reason no longer monitored by higher cortical functions. Although most investigators do not necessarily embrace the specific pathological mechanism proposed by Jackson, the categorization of schizophrenia symptoms as “positive” or “negative” has been largely adopted as a descriptive one.

Bleuler’s view, emphasizing manifestations that we would mostly call negative symptoms as central to schizophrenia, prevailed for decades. However in the 1960s and 1970s the emphasis on core symptoms shifted away from his view and delusions and hallucinations were given greater prominence which eventually changed both the concept of schizophrenia and its diagnostic criteria.

The emphasis on more conspicuous psychotic symptoms arose from an interest in improving diagnostic precision and reliability. In Nancy Andreasen’s (1997) words, florid psychotic symptoms, such as delusions and hallucinations “are essentially “all or none” phenomena, which are relatively easy to recognize and define” (p.107), whereas, “Bleulerian symptoms were difficult to define and rate reliably. They are often continuous with normality, while positive symptoms are clearly abnormal” (p. 108).

The influence of the ideas of Kurt Schneider among English-speaking psychiatrists was critical to such a shift (Andreasen, 1997). Schneider, as did Bleuler, attempted to identify symptoms that were fundamental to schizophrenia. Karl Jaspers’ work (1959/1997) who believed that the essence of psychosis was the experience of phenomena that a “normal” person could not readily relate to, had great influence on Schneider. In his opinion (Schneider, 1946/1959) key components of schizophrenia were the loss of the boundaries between self and non-self and the loss of the sense of personal autonomy. Thus, he considered symptoms such as thought insertion and delusions of being controlled by outside forces as “first-rank” symptoms which should then play a prominent diagnostic role.

Nevertheless, the end of the 20th century witnessed a resurgence of interest in negative symptoms of schizophrenia. A landmark of that resurgence was the paper by Strauss and colleagues (1974): “An approach to the diagnosis and understanding of schizophrenia, part III. Speculations on the processes that underlie schizophrenic symptoms and signs”. In this paper, the authors suggested that schizophrenic symptoms could be grouped in three relevant dimensions: a) positive symptoms including disorders of content of thought and perception and certain behaviors (e.g. catatonic motor disorders); b) negative symptoms including blunting of affect, apathy, and certain kinds of formal thought disorder, such as blocking; and c) disorders of relating including poor relationships and social avoidance.

The work by Strauss and co-workers led to a growing interest in the positive/negative distinction in schizophrenia. However, in Andreasen and Olsen’s words (1982):

“Exploration of the distinction has proceeded slowly and fitfully [so far] in spite of considerable interest in it, primarily because adequate methods of phenomenologic description and nosologic categorization have not been available” (p. 790)

Efforts to better delineate the features of negative symptoms were then undertaken. The “disorders of relating”, postulated by Strauss and colleagues, were eventually assimilated to “negative symptoms”, which have been most commonly, although not uncontroversially, considered to consist of *blunted affect, poverty of speech, asociality, avolition and anhedonia*. In order to improve diagnostic reliability and to quantify negative symptoms in spite of their nebulous fringes with normal experiences, a number of scales for the standardized assessment of negative symptoms were developed. We will return to two of those assessment instruments later in this paper.

The positive/negative distinction was adopted by a number of investigators in an attempt to define a putative disease entity within the “group of schizophrenias” as Bleuler referred to it. Three major models emerged: type I and type II schizophrenia (Crow, 1980), negative and positive schizophrenia (Andreasen and Olsen, 1982),

and deficit and nondeficit forms of schizophrenia (Carpenter Jr. et al., 1988). Although the first two models were praised as very promising in the 1980s and 1990s, they are nowadays less enthusiastically embraced even by their own idealizers (Andreasen, 1997). However, the hypothesis that deficit schizophrenia - a putative subtype of schizophrenia characterized by the presence of prominent and persistent negative symptoms that are considered to be primary to the illness rather than due to such factors as antipsychotic akinesia, depressive anhedonia or paranoid social withdrawal - might represent a separate disease within schizophrenia syndrome remains an active program of research.

Negative symptoms have also an important place in a current research approach that is becoming prevalent: it emphasizes the investigation of discrete symptom complexes as compared with schizophrenic syndromes or subtypes, shifting away the focus from the pathophysiology of schizophrenia to the investigation of the pathophysiology of each specific symptom domain (Buchanan and Carpenter, 1994). Negative symptoms and particularly deficit symptoms are considered to be one of such domains. Those symptom complexes have been tested with a variety of neuroimaging and neurophysiologic techniques, and in genetic studies they are hypothesized to represent independent phenotypes. There have also been expectations even that animal models could be developed for each of the domains (Buchanan and Carpenter, 1994; Andreasen, 1997).

An uncritical ascription of the study of negative symptoms to such a research agenda has been sometimes pointed out and regarded as a reductionist approach (see, for example, TARRIER (2006)). We subscribe to that criticism, to the extent that such naturalistic approach neglects the complexity of a subject's being-in-the-world as well as the diversity of driving forces within the life of each individual. Hereafter, we will point out one of the neglected aspects within a plain naturalistic approach, that is the key role played by values in the conceptualization of negative symptoms.

There are an ongoing debate and a growing body of literature on the inescapable role of val-

ue attribution, besides "scientific facts", not only on mental health care but also on the process of psychiatric diagnosis, involving conceptualization and assessment of symptoms and classification of disorders (Sadler, 2004; Fulford et al., 2006). One of the stands assumed in that debate is that scientific advances (in neuroscience, for example), far from reducing the prominence of values in psychiatry, increases the value-ladenness of the discipline by opening up a widened range of possible choices to which values are entailed (Fulford et al., 2006). We believe that bringing the debate on values to the consideration of negative symptoms is a way of preventing reductionism in that field.

In order to highlight some instances of values content in the concepts of negative symptoms we will analyze two of the scales for the standardized assessment of those symptoms. We believe such instruments can give us a glimpse on how those concepts of negative symptoms have been applied in practice. The scales were primarily developed for use in research, but we assume that they eventually influenced assessment for clinical purposes as well.

Firstly, let us take a look on Andreasen's Scale for the Assessment of Negative Symptoms (SANS) (Andreasen, 1989), a widely adopted instrument, first released in the early 1980's, which is considered to be the one with most extensive coverage of negative symptoms. The SANS consists of 5 subscales: affective flattening or blunting, alogia, avolition/apathy, anhedonia/asociality, and attentional impairment. Let us pick up the avolition/apathy subscale as an example. The general description of the subscale reads:

"This symptom complex encompasses the schizophrenic subject's difficulties in experiencing interest or pleasure. It may express itself as a loss of interest in pleasurable activities, an inability to experience pleasure when participating in *activities normally considered pleasurable*, or a lack of involvement in social relationships of various kinds" (our italics)

The subscale consists of four items and a global rating of Anhedonia-Asociality:

- a) Recreational Interests and Activities: "The subject may have few or no interests, activities, or hobbies"
- b) Sexual Interest and Activity: "The subject may show a decrement in sexual interest and activity, as

*judged by what would be normal for the subject's age and marital status.* Individuals who are married may manifest disinterest in sex or may engage in intercourse only at the partner's request. In extreme cases, the subject may not engage in any sex at all. Single subjects may go for long periods of time without sexual involvement and make no effort to satisfy this drive"

c) Ability to Feel Intimacy and Closeness: "The subject may display an inability to form close and intimate relationships *of a type appropriate for his age, sex, and family status.* In the case of a younger person, this area should be rated in terms of relationships with the opposite sex and with parents and siblings. In the case of an older person who is married, the relationship with spouse and with children should be evaluated, while older unmarried individuals should be judged in terms of relationships with the opposite sex and any family members who live nearby"

d) Relationships with Friends and Peers: "Subjects may also be relatively *restricted in their relationships* with friends and peers of either sex. They may have few or no friends, make little or no effort to develop such relationships, and choose to spend all or most of their time alone" (our italics)

We can infer from those items that judgment on areas where human values varies largely and are far from consensual, even within a given culture, such as sexual interest and activity, is a requirement of negative symptoms assessment.

Let us take an excerpt of another scale, the Schedule for the Deficit Syndrome (SDS: Kirkpatrick et al., 1989) developed to assess the presence or absence of the deficit syndrome in schizophrenia. The SDS incorporates severity ratings for 6 negative symptoms: restricted affect, diminished emotional range, poverty of speech, curbing of interests, diminished sense of purpose and diminished social drive. Although the schedule is not intended to be a measure of negative symptoms severity, the identification of at least two out of six symptoms presenting severity beyond a specific threshold is one of the criteria for the diagnosis of the deficit syndrome of schizophrenia.

The SDS manual puts forward definitions of the symptoms to be assessed and directions on how that assessment should be done. For example:

Diminished sense of purpose: under this item, one is attempting to rate: 1) the degree to which the patient posits goals for his/her life; 2) the extent to which the patient fails to initiate or sustain goal directed activity

due to inadequate drive; and 3) the amount of time passed in aimless inactivity. Whether or not the goal is realistic is not relevant. The patient with a superficial commitment to a goal - i.e., who only pays lip service to a socially acceptable goal - should be considered to have a diminished sense of purpose. It may be important to distinguish between activity for which the patient provides the impetus, and one for which another person (such as a family member) provides it

Here again the rater is prompted to judge and decide on widely variable and value-laden human activities, behaviors and inner experiences, in order to capture manifestations that are supposedly out of the boundaries of an implicit norm or expected range of diversity.

It is not our point that researchers and scale developers are unaware of value attribution in the definition and assessment of negative symptoms. But, instead, that this issue has not been carefully and explicitly addressed. Illustrative of the overlooking of the role played by values in the conceptualization and assessment of negative symptoms is the absence of any reference to any question related to that issue amongst the questions addressed by schizophrenia experts gathered under the auspices of the NIMH on a consensus development conference on negative symptoms in 2005 (Kirkpatrick et al, 2006).

We argue on the relevance and need of open debate and further conceptual work on negative symptoms, especially as regarding values-related issues. The cooperation between philosophy and psychiatry that has been flourishing in the first decade of the 21st century (Fulford and Stanghellini, 2008) would provide valuable framework and tools for that enterprise.

In order to show how our concerns are relevant to clinical practice, let us introduce Mr. A to you:

Mr. A. is now 32 years old. He had his first psychotic episode when he was 25. On that time he was married and had already two children. He worked as an administrative employee on a beach hotel. Since he was 19 he used to smoke marijuana on occasions (about twice a month). Before the psychotic episode he liked to party with his co-workers and had sometimes flirted with hotel guests. Through some months he became increasingly paranoid and started hearing voices that talked with one another discussing about him. After much insistence of his wife, he accepted psychiatric treatment and started taking antipsychotics. After some time he had no longer positive symptoms and

he returned to his work and previous life style, except for that he quitted marijuana. A couple of years later he stopped taking antipsychotics and abandoned treatment. When he was 28 he had a new episode, during which, besides delusions and hallucinations, he presented bizarre and aggressive behavior. He was involuntarily admitted to a psychiatric ward and he was prescribed a second generation antipsychotic. Even though the diagnosis of a substance-induced psychosis could not be ruled out at first, the occurrence of a second full-blown psychotic episode after years of abstinence of marijuana, combined with a persistent change in patterns of sociability and functionality led to the diagnosis of schizophrenia (according to the DSM-IV). Once again positive symptoms remitted completely with antipsychotic treatment. But this time his wife left him. Mr. A. deeply regretted the end of his marriage. He moved to another city, to live alone in a studio next to his sister's house. Now he works as a nocturnal security guard. He visits his children monthly and he talks a little to his sister, other than that he has no social relationships. He says he is more "moderate" nowadays and he doesn't get "emotionally involved" with things like he used to do before. He doesn't mind being alone, actually he doesn't feel like being with people. He had no sexual relationships in the last 4 years. In his account, he changed because he realized he had a wrong way of life before, one that led to the second psychotic episode, and most importantly, to the end of his marriage. He has been going to an evangelical church from time to time, and he believes living a more ascetic life will praise God, and will help preventing new psychotic episodes. He thinks his life is good this way.

If we think of negative symptom domains definitions and SANS' anhedonia-asociality subscale we might consider that Mr. A has significant asociality. However, he has a personal account for the changes he has undergone that makes them meaningful to him. He expresses his view that the changes that could possibly be considered a negative symptom of schizophrenia are, in fact, a life option that is in line with values he currently holds.

Imagine a future when NIMH's hopes for the development of specific pharmacological treatment for negative symptoms (Kirkpatrick et al., 2006) were met and clinicians are provided with a drug for asociality. Should we treat Mr. A or should we not? Should we tell him that what he thinks as his option for an "ascetic life" is a mere rationalization of his impairment, which actually is a dysfunction of his brain, treatable by medication?

Some recent trends in health care promotion can help us deal with those questions: Values-Based-Practice (VBP) (Fulford, 2004), health care aimed at recovery (Farkas, 2007), and WPA's Psychiatry for the Person (Mezzich, 2007). In different ways, all those approaches positively valorize first person's accounts for mental illness, the respect for the diversity of values that are at play on diagnostic process, treatment planning and service delivery, and the active engagement of the person in all aspects of promoting person's own health and well-being.

However, as emphasized by principle one of VBP, fact and value are woven together in diagnostic decisions and the proposal of a deficit syndrome of schizophrenia has its own good share of facts. It arose from clinical observations and from the contact with patients whose persistent lack of liveliness and interest in other people and in world strikes clinicians as impressive. Patients presenting the deficit syndrome - 15% of first-episode and 25-30% of chronic schizophrenics, if the prevalence estimate is right (Kirkpatrick et al., 2001) – represent a knot to the person-centered approaches afore mentioned. By supporting the involvement and active participation of the person in protecting oneself from illness and promoting and maintaining health and recovery, VBP, recovery movement and psychiatry for the person, are somehow assuming that patients (or users) are willing to get involved and to have a say in health promoting process. That might prove true for most patients, but doesn't seem to be the case for deficit schizophrenics. What to do when *will* itself is disordered? As Kraepelin (1899/1990) put it, in these patients:

"[the] essence of personality is thereby destroyed, the best and most precious part of its being, as Griesinger once expressed it, torn from her. With the annihilation of personal will, the possibility of further development is lost, which is dependent wholly on the activity of volition" (p.74)

While in the case of Mr. A, taking into account the patient's values may influence the very recognition of negative symptoms, making their ascertainment somewhat controversial, there are clinical situations, in a full-blown deficit syndrome, for instance, where what is of essence is precisely whether and how patients' values can

determine the direction of treatment and rehabilitation.

Let us introduce Mr. D to you:

Mr. D. is 40 years old. He had his first psychotic episode when he was 20, by that time he was reliably diagnosed as schizophrenic (according to DSM-IV). From 20 to 28 years old, he had some psychiatric hospitalizations. While taking antipsychotic medication he presented complete remission of positive symptoms, but in the last 15 years he did almost nothing but sat around watching the days go by. He lives with his elderly parents and his income is a social security pension. His mother had a stroke and has severe motor impairments. His father takes care of the household. If the old man insists a lot, Mr. D. would wash a single dish, but no more than that. He wakes up about nine in the morning and spends the morning waiting for the lunch sat on the sofa or laid in his bed, but if for any reason his father doesn't prepare the meal, Mr. D. won't care, he simply won't eat. He doesn't watch television or listen to the radio. He smokes all day long. Mr. D. is treated in a multidisciplinary community based mental health care setting aimed at psychosocial rehabilitation. He accepts to take antipsychotic medication, but his father has to supervise him because he would not take his medicine by himself. Every two weeks, Mr. D. goes to the mental health service to participate in a therapeutic group. His participation consists of staying silently in the room. He refuses every single invitation to engage in any other activity and he doesn't propose another instead. Even his refusal is quite passive. He would say: "Uh... I guess not" or "Oh... I don't like it". When asked what he would like to do, he would say with a smile: "Nothing, I guess. Let it be"

What about to do with Mr. D? How could we possibly include him in his own process of health promoting? Should we just leave him alone? How could us help him achieve recovery, understood as "the deep personal process of changing one's attitudes, feelings, perceptions, beliefs, roles, and goals in life", developing "new meaning and purpose in one's life, beyond the impact of mental illness" (Farkas, 2007)?

That is the double challenge negative symptoms poses to us: on the one hand, to be actively watchful of normalizing and naturalizing tendencies and keep an openness and respect for the diversity, and on the other, to rethink the limits of cherished concepts, such as self-determination and empowerment, and of person-centeredness in health care.

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**Endnote:** This paper was first presented (oral presentation) in a condensed form at the 13th International Conference of the International Network for Philosophy and Psychiatry, Manchester, United Kingdom, June, 2010. This work was funded by FAPESP, grant no. 08/09488-8.

**REFERENCES**

- Andreasen NC, Olsen S. Negative versus positive schizophrenia: definition and validation. *Arch Gen Psychiatry* 1982; 39: 789-94.
- Andreasen NC. Scale for the Assessment of Negative Symptoms (SANS). *Br J Psychiatry* 1989; 155(suppl.7):53-8.
- Andreasen NC. The evolving concept of schizophrenia: from Kraepelin to the present and future. *Schizophr Res* 1997; 28:105-109.
- Bleuler E. *Dementia praecox or the group of schizophrenias*. International University Press, New York, 1950 (original version, 1911).
- Buchanan RW, Carpenter WT. Domains of psychopathology. An approach to the reduction of heterogeneity in schizophrenia. *J Nerv Ment Dis* 1994; 182: 193-204.
- Carpenter Jr. WT, Heinrichs DW, Wagman AMI. Deficit and nondeficit forms of schizophrenia: the concept. *Am J Psychiatry* 1988; 145: 578-83.
- Crow TJ. Molecular pathology of schizophrenia. More than one dimension of pathology? *Br Med J* 1980, 280: 666-8
- Farkas M. The vision of recovery today: what it is and what it means for services. *World Psychiatry* 2007; 6: 68-74.
- Fulford KWM, Stanghellini G. The third revolution: philosophy into practice in twenty-first century psychiatry. *Dial Phil Ment Neuro Sci* 2008; 1: 5-14.
- Fulford KWM, Thornton T, Graham G. Values in psychiatric diagnosis. In: Fulford KWM, Thornton T, Graham G (Eds.). *The Oxford Textbook of Philosophy and Psychiatry*. Oxford University Press, New York, 2006: 564-584.

- Fulford KWM. Facts/values: Ten principles of values-based-medicine. In: Radden J. *The Philosophy of Psychiatry: a companion*. Oxford University Press, New York, 2004: 205-236.
- Jackson JH. *Selected writings (1881-1887)*. London, Hodder and Stoughton, 1931.
- Jaspers K. *General Psychopathology*. Johns Hopkins University Press, Baltimore, 1997 (original version, 1959, seventh edition).
- Kirkpatrick B, Buchanan RW, McKenny PD, Alphas LD, Carpenter Jr. WT. The Schedule for the Deficit Syndrome: an instrument for research in schizophrenia. *Psychiatry Res* 1989; 30: 119-24.
- Kirkpatrick B, Buchanan RW, Ross DE, Carpenter Jr. WT. A separate disease within the syndrome of schizophrenia. *Arch Gen Psychiatry* 2001; 58: 165-71.
- Kirkpatrick B, Fenton WS, Carpenter Jr. WT, Marder SR. The NIMH-MATRICES consensus statement on negative symptoms. *Schizophr Bull* 2006; 32(2): 214-9.
- Kraepelin E. *Psychiatry: A Textbook for Students and Physicians*. 2 volumes. Science History Publications, Canton, Massachusetts, 1990 (original version, 1899, sixth edition).
- Mezzich JE. Psychiatry for the person: articulating medicine's science and humanism. *World Psychiatry* 2007; 6: 65-67.
- Sadler, JZ. *Values and Psychiatric Diagnosis*. Oxford, Oxford University Press, 2004.
- Schneider K. *Clinical psychopathology*. Grune and Stratton, New York, 1959 (original version, 1946).
- Strauss JS; Carpenter Jr., WT, Bartko JJ. An approach to the diagnosis and understanding of schizophrenia, part III. Speculations on the processes that underlie schizophrenic symptoms and signs. *Schizophr Bull* 1974;11: 61-69.
- Tarrier N. Negative symptoms in schizophrenia: comments from a clinical psychology perspective. *Schizophr Bull* 2006; 32(2): 231-233.