What Did the WHO Studies Really Find?

Assen Jablensky1,2 and Norman Sartorius3

1 School of Psychiatry and Clinical Neurosciences, The University of Western Australia, MRF Building, 50 Murray Street, Perth 6000, Australia; 214 chemin Colladon, 1209 Geneva, Switzerland

The article by Cohen et al.1 raises important issues and provides a useful synopsis of published studies on schizophrenia outcomes in 11 low- and middle-income countries. The authors use this material to challenge what they claim to be an “axiom” (ie, a self-evident proposition requiring no proof) of better course and outcome in developing countries which has been “embraced” by international psychiatry. They impute the origin of this belief primarily to World Health Organization (WHO)–led international collaborative research conducted over the past 30 years2–5 and caution that the publication of the final report from the International Study of Schizophrenia (ISoS)6 might even further bolster convictions in the “better prognosis” hypothesis. Based on evidence from research conducted outside the WHO studies, they conduct a reexamination of the axiom.

Having been directly involved with the WHO schizophrenia research program over decades, we wish to point out that Cohen et al.1 have misunderstood key aspects of the design and conclusions of the WHO studies. They claim that “the sampling methods utilized in the WHO studies may have resulted in overly optimistic perceptions of course and outcome”2 because “case-finding methods which focus exclusively on help-seeking agencies will miss large proportions of seriously ill, poor prognosis individuals.” They state, mistakenly, that the WHO studies provide no evidence allowing an evaluation of “the quality of family and social interactions,” and impute to them by implicating a view that “scarcity” of care resources is responsible for better outcomes. Because these claims repeat an earlier critique of the WHO 10-country study (Determinants of Outcome of Severe Mental Disorders [DOSMeD])7 by Edgerton and Cohen in 1994,7 which was answered by us in a publication8 not quoted in the present article, we summarize briefly the relevant features, findings, and conclusions of that study.

An unexpected finding of the follow-up stage of the WHO International Pilot Study of Schizophrenia (IPSS)3 was a markedly better overall outcome of schizophrenia patients in India and Nigeria at 2-year and 5-year follow-up. Because the IPSS cohort was not necessarily representative and the finding could be an artifact of selection, a second, epidemiologically designed study was launched in the early 1980s. DOSMeD4 was the first large-scale study in which a unified design, stringent methods, and standardized instruments were concurrently applied to first-episode incident cohorts (total study population = 1379) at 12 research sites in diverse sociocultural settings (Colombia, Czechoslovakia, Denmark, India, Ireland, Japan, Nigeria, Russia, United Kingdom, and United States). The cohorts were recruited by 2-year active case finding within defined geographical areas, aiming to intercept all new onsets at all kind of facilities—not just mental health services, but including primary care, police/prisons, traditional healers, and religious shrines (notably, 28% of the cases in India and Nigeria were recruited through such “alternative” care sources). For 86% of the cases, the duration of untreated psychosis was less than 1 year, and only 10% had been prescribed antipsychotic drugs prior to entry into the study. Repeated “leakage” checks on the completeness of case finding found that only a handful of incident cases had been missed by this technique, thus categorically ruling out an ascertainment bias favoring inclusion of milder or good prognosis cases. Patients and key informants were interviewed at baseline and at 1-year and 2-year follow-up (78.2% of the cohort), and a large proportion of the original cohort was traced and assessed again at 15 years (as part of the ISoS6) in 8 of the 12 field research centers. Throughout the study, high intra- and intercenter reliability of assessment using the Present State Examination (PSE)9 was maintained by joint rating of live and prerecorded interviews. Diagnostic stringency was ensured by processing of the PSE data using a computerized diagnostic algorithm.9 During the first 2 years, nested studies were conducted on the impact of potential precipitants of psychotic relapse: stressful life events10 (in 10 of the centers) and expressed emotion11 (in Chandigarh, India). These studies did provide important information on family and social interactions. Operationally defined measures of course and outcome included 1 categorical...
The essence of the findings and conclusions of the study are best conveyed by quoting from the DOSMeD final report.4 The study demonstrated clearly a diversity of outcomes but “did not identify any particular pattern in the course and outcome of schizophrenic illnesses which could be regarded as specific to a given area or culture.” The outcome of patients in the developing countries was not uniformly better, as compared to the outcome in developed countries. While high rates of complete clinical remission were significantly more common in developing country areas (37%) than in developed countries (15.5%), the proportions of continuous unremitting illness (11.1% and 17.4%) did not differ significantly across the 2 types of setting. Patients in developing countries experienced significantly longer periods of unimpaired functioning in the community, although only 16% of them were on continuous antipsychotic medication (compared with 61% in the developed countries). All the highest values (SMR > 4.0) were in developed countries. Had Cohen et al1 included in their review comparable data from course and outcome studies in high-income countries, the contrast between the 2 groups of settings would be striking.

We do not argue that the prognosis of schizophrenia in developing countries is groupwise uniformly milder or that the existing huge gaps in mental health service provision between high- and low-income countries are irrelevant to the lives of millions of people affected by this disorder. On the contrary, the erosion of social support systems, likely to be associated with the processes of globalization,12 should be a matter of grave concern. The sobering experience of high rates of chronic disability and dependency associated with schizophrenia in high-income countries, despite access to costly biomedical treatment, suggests that something essential to recovery is missing in the social fabric. Thus, the existence of outcome differentials between populations and cultures is not “presumed wisdom” but a real complex issue which should be addressed with standards of precision and rigor that are customary in scientific research and discourse.

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