

The A B C's of Schizophrenia

SCHIZOPHRENIA GENESIS, THE ORIGINS OF MADNESS

Irving I. Gottesman

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In *Schizophrenia Genesis*, Irving I. Gottesman tells the story of schizophrenia in a highly readable fashion which inspires curiosity and fascination with this mysterious disease. Instead of struggling through dry scientific articles or texts, we learn by reading easily through a fairly short 255-page text which at times feels more like historical fiction than medical science. Each chapter weaves an interesting story in a style that inspires genuine curiosity about its outcome. In addition to being so easy and enjoyable to read, a second notable attribute of Gottesman's book lies in its comprehensiveness. It provides a thorough review of current knowledge about schizophrenia, covering history, epidemiology, sociology, diagnosis, twin studies, genetics, environment, case histories, and current research directions.

In Chapter 1, Gottesman reviews schizophrenia in history. He begins with the somewhat controversial implication that the illness may not have existed until modern times:

"In ancient writings, we find no description of mental illness that is, by contemporary standards, unquestionably schizophrenia, though there are descriptions that would fit modern diagnoses of senile dementia and severe depression. These facts lead some distinguished authorities to suggest that schizophrenia was rare, or even nonexistent, before the nineteenth century." (p. 1)

In support of this proposal he reviews ancient descriptions of mental illness including Biblical references, the writings of the ancient Greeks, Shakespearean characters, and records of early physicians. According to Gottesman, the first clinically adequate descriptions of schizophrenia were documented independently in 1809 by John Haslam of London's Bethlem Hospital and by the French physician Philippe Pinel. Although this chapter provides a readable and thorough historical review of references to mental illness, Gottesman falls short of making a convincing case for his proposal that schizophrenia may have first surfaced in the 19th century. Indeed, one is left unsure of Gottesman's own point of view on this question. But the chapter provides provocative and interesting material on more recent history including controversy that existed between Bleuler, Kraepelin, and Freud.

In his chapter entitled, "How Do We Know It's Schizophrenia?" the difficulty of creating a satisfactory diagnostic classification is discussed. DSM-III-R and ICD-9 criteria are reviewed as well as older schemes like Kurt Schneider's first-rank symptoms and modern research criteria used by various scientists. It is interesting to learn that in the United States we have had a tendency to overdiagnose schizophrenia and to underdiagnose bipolar disorder. After WW II it was noted that British psychiatrists diagnosed manic-depressive psychosis 20 times more often than American psychiatrists; Americans diagnosed schizophrenia four times more often than their British counterparts. Reasons may have included a European tradition for stricter diagnostic criteria and greater use of lithium which was not approved for use in America until much later. Ultimately, Gottesman concludes that the most useful diagnostic classification scheme is one devised by Manfred Bleuler, who replaced his renowned father Eugen Bleuler at the Burgholzli Hospital in Zurich in 1942. Once organic causes are ruled out, the presence of three of the following seven items leads to a diagnosis of schizophrenia, according to Bleuler:

1. An ordinary person would consider the patient's train of thought to be incomprehensible and obviously confused, i.e., ununderstandable.
2. The patient has a conspicuous incapacity for emotional empathy and this lack cannot be explained by any obvious fact.
3. The patient appears to be in a state of intensely abnormal excitement or stupor, which may last more than just a few days.
4. The patient experiences hallucinations and illusions that last more than a few days.
5. The patient experiences delusions.
6. The patient shows a sudden and total neglect of everyday, ordinary obligations or, without provocation, behaves with brutality toward family or strangers.
7. Friends and family members report that the person they know has suddenly become a different person, not like his or her old self, and the patient's behavior can no longer be understood. (p. 36)

Overall, Gottesman's expertise clearly lies in the realm of genetics. After reading his chapter on inheritance patterns one sees how complex these patterns are in schizophrenia. Psychiatrists will benefit from understanding the risk of schizophrenia for various members of a patient's family: 48% for an identical twin, 17% for a fraternal twin, 9% for a sibling, and 4% for nieces and nephews. This chapter provides extremely useful information with which to counsel patients and their families. In addition, his chapter on twin studies summarizes the history of the classic studies done between 1928-1953, and more modern studies. He focuses upon current research with monozygotic twins who are concordant for schizophrenia, MZ twins who are discordant for the disease, and the not uncommon MZ twins in which one clearly has schizophrenia and the other has merely odd beliefs or schizoid personality traits. Interestingly, after following the children of identical twins who were discordant for schizophrenia for 18 years, Gottesman found that the risk of the disease in

the children of either twin was the same: 17%. Although the disease is strongly genetically based, clearly some unknown environmental factor plays an important role. Gottesman uses the fava bean analogy: the causal factors may well be like the fava bean and hemolytic anemia; the environmental factors are quite common but result in a disease only when they interact with specially predisposed genotypes.

Gottesman also includes some case histories in which patients and families share their experiences with this devastating illness. Those of us employed in this field might be tempted to skip these, since we hear similar stories on a daily basis, but this would be a mistake. These accounts, including one by a social worker whose uncle, brother, and daughter are all schizophrenic, add richness and meaning to Gottesman's book and make it all the more readable and tangible.

In fact the most notable feature of the book is its pertinence and readability. It will appeal to a wide audience. It is enjoyable and understandable for the lay person and also provides detailed information and provocative controversies for the mental health professional. As such it makes excellent reading for many people, including psychiatric residents.