

## EURODEP Consortium and late-life depression<sup>†</sup>

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The EURODEP Consortium is a large, international collaboration which aggregates data to permit methodologically sound secondary analyses of extant epidemiological data across multiple sites throughout Europe. The effort, as exemplified in the papers presented here, can help clarify issues which have been debated among old age psychiatrists throughout the developed world for many years. Perhaps of more importance, however, is that the cross-national nature of the study can bring new questions to the centre of discussions about late-life depression, questions of far more interest, in my opinion, than some of the questions which have dominated the epidemiological study of mood disorders among the elderly in recent years (Blazer, 1997). I first address the methods of this collaboration, which must be understood by anyone who reviews these reports critically. Next I focus upon a question addressed by the investigators which should fade to the background with the publication of these studies and a review of studies already published. I then suggest another question, raised by the investigators, that should proceed to centre stage.

### METHOD

The casual reader of these papers must not assume that the EURODEP Consortium reports data from a new wave of epidemiological studies using the same diagnostic instrument across multiple sites. The EURODEP Consortium investigations contrast with the Epidemiologic Catchment Area (ECA) studies in the USA and later replicated in Puerto Rico and Canada (Regier *et al*, 1988). In the ECA studies, the Diagnostic Interview Schedule (DIS; Robins *et al*, 1981) was the core diagnostic instrument and was administered (either in English or Spanish) across all sites (Weissman *et al*, 1996). Rather, the Consortium

efforts are a clever and sound attempt to re-analyse data from a series of previous studies. The basic method is a type of meta-analysis. The investigators abstract 12 core symptoms of depression, each symptom being assessed at each site (using slightly different probes). They then construct, *post hoc*, the EURO-D scale. This scale was never actually administered in its pure form to any subject (unlike the DIS administered at the ECA sites). Yet secondary analysis of the data suggests that the scale is internally consistent and the scale was externally 'validated' through review by experienced clinicians from the consortium. This is not validation in the classic sense, that is, comparison of the scale with a gold standard, such as a structured diagnostic interview administered by an experienced clinician. Nevertheless, the approach is perfectly legitimate and only the extreme purist among psychiatric epidemiologists would complain that this exercise is flawed from the outset. Instead, any clinician/investigator who reviews these studies should keep this method in mind when critiquing the findings of the investigators. Critiquing the results of a paper based upon the methods is at the heart of evidence-based medicine, regardless of the setting and methods of the study. The EURODEP reports provide an excellent opportunity to engage in discussions of how methods may bias the interpretation of the results presented from the study.

### THE QUESTION OF PREVALENCE

Professors Beekman and Copeland and Dr Prince address, in the report on the prevalence of depression among the elderly in the community (Beekman *et al*, 1999, this issue), the double question which I believe should fade to the background, namely: "What is the true prevalence of late-life depression and is it higher or lower than the

prevalence of depression among younger persons?" This question came to prominence with the reports from the ECA studies, in which the counterintuitive finding emerged, site after site, that late-life depression was not as frequent as previously believed and was no more frequent in the elderly than at earlier ages (Weissman *et al*, 1988). As noted by the authors, these findings depend upon case definition and methods of case ascertainment, constraints which Professor Copeland has been discussing for years. The EURODEP findings confirm yet again that the burden of depression among the elderly is high (no one seriously ever suggested otherwise) yet the frequency of major depression (the most severe of the depressive syndromes), as operationalised in DSM-III (American Psychiatric Association, 1980), its successors and analogous operationalised criteria throughout the world, is no higher among community-dwelling elders than among the young and the middle-aged. What these findings do not account for is the role of comorbidity (dementing disorders and physical illness) which is common among the elderly, yet not considered in the operationalised criteria for major depression. In retrospect, the question: "What is the true prevalence of depression in late life?" cannot be answered, for whatever estimate of depression emerges from a study will reflect the methods of the study as much as the suffering of the subjects. For this reason, the question is not that interesting.

### THE QUESTION OF GEOGRAPHICAL DIFFERENCES

Yet the EURODEP study does highlight a most interesting question: "Why does the frequency of late-life depression vary from one country to another?" The investigators report a two-fold difference among elders across the sites of these epidemiological studies which I do not believe can be explained by the methods of the study alone. We live in an era during which the study of the biology of psychiatric disorders is in the ascendance. Vascular lesions of the subcortex, dysregulation of chemical messengers or circadian rhythms and genotype are the risk factors most often explored. Of course, biological factors could explain geographical differences, such as a difference in genotype. Yet this is not the most parsimonious explanation, nor the explanation which

<sup>†</sup>See pp. 304-345, this issue

best fits these data. For example, among the more significant differences were those between London and Liverpool. Psychosocial risk factors, on the other hand, are acknowledged by psychiatrists but do not appear to excite most of us at the end of the 20th century. Social psychiatry has almost disappeared as a discipline in the USA. Nevertheless, the biopsychosocial model, which has served us so well for so many years, still applies. The EURODEP investigators have the ability to explore in much greater depth these geographical differences. If they are as clever in devising methods for comparing psychosocial risk factors as they have been in developing the EURO-D, some most interesting findings could emerge. These findings will not only inform more biologically inclined psychiatrists, who must accommodate these factors in their models (and many do), also they will inform clinicians who care for older people experiencing

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(First received 24 November 1998, accepted 4 December 1998)

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depression in the context of a social environment that is a very real factor in the onset, character and duration of late-life depression.

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