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Comorbidity and Chairman Mao

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As Pincus et al observe, comorbidity among psychiatric conditions is rampant. This fact has led many authors to propose solutions for limiting the extent of comorbidity. Nevertheless, most of these solutions, such as the hierarchical exclusion rules enshrined in recent editions of the

DSM, are based more on 'common sense' or clinical lore regarding the presumed etiological relations among comorbid conditions than on data.

Most proposals for decreasing comorbidity place the cart before the horse. We still do not know which, if any, of the more than 300 conditions in the DSM-IV are dimensional as opposed to taxonic. By a taxon, we mean a category that exists in nature rather than solely in the minds of clinicians (1). Although some DSM-IV categories, such as schizophrenia (2), may be underpinned by genuine categories, others, like anorexia and bulimia nervosa (3), may merely represent the product of scientifically arbitrary cutting points on one or more continuously distributed personality traits (e.g., neuroticism, introversion) (4).

The concept of comorbidity may be meaningful only when discussing taxonic conditions (5). As Pincus et al note, Feinstein (6) defined a comorbid condition as a 'distinct additional clinical entity' that coexists with another condition. If comorbid conditions merely represent the confluence of extreme scores on one or more dimensions, they would be neither distinct nor qualitatively different from normal functioning. Moreover, the extent of comorbidity among dimensional conditions would be driven by scientifically arbitrary decisions, such as the cut-off points for demarcating pathology from normality.

Psychologists and statisticians have developed a number of useful methods for detecting and/or validating taxa underlying psychological disorders. These methods include the taxometric techniques developed by Meehl and his colleagues (7), admixture models (8), molecular genetic studies (9), and multivariate behavior genetic studies (10). Although none of these methods by itself can provide definitive confirmation of taxa, consistent findings of taxonicity across multiple methods offer converging evidence that a psychiatric condition is categorical at a latent level (11).

Most proposals for constraining comorbidity may serve only to mask a

fundamental problem with the DSM, namely the possibility that many of its categories reflect not true taxa but the intersection of high scores on continuous traits. Rather than impose hierarchical exclusion rules in the absence of compelling research evidence and thereby impose a premature 'band-aid' solution to widespread comorbidity, it may be preferable to, in Mao Tse Tung's words, "let a thousand flowers bloom" – that is, freely permit comorbidity to exist unless or until there is some strong empirically driven reason not to. Such an approach, although perhaps more confusing for clinicians, is consistent with the splitting preference embodied in recent editions of the DSM (12). In an early stage of scientific development, splitting is generally preferable to lumping given that the relation between splitting and lumping is asymmetrical. One can always split first and lump later if the etiological data indicate that two or more comorbid conditions should be housed under the same diagnostic roof; but once one has lumped it can be extremely difficult to split later. By minimizing comorbidity in the absence of data, we may never discover whether two conditions believed to be either isomorphic or closely related are actually "distinct", to use Feinstein's term.

Pincus et al note that dimensional models may meet with resistance from many clinicians. In part, this is probably because of 'categorical thinking': the pronounced tendency of humans to conceptualize the natural world in terms of categories even when such categories do not exist (13). The great American psychologist Gordon Allport observed that "the human mind must think with the aid of categories...We cannot possibly avoid this process. Orderly living depends on it" (14). Categorical thinking is typically adaptive, as Allport pointed out, but it often leads us to oversimplify the world. If studies demonstrate that most conditions in the DSM are dimensional rather than taxonic at an underlying level, we should revise our

psychiatric classification system to mirror that fact even if clinicians find it difficult to think in dimensional terms. The DSM should reflect the state of nature, not merely how clinicians think about the state of nature.

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