# Schizophrenia

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## I. Introduction

We have thus far examined psychological disturbances that, while potentially quite debilitating, are typically "ambulatory" in nature, the person can usually still function, there is usually no serious loss of contact with reality. Today we turn to Schizophrenia, a class of psychological disorders that is perhaps the ultimate in psychological breakdown (Carson, et al., 1988). The individual typically has marked breaks with and distortions of reality. As we shall see, Schizophrenia "strikes at the very heart of what we consider the essence of the person" (Carpenter, 1987, p.3) Such a disturbance is often termed psychotic to distinguish it from the milder "neurotic" disorders (Anxiety and Mood disorders). Today, we will review some of the issues and controversies regarding Schizophrenia, as well as briefly look at how the DSM-III-R defines the concept.

Schizophrenia affects all areas of functioning: thought, perception, emotion, behavior. A schizophrenic individual suffers from impairment in multiple areas of functioning. The following is a list of those symptoms identified by the DSM-III-R.

(Note: Your text goes into much more detail for each of these areas, so we won't spend a lot of time on them in lecture. Make sure you review them carefully).

A. Content of Thoughts: delusions (false beliefs). Eg: Others able to read my thoughts (thought broadcasting), thoughts are being placed in my head (thought insertion), other people/beings are controlling me

B. Form of Thoughts: Eg: loose associations (one thought has little to do with the previous or forthcoming thoughts), poverty of content (talks a lot, but says very little), unique/made-up words (neologisms), clanging (speech follows meaningless rhymes. (See Handout 12-1).

   [Note: The specificity of thought disturbances is not altogether clear (disturbances of thought occur to varying degrees in many psychological disorders [Rattenbury, Silverstein, DeWolfe, et al., 1983)].

C. Perception: hallucinations, especially auditory (e.g.: hearing voices).

D. Affect: flat and/or inappropriate emotional responses (e.g.: extreme silliness, or an utter lack of emotion).

E. Sense of Self: no sense of self, of being an individual. No sense of meaning.

F. Volition: inadequate self-initiated behavior. Eg: inability to meet goals or complete tasks.

G. Interpersonal Relations: withdrawn, detached (sometimes called "autism") or excessive clinging, dependency, and intrusiveness.

H. Psycho-Motor Behavior: unresponsive or bizarre responses to the environment, e.g.: Catatonia (such as extreme rigidity or stupor), overexcited activity, strange faces.

The final, overarching diagnostic criterion is that the person's functioning has declined markedly below the highest level of functioning achieved prior to the disorder. This criterion is included to discriminate between people with Schizophrenia and those with more isolated problems (such as someone who, although experiencing some form of delusion, shows no reduction in social or work functioning). Schizophrenia typically involves impairment in multiple areas of functioning. Because the impairment is often so pervasive, Schizophrenic individuals often require prolonged or repeated hospitalization.

Case Study: (Susan, a young woman, placed by her school in a class for the emotionally disturbed): She talked at length about her interests and occupations. She said she made a robot in the basement that ran amok and was about to cause a great deal of damage, but she was able to stop it by remote control. She claims to have built the robot from spare computer parts, which she acquired from the local museum. When pressed on details of how this worked, she became increasingly vague, and when asked to draw a picture of one of her inventions, drew a picture of an overhead railway and went into what appeared to be complex mathematical calculations to substantiate the structural details, but which in fact consisted of meaningless repetitions of symbols (eg: plus, minus, divide, multiply). When the interviewer expressed some gentle incredulity, she blandly replied that many people did not believe that she was a supergenius. She also talked about her unusual ability to hear things other people cannot hear, and said she was in communication with some sort of creature. She thought she might be haunted, or perhaps the creature was a being from another planet. She could hear his voice talking to her and asking her questions (Spitzer, Skodol, Gibbon & Williams, 1981, p221-222).

Sex ratio: Schizophrenia is apparently equally common in both sexes (APA, 1987).

Prevalence: Lifetime prevalence rates have been reported to be around 0.2% to almost 1% in Europe and Asia. Studies in the U.S. (which have traditionally used broader definitions - see below) report somewhat higher rates (APA, 1987).

## II. The Concept of Schizophrenia (Andreasen, 1987a, 1987b; Neale & Oltmanns, 1980)

Schizophrenia occurs in almost all societies - it is a virtually universally accepted concept (Andreasen, 1987a). Nevertheless, there is debate over exactly how to define the concept. Typically, the controversy revolves around how to determine the boundaries of the disorder: What are the "rules" for deciding what is and what isn't Schizophrenia?

A. Kraepelin: No discussion of Schizophrenia would be complete without recognizing the role played by the German psychiatrist, Emil Kraepelin during the late 1800's and early 1900's. Kraepelin was the first to identify and comprehensively describe the disorder that we now call Schizophrenia. Kraepelin used the term "dementia praecox", a Latin phrase meaning "mental deterioration at an early age". For Kraepelin, the early age of onset was a defining criteria of dementia praecox (ie: Schizophrenia). An additional defining characteristic was a deteriorating course, that is, it is only Schizophrenia if the person gets progressively worse. While Kraepelin's definition incorporates observable symptoms as well, the emphasis was on early onset/deteriorating course as the defining features. Thus, Kraepelin's approach is fairly narrow.

B. Bleuler: The Swiss psychiatrist, Eugen Bleuler (a contemporary of Kraepelin's) rejected Kraepelin's emphasis on early onset and deteriorating course. He did much to broaden the concept, as well as coining a new term: "Schizophrenia". For Bleuler, Schizophrenia was a group of disorders, including mild and severe cases, those with a favorable outcome and those with a deteriorating course, and those which were acute and those which were chronic. He attempted to identify the core psychological feature unifying this group of disorders, and decided it must be the loosening of associations. That is, the associations typically joining thought, communication, actions, and emotions become disconnected, giving rise to the often times bizarre behaviors. (Schizophrenia literally means "split mind": from the Greek schizien for split, and phren for mind). The ultimate split is seen in the person's disconnection with the outside world.
This approach was the "prevailing wisdom" in the United States for much of the 50's and 60's, where Bleuler's definition was further broadened to include various other inferred mental process, in addition to loosening associations.

C. Schneider: Meanwhile, back in Europe, there was a push to narrow the meaning of Schizophrenia away from the broad Bleulerian conceptions of America. European psychiatrists were worrying that the definitions were becoming so broad that Schizophrenia was becoming a meaningless term. Work by people like Kurt Schneider was gaining importance. The emphasis was on identifying observable symptoms that would indicate the presence of Schizophrenia ("first rank symptoms" in Schneider's terminology) and avoiding inferred processes.

D. US-UK Cross National Project: This distinction between broad (Bleulerian) and narrow (Kraepelinian) conceptions of Schizophrenia is dramatically illustrated in the US-UK Cross National Project conducted by a team of researchers in the early 1970's. One part of this study compared the frequencies of diagnoses made in London hospitals and New York hospitals:

| | New York | London |
|---|---|---|
| Schizophrenia | 118 (62%) | 59 (34%) |
| Mood Disorder | 13 (7%) | 68 (38%) |
| Anxiety Disorder | 5 (3%) | 10 (6%) |
| Personality Disorder | 2 (1%) | 8 (5%) |
| Other | 54 (28%) | 29 (17%) |
| | ----------- | ----------- |
| | 192 | 174 |

The project researchers made their own diagnoses of the two sets of patients and found that the actual characteristics of the inpatients in the US hospitals were virtually identical to those of the British inpatients:

| | New York | London |
|---|---|---|
| Schizophrenia | 56 (28%) | 61 (34%) |
| Mood Disorder | 62 (31%) | 76 (44%) |
| Anxiety Disorder | 3 (2%) | 7 (3%) |
| Personality Disorder | 8 (3%) | 5 (3%) |
| Other | 63 (33%) | 25 (13%) |
| | ------------ | ----------- |
| | 192 | 174 |

As can be seen, the US hospital staff were much more likely to make the diagnosis of Schizophrenia than were the British staff.

E. A More Conservative U.S.: Spurred by studies like the Cross National Project, psychologists, psychiatrists and others in the mental health field became increasingly critical of the broad American definition of Schizophrenia.

The "Feighner Criteria": During the 1970's a group of Washington University (Saint Louis) researchers (Feighner and his associates) developed a more comprehensive set of criteria for defining Schizophrenia than was currently in use (for example, and especially, the DSM-II) (Feighner, Robins, Guze, et al., 1972).

The RDC: The "Feighner criteria" were the bases for the Research and Diagnostic Criteria, or RDC (Feighner, Robins, Guze, et al., 1972). These criteria returned to Kraepelin's emphasis on observational data - the RDC has notable clarity and precision (Neale & Oltmanns, 1980) compared to earlier diagnostic systems. The RDC meant a smaller and more homogeneous (hence, more meaningful?) set of patients would be diagnosed as Schizophrenic. This, in turn, meant diagnoses would be more reliably made (although this increased reliability did not insure increased validity).

## III. DSM-IV-TR

This work had an important influence on the development of the DSM. The DSM-III moved away from the overly broad definition in the DSM-II to create a more narrow definition. The DSM-III-R has carried on this trend toward a narrow conception of Schizophrenia, as illustrated by its diagnostic criteria.

A. Duration Criterion: To be diagnosed as Schizophrenic, the individual must have had the symptoms for at least 6 months. This criterion eliminates brief psychotic episodes and Mood Disorders such as Major Depression from the diagnostic category of Schizophrenia. (Why 6 months? 6 months seems to discriminate between those patients with a good prognosis [less than 6 months] and those with poor outcomes [more than 6 months] [Andreasen, 1987b]).

B. Characteristic Symptoms: Only those symptoms that are reliably identifiable are included. Problem: even with a highly reliable symptom, if it occurs infrequently it may not be useful as a criterion symptom. The symptoms should be common enough to be present in enough patients so that the diagnosis can be made accurately. In addition, the symptoms ideally discriminate between Schizophrenia and other disorders (ie: symptoms shouldn't also typically occur in other disorders). There is, however, debate over the diagnostic significance of DSM-IV-TR symptoms.

C. Age Criterion: DSM-III required onset prior to age 45. This criterion has been broadened a bit in the DSM-IV-TR: onset can occur after 45, but you must specify it as "late onset". The idea is that, after 45, we may be dealing with a different disorder, perhaps symptoms due to natural aging processes.

D. Organic Exclusion Criterion: If there is evidence that the symptoms are due to an organic (biological) disorder (eg: mental retardation, drug intoxication) then the diagnosis of Schizophrenia is not made. This is a confusing criterion, especially with all the evidence that various organic factors may be the cause of Schizophrenia.

E. Subtyping: In recognition that there do seem to be distinct types of Schizophrenia, a number of subtypes have been defined in the DSM-IV-TR. There is, however, much debate over the validity of these subtypes. Typical criticisms: The subtypes don't predict outcome; they lack validity; reliability is questionable: patients will present with different subtype symptoms during different episodes of the disorder; they ignore biological facts.

1. *Catatonic Type*: The essential feature is serious motor behavior disturbance. Such disturbance can take various forms: Stupor (marked decrease in responsiveness to environment, reduction in spontaneous movements, mutism); Negativism (resistance to all instructions or attempts to be moved); Rigidity (maintaining a rigid posture against all efforts to be moved); Excitement (purposeless and excited activity and movements); Posturing (voluntary assumption of inappropriate or bizarre postures, often for extended periods of time).

2. *Disorganized Type* (previously known as “hebephrenia”): A particularly severe (although also less common) type o f Schizophrenia, characterized by incoherent behaviors, thoughts,and affect. There is extreme loosening of associations. The individual seems to become increasingly indifferent and infantile. Giggling, silliness, weeping, anger and other reactions inexplicable and inappropriate to the situation are common. In some cases the incoherence progresses to the point where the person "makes no sense at all".

3. *Paranoid Type*: Characterized by delusions that have themes of suspiciousness, persecution, or grandeur. For example, the individual may become extremely suspicious that everyone at work is trying to kill him, or that he possesses some profound or even divine powers. Hallucinations will often accompany these delusions, often reinforcing the false beliefs.

4. *Undifferentiated Type*: A "waste basket" category, for those individuals who do not fit neatly into the other categories, but who do show prominent psychotic symptoms (delusions, hallucinations, incoherence, grossly disorganized behavior).

5. *Residual Type*: A category reserved for those individuals who have had at least one episode of Schizophrenia, but where there are no prominent psychotic symptoms. Nevertheless, the individual still exhibits signs of disorder (eg: marked social isolation or withdrawal, peculiar behavior, inappropriate affect, illogical thinking, mild loosening of associations).

6. Alternative Subtyping Schemes: Most investigators would agree that Schizophrenia is probably made up of a heterogeneous group of disorders. However, not all would agree with the way the DSM-IV-TR has cut up the pie. The DSM- IV-TR is just one of many proposed subtyping systems (Andreasen, 1985; Andreasen, 1987; Carson, et al., 1988; Neale Oltmanns, 1980):

   a) Process vs Reactive

Some cases of Schizophrenia develop slowly and gradually over a period of time, not in response to any obvious stressors, and tend to be long-lasting. Other cases seem to arise quite suddenly, marked by intense emotional turmoil and confusion. These cases are often associated with an identifiable stressors; the symptoms usually fade. These two subtypes have been termed Process Schizophrenia and Reactive Schizophrenia, respectively. Alternative terms that are approximately equivalent have been Poor Premorbid or Chronic Schizophrenia for the Process type, and Good Premorbid or Acute Schizophrenia for Reactive Schizophrenia.

b) Paranoid vs Nonparanoid
Schizophrenia has also been subdivided based on the presence or absence of paranoid symptoms (delusions and hallucinations of grandeur, persecution, suspiciousness, etc). Paranoid type: paranoid symptoms are a dominant feature. Nonparanoid type: paranoid symptoms, if present at all, tend to be fleeting, rare, and inconsistent. Paranoid Schizophrenia tends to be more "reactive" than "process" in type, to have a more benign course and outcome, and has a less clear genetic link. [There may be, however, a subgroup of paranoid schizophrenics whose disorders are quite chronic].

c) Positive vs Negative
Currently, there is much interest in the possible subtyping of Schizophrenia into positive and negative types. [To some extent, this approach overlaps the "process" vs "reactive" approach]. Positive Schizophrenia: prominent positive symptoms (delusions, hallucinations, emotional turmoil, motor agitation, bizarre behavior, and perhaps catatonic features). In addition, there tends to have been good premorbid adjustment, a relatively acute onset, and a good prognosis. Negative Schizophrenia: negative symptoms (dulled emotions, little movement, impaired or absent reactivity to the environment). In other words, there is a deficit or absence of behaviors normally present in a person's repertoire. In addition, there tends to be poor premorbid adjustment, suggesting an underlying process beginning early in life (perhaps biological); onset is slow and subtle, making it difficult to date the precise time of onset; and there is a poor prognosis.

## IV. Conclusions

There is still debate over how to define Schizophrenia. There is concern today that the DSM-IV-TR criteria are too narrow, that "the pendulum has swung too far" to the narrow side of things (Andreasen, 1987a). Others have even gone further, arguing that the entire concept of Schizophrenia is a myth. Rather, it is a means of labelling social undesirables and norm violators and thereby justifying their incarcerations (eg: Szasz, 1976). The Scottish psychiatrist, R.D. Laing (1967) has gone so far as to claim that the so-called Schizophrenia symptoms are in fact highly adaptive responses to an extremely disturbed environment. Laing argues that, instead of trying to prevent or interfere with the course of Schizophrenia, we should allow the person to experience the full course of the disorder. Like a phoenix from the ashes, the person would eventually arise from his or her psychosis, reformed and "cured". By "treating" the person, Laing argues, we actually prevent him or her from growing.

Needless to say, positions such as Szasz and Laing have been challenged by many investigators. We will have more to say about this later in the course. However, note that such extreme positions are important because they force us to confront our assumptions (e.g.: Schizophrenia is real, Schizophrenia is bad, Schizophrenia is a problem with the individual and not his or her environment, etc). As Neale and Oltmanns in their book on Schizophrenia warn us: Diagnostic systems are often based more on faith than fact. Instead of blindly accepting the reality of Schizophrenia (or any disorder for that matter), we must show that it is a meaningful concept.

In close, a quote:

> When we think of schizophrenia, we think of [the destruction of] the inner unity of the mind and [the weakening of] the volition and drive that constitute our essential character... The mind loses the intimate connectedness between thought and emotion, and the mental life is often resplendent with distorted perception, false ideas, and lack of clarity or logic in thought. Aberrant motor and social behaviors are manifest. The [person's] place in society erodes in an interactive process reflecting the incapacity to engage and sustain social bonds and society's reaction to the social and personal deviancy caused by the [disorder]. This [disorder] strikes at the very heart of what we consider the essence of the person. Yet, because its manifestations are so personal and social, it elicits fear, misunderstanding, and condemnation in society instead of sympathy and concern. Schizophrenia remains unparalleled as a stigmatizing [disorder] with all the societal consequences of personal shame, family burden, and inadequate support of clinical care, research, and rehabilitation. It is ironic that in a society with pride in individual freedom and achievement, the response to a person whose personal capacity is being eroded...is the withdrawal of opportunity (Carpenter, 1987, p.3).