

The Decline of Catatonic Schizophrenia

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Abstract

Missouri Department of Mental Health data revealed a decrease in the percentage of schizophrenics diagnosed catatonic from 1900 to 1979. However, this decrease was not uniform. And, catatonic schizophrenia does not currently appear to be "rare" as has been contended.

A widespread clinical impression is that the incidence of catatonic schizophrenia is less than in the past (Bleuler, 1978; Grinker, 1973). In fact, the Diagnostic and Statistical Manual (1980) of the American Psychiatric Association (DSM-III) goes so far as to state, "Although this type was very common several decades ago, it is now rare in Europe and North America." There is some empirical evidence to support this contention of a decrease. Hogarty and Cross (1966) found that in a Maryland state hospital 38 percent of first schizophrenic admissions were catatonic in 1953 and 25

percent in 1960 ($X^2 = 6.97, p < .05$). Morrison (1974) reported that in an Iowa state hospital from 1920 to 1944, 14.20 percent of schizophrenic admissions were catatonic and from 1945 to 1966, the percentage was 8.45 ($X^2 = 16.49, p < .001$).

The present study was designed to determine and quantify a year to year perspective over an 80 year period, of the proportion of schizophrenics with a catatonic diagnosis. The present analysis was based upon tabulations for 54,839 schizophrenics, including 2,777 catatonics, from 1900 to 1979 supplied by the Missouri Department of Mental Health.

The product-moment correlation coefficient between proportion of catatonics and number of years since 1900 for all 80 years is $-.63 (p < .01)$. Figure 1 presents the percentage of schizophrenic first admissions that are catatonic as a function of five year periods.

Although the evidence of a decline in the proportion of catatonics is strong, the reasons for such are not clear. It could be somehow associated with increased prosperity and technology. Carpenter et al. (1976) presented a table displaying frequency of schizophrenia subtype diagnosed in nine different countries:

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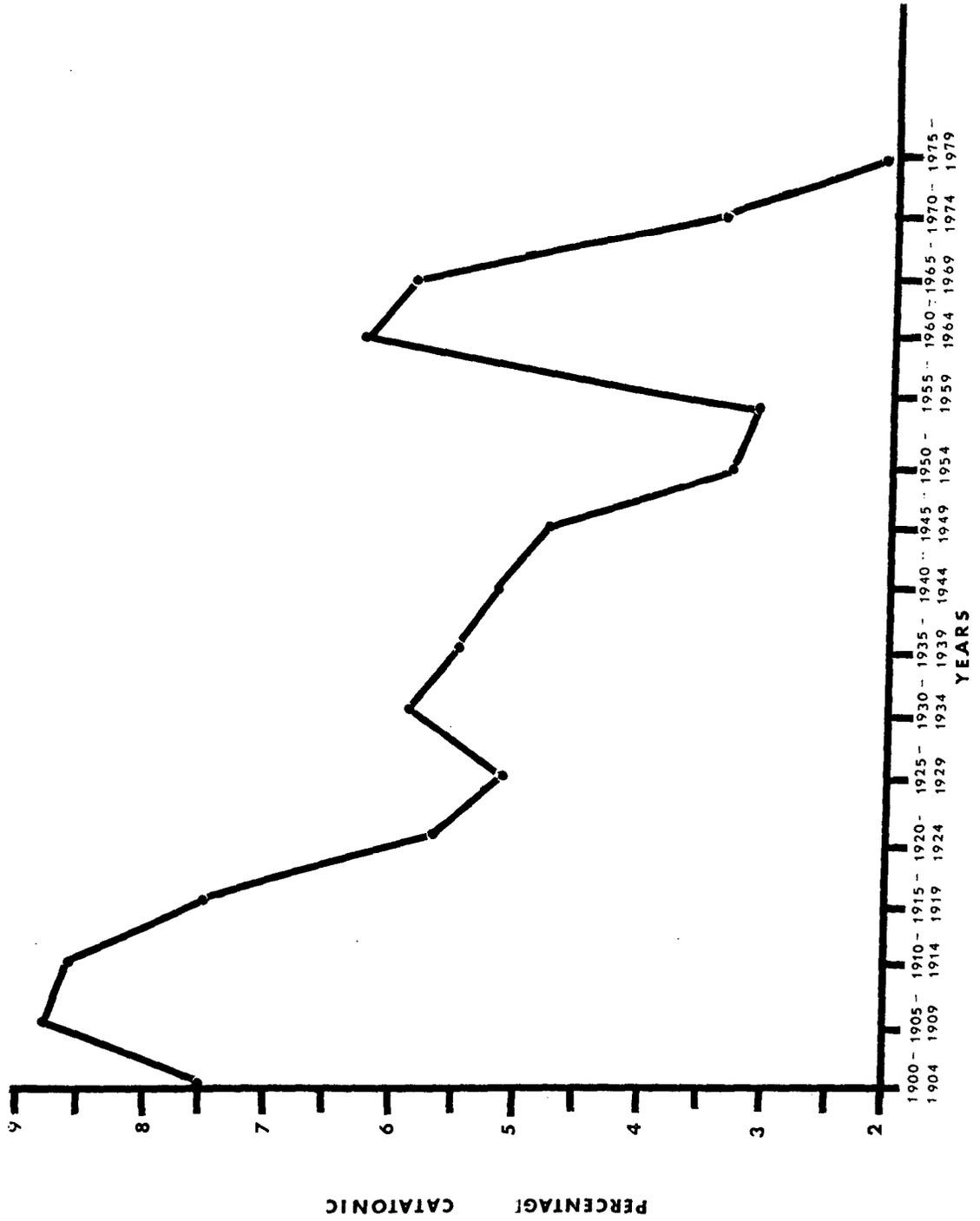


FIG. 1. Percentage catatonic as a function of five Year Periods.

Denmark, India, Colombia, Nigeria, United Kingdom, U.S.S.R., Taiwan, U.S.A., and Czechoslovakia. The present authors determined that the three countries which clearly have the highest percentage of catatonics also are the three countries with the lowest per capita income ($X^2 = 9.00, p < .01$).

However, level of economic development only provides possible clues to etiology rather than revealing specific causation. The decline in the percentage of catatonics has been attributed to the antipsychotic drugs which possibly prevent the development of a full blown catatonic syndrome resulting in hospitalization (Hogarty and Gross, 1966). However, Figure 1 does not provide much support for this explanation. Although there was an impressive decline in the 1950's, there were earlier impressive declines, and there was an increase in the 1960's.

Catatonia can be produced by a variety of physical illnesses, including infectious encephalitis (Penn et al., 1972; Raskin and Frank, 1974). It occurred to the present authors that the year to year fluctuation in catatonic schizophrenia could be a function of misdiagnosed cases of infectious encephalitis. The Missouri Department of Mental Health provided a year by year tabulation of the number of cases of infectious encephalitis in Missouri for a 34 year period, from 1946 to 1979. The range of cases was from two to 129 with a mean of 22.74 and a standard deviation of 31.07. The product-moment correlation coefficient between number of cases of encephalitis and percentage of schizophrenics diagnosed catatonics is a non-significant $-.06$. Furthermore, in 1933, which had the well known encephalitis epidemic with over 1300 cases in Missouri, the percentage of diagnosed catatonics was 6.5, a percentage similar to that of surrounding years. Thus, there is no support for our encephalitis hypothesis.

A final point to be made is that although DSM-III is correct in the contention that catatonic schizophrenia is decreasing, it is not correct in saying it is rare. Our Missouri data mesh fairly well with the conclusions of

Guggenheim and Babigian (1974) who studied the epidemiology of catatonic schizophrenia in Monroe County, New York, from 1960 to 1967. They stated that, "The seven-year prevalence of catatonic schizophrenia, based on the span of this study, is close to one per 1,000 county inhabitants. Far from being a vanishing entity, the catatonic type of schizophrenia now *represents* five percent of all first diagnosis of schizophrenia."

In conclusion, the percentage of schizophrenics diagnosed catatonic has been decreasing over the 20th century, although not at a regular rate, and not to the point of making this condition "rare" as has been contended. The reasons for this decline are not clear.

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