‘Psychiatric comorbidity’: an artefact of current diagnostic systems?†

MARIO MAJ

The term ‘comorbidity’ was introduced in medicine by Feinstein (1970) to denote those cases in which a ‘distinct additional clinical entity’ occurred during the clinical course of a patient having an index disease. This term has recently become very fashionable in psychiatry to indicate not only those cases in which a patient receives both a psychiatric and a general medical diagnosis (e.g. major depression and hypertension), but also those cases in which a patient receives two or more psychiatric diagnoses (e.g. major depression and panic disorder). This co-occurrence of two or more psychiatric diagnoses (‘psychiatric comorbidity’) has been reported to be very frequent. For instance, in the US National Comorbidity Survey (Kessler et al, 1994), 51% of patients with a DSM–III-R/DSM–IV (American Psychiatric Association, 1987, 1994) diagnosis of major depression had at least one concomitant (‘comorbid’) anxiety disorder and only 26% of them had no concomitant (‘comorbid’) mental disorder, whereas in the Early Developmental Stages of Psychopathology Study (Wittchen et al, 1998) the corresponding figures were 48.6% and 34.8%. In a study based on data from the Australian National Survey of Mental Health and Well-Being (Andrews et al, 2002), 21% of people fulfilling DSM–IV criteria for any mental disorder met the criteria for three or more concomitant (‘comorbid’) disorders.

This use of the term ‘comorbidity’ to indicate the concomitance of two or more psychiatric diagnoses appears incorrect because in most cases it is unclear whether the concomitant diagnoses actually reflect the presence of distinct clinical entities or refer to multiple manifestations of a single clinical entity. Because ‘the use of imprecise language may lead to correspondingly imprecise thinking’ (Lilienfeld et al, 1994), this usage of the term ‘comorbidity’ should probably be avoided.

However, the fact remains that the co-occurrence of multiple psychiatric diagnoses is now more frequent than in the past. This is certainly in part a consequence of the use of standardised diagnostic interviews, which helps to identify several clinical aspects that in the past remained unnoticed after the principal diagnosis had been made—a development that is obviously welcome because it is likely to lead to more comprehensive clinical management and more reliable prediction of future disability and service utilisation. But this is only one part of the story. The other part is that the emergence of the phenomenon of ‘psychiatric comorbidity’ has been to some extent a by-product of some specific features of current diagnostic systems. Artificially splitting a complex clinical condition into several pieces may prevent a holistic approach to the individual, encouraging unwarranted polypharmacy, and may represent a new source of diagnostic unreliability because clinicians may focus their attention on one or other of the different ‘pieces’, especially in those clinical contexts in which coding of only one diagnosis is allowed.

‘PSYCHIATRIC COMORBIDITY’ AS A BY-PRODUCT OF RECENT DIAGNOSTIC SYSTEMS

A powerful, usually unrecognised, factor contributing to the emergence of the phenomenon of ‘psychiatric comorbidity’ has been ‘the rule laid down in the construction of DSM–III (American Psychiatric Association, 1980) that the same symptom could not appear in more than one disorder’ (Robins, 1994). This rule (never made explicit, to my knowledge, in DSM-related publications), probably explains why the symptom ‘anxiety’ does not appear in the DSM–IV criteria for major depression, although the text of the manual acknowledges that patients with major depression frequently present with anxiety. Lee Robins, the only author who, as far as I know, has mentioned the above rule in the literature, stated: ‘I thought then, as I still do, that the rule was not a good one’ (Robins, 1994). Actually, DSM–IV does not allow the presence of anxiety in a patient with major depression to be recorded either as a symptom or, as allowed for delusions, a specifier for the diagnosis. The concomitant diagnosis of major depression and panic disorder is encouraged (being one of the most common forms of ‘psychiatric comorbidity’), whereas the concomitant diagnosis of major depression and generalised anxiety disorder is not allowed (unless generalised anxiety occurs also when the patient is not depressed). The latter exclusion criterion seems to be an acknowledgement of the implausibility of the idea that anxiety and depression, when they occur simultaneously, are two separate clinical entities, but it actually contributes to leaving the presence of anxiety in a patient with major depression (with its significant prognostic and therapeutic implications) totally unrecorded. Not surprisingly, both the elimination of the above exclusion criterion (Zimmerman & Chelminski, 2003), which would be consistent with the logic of the system but would multiply the cases of ‘psychiatric comorbidity’, and the introduction of a mixed depressive–anxiety diagnostic category (Tyrer, 2001) have been proposed.

A second, obvious, determinant of the emergence of the phenomenon of ‘psychiatric comorbidity’ has been the proliferation of diagnostic categories in recent classifications. If demarcations are made where they do not exist in nature, the probability that several diagnoses have to be made in an individual case will obviously increase. The current classification of anxiety and personality disorders is a good example of this. It is rare to see a patient with a diagnosis of an anxiety (or a personality) disorder who does not fulfil the criteria for at least one more anxiety (or personality) disorder. The fact that ‘neuroses and abnormal personalities’ do not have clear boundaries either among themselves or with normality was clearly recognised by Jaspers (1913; see below), and would argue in favour of a dimensional approach to their classification. Paradoxically, the attempt by the DSM to

† See pp. 190–196, this issue.
characterise ‘pure’ disorders in these areas
seems to be the first step towards the iden-
tification of several ‘dimensions’. However,
how a dimensional approach would actu-
ally work in clinical practice (e.g. in what
cases a disorder would finally be diagnosed,
and how the diagnosis would be expressed)remains unclear.

A third relevant characteristic of current
diagnostic systems is the limited number of hierarchical rules. A conso-
diated tradition in psychiatry was to estab-
lish a hierarchy of diagnostic categories so
that, for example, if a psychotic disorderwere present, the possibly concomitant
neurotic disorders would not be diagnosed
because they would be regarded as part of
the clinical picture of the psychotic condi-
tion. One could argue that the current pos-
sibility of diagnosing a panic disorder in the
presence of a diagnosis of schizophrenia re-
resents a useful development, because this
additional diagnosis provides information
that may be useful for clinical management.
But are we sure that the occurrence of panic
attacks in a person with schizophrenia
should be conceptualised as the ‘comorbidi-
ity’ of panic disorder and schizophrenia? Is
the panic of a person with agoraphobia, of
a person with major depression and of a
person with schizophrenia the same
psychopathological entity that simply ‘co-
occurs’ with the other three? I am not aware
of any research evidence on this issue.

A fourth relevant feature of our current
diagnostic systems is the fact that they are
based on operational diagnostic criteria.
Because of this, they are regarded as more
precise and reliable than the traditional
ones based on clinical descriptions. How-
ever, the old clinical descriptions provided
a gestalt of each diagnostic entity, which
is often not provided by current operational
definitions. This was probably due in part
to the different emphasis laid on the various
clinical aspects (whereas in current opera-
tional definitions the various clinical features
are usually given the same weight), as well as
to the inclusion of some aspects regarded as
essential (e.g. autism in the case of schizophre
nia) that do not appear in current diagnostic systems because they
are regarded as not sufficiently reliable.
Traditional clinical descriptions encour-
gaged differential diagnosis, whereas current
operational definitions encourage multiple
diagnoses, probably in part because they
are less able to convey the ‘essence’ of each
diagnostic entity. Is this an intrinsic limita-
tion of any operational definition, or a
remediable flaw of our current operational
definitions? Was the above-mentioned
gestalt (for instance, in the case of schizo-
phrenia) a fact or an illusion? Are we sure
that we have used all the resources of the
operational approach in typifying, for in-
stance, the disorder of social and inter-
personal functioning in schizophrenia?

**PSYCHIATRIC COMORBIDITY**
AND THE NATURE OF PSYCHOPATHOLOGY

Most of the recent debate about psychiatric
comorbidity has been remarkably atheo-
retical, focusing on the practical usefulness
of one or the other approach in terms of
treatment selection and prediction of out-
come and service utilisation. However,
the emergence of the phenomenon of ‘psychi-
atriic comorbidity’ has obvious theoretical
implications. The frequent co-occurrence
of the mental disorders included in current
diagnostic systems has recently been reg-
arded as evidence against the idea that
these disorders represent discrete disease
entities (e.g. Cloninger, 2002). The point
has been made that the nature of psychopa-
thology is intrinsically composite and
changeable, and that what is currently
conceptualised as the co-occurrence of
multiple disorders could be better reformu-
lated as the complexity of many psychiatric
conditions (with increasing complexity
being an obvious predictor of greater sev-
verity, disability and service utilisation).
From the psychodynamic viewpoint, the idea
seems to be reinforced that the interaction
of congenital predisposition, individual ex-
periences and the type and success of de-
fence mechanisms employed may generate
an infinite variety of combinations of symp-
toms and signs. From the psychobiologi-
cal viewpoint, the hypothesis seems to be sup-
ported that ‘noxious stimul…perturb a
variety of neuronal circuits…The extent
to which the various neuronal circuits will be
involved varies individually, and conse-
quently psychiatric conditions will lack
symptomatic consistency and predictabil-
ity’ (van Praag, 1996). From the evoluto-
nary viewpoint, the concept seems to be
corroborated that mental disorders are the
expression of preformed response patterns
shared by all humans, which may be activ-
ated simultaneously or successively in the
same individual by noxae of various nat-
ure – a view endorsed by Kraepelin himself
in one of his later works, in which he dismis-
several disease entities even for dementia praecox and
manic–depressive insanity (Kraepelin,
1920).

However, the emergence of the phe-
nomenon of ‘psychiatric comorbidity’ does
not necessarily contradict the idea that psy-
chopathology consists of discrete disease
entities. An alternative possibility is that
psychopathology does consist of discrete
entities, but these entities are not appropri-
ately reflected by current diagnostic categ-
ories. If this is the case, then current
clinical research on ‘psychiatric comorbi-
dity’ may be helpful in the search for ‘true’
disease entities, contributing in the long
term to a rearrangement of present classifi-
cations, which may involve a simplification
(i.e. a single disease entity may underlie the
apparent ‘comorbidity’ of several disor-
ders), a further complication (i.e. different
disease entities may correspond to different
‘comorbidity’ patterns) or possibly a simplifi-
cation in some areas of classification and
a further complication in other areas.

There is, however, a third possibility:
that the nature of psychopathology is in-
trinsically heterogeneous, consisting partly
of true disease entities and partly of
maladaptive response patterns. This is
what Jaspers (1913) actually suggested
when he distinguished between ‘true
diseases’ (such as general paresis), which
have clear boundaries among themselves
and with normality; ‘circles’ (such as
manic–depressive insanity and schizo-
phrenia), which have clear boundaries with
normality but not among themselves; and
‘types’ (such as neuroses and abnormal
personalities), which do not have clear
boundaries either among themselves or
with normality. Recently, it has been
pointed out (Nesse, 2000) that throughout
medicine there are diseases arising from a
defect in the body’s machinery and diseases

---

**MARIO MAJ, MD, Department of Psychiatry, University of Naples SUN, Largo Madonna delle Grazie, I-80138 Naples, Italy. E-mail: majmario@tin.it**

(First received 5 August 2003, final revision 24 November 2003, accepted 6 February 2004)

---

183
arising from a dysregulation of defences. If this is true also for mental disorders – for example, if a condition such as bipolar disorder is a disease arising from a defect in the brain machinery, whereas conditions such as anxiety disorders, or part of them, arise from a dysregulation of defences – then different classification strategies may be needed for the various areas of psychopathology.

DECLARATION OF INTEREST

None.

REFERENCES


'Psychiatric comorbidity': an artefact of current diagnostic systems?

Mario Maj

Access the most recent version at DOI: 10.1192/bjp.186.3.182

References
This article cites 10 articles, 2 of which you can access for free at:
http://bjp.rcpsych.org/content/186/3/182#BIBL

Reprints/permissions
To obtain reprints or permission to reproduce material from this paper, please write to permissions@rcpsych.ac.uk

You can respond to this article at
/letters/submit/bjprcpsych;186/3/182

Downloaded from
http://bjp.rcpsych.org/ on July 8, 2017
Published by The Royal College of Psychiatrists

To subscribe to The British Journal of Psychiatry go to:
http://bjp.rcpsych.org/site/subscriptions/