

schizophrenic probands is important for genetic counselling, and also provides insights into the mode of transmission of the disorder. Risch (1990) used such data to conclude that at least two genes whose effects interact are involved in predisposing to schizophrenia.

Estimates of the lifetime prevalence of schizophrenia in the general population and in first-degree relatives of schizophrenic probands are available from several investigations using direct interview of subjects, often supplemented by case-note information. In contrast, such estimates for second- and third-degree relatives come from family history studies, in which information is gathered mainly from an informant rather than directly from the subject. Although we do not yet have a psychiatric diagnostic 'gold standard', family history methods are generally inferior to direct interview methods, and in studies of affective disorder may underestimate the rate of affective illness by as much as 85% in first-degree relatives of informants (Gershon & Guroff, 1984). The degree of underestimation almost certainly increases greatly with more distant relatives (Giuffra, 1991).

In psychiatry we use operational definitions for the disorders we study. Bridgman (1927) introduced operational thinking into physics because he recognised that the operations used to measure an entity themselves define the entity under investigation. Changing the measurement operation changes the entity being measured. Because lifetime risks of schizophrenia in first-degree and in more distant relatives of schizophrenic probands have not been measured using the same methods, the results are not directly comparable.

We urge caution in the use of estimates of lifetime risk of psychotic disorders in second- and third-degree relatives of schizophrenic probands. Good data are not available. Current estimates suggest a small increase of risk above that in the general population for second-degree relatives (Gottesman, 1990). The qualitative finding of an increase should be robust. However, the magnitude of the increase is not known, and may be significantly higher than the values quoted in textbooks. The true risk to third-degree relatives of schizophrenic probands is even less well known.

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Childhood sexual abuse and mental health

SIR: We have researched the long-term consequences of childhood sexual victimisation and family background in a non-clinical sample of female students. Our findings (Kinzl *et al*, 1994) confirm and supplement those of Mullen *et al* (*BJP*, December 1993, **163**, 721–732).

Our data suggest that both family dysfunction and sexual victimisation contribute to sexual disorders in adulthood. Women who experienced multiple sexual abuse often reported intimacy disturbances and impairment of sexual pleasure. Despite a negative attitude towards men and sexuality, many lived in a sexual relationship without enjoying it. Female orgasm was the most susceptible part of the sexual response cycle in women with a history of CSA.

Our results also indicate that the eating disorder frequently observed in sexually abused women is due less to sexual victimisation *per se* than to a dysfunctional family background. CSA is neither necessary nor sufficient for the development of a personality or neurotic disorder; however, it may be an important aetiological factor because of its effects on personality and emotional development (e.g., low sense of self-worth, feelings of shame and guilt, disgust, unwillingness to trust, and a sense of personal failure).

It may be said that, over time, the abuse-related factors are less influential than the continuing family processes, such as the quality and amount of family support for the child.

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