

## Correspondence

EDITED BY MATTHEW HOTOPF

**Contents** ■ Implications of evolutionary theory for psychiatry ■ Comments on the UK700 case management trial ■ Lithium and mortality ■ Finding the evidence in forensic rehabilitation ■ Arachnophobia: a practical management device ■ Thrombocytosis due to clozapine treatment: working towards an early marker for clozapine-induced agranulocytosis ■ Etomidate-induced convulsion prior to electroconvulsive therapy

### Implications of evolutionary theory for psychiatry

It may well have been a coincidence that the announcement of the ‘breaking’ of the human genetic code and the publication of an editorial on psychiatry and Darwinism in the *Journal* occurred within the same week, but it is to be hoped that both of these events signal a new beginning. Abed (2000) asks whether the time has come for psychiatry to reconsider Darwinism: in fact, one could argue that if psychiatry as a science is to survive, there is no other option. Since its first publication in 1859, Darwin’s evolutionary theory has transformed our understanding of the living world. The model has stood the test of time despite heavy resistance by religious groups, exploitation by Fascism and enthusiastic misinterpretation. The proliferation of papers on the subject in scientific journals over the past 30 years strongly suggests that it is here to stay. Evolutionary psychology has already established itself (Barkow *et al*, 1995). In contrast, only a few articles have been published by psychiatric journals, and evolutionary theory is largely ignored in psychiatric training worldwide.

If psychiatry has survived until now without using evolutionary theory, what would be the advantage of a theoretical shift? Psychiatry badly needs a theoretical framework (Kandel, 1998) that allows for the synthesis of knowledge accumulated by different schools that do not speak the same language and therefore do not interact with each other. Evolutionary theory is capable of integrating genetic, environmental, developmental and social explanations of behaviour and is therefore an excellent candidate (Leckman & Mayes, 1998). Furthermore, as Abed points out, the usefulness of the model can be tested by theory-driven research. Psychiatry has to take up the challenge. The application of modern evolutionary theory should lead to a more accurate understanding of human

behaviour, including the origins and treatment of mental illness. Psychodarwinism became a term of abuse following atrocities perpetrated during the first half of the 20th century. It is time to learn the lessons of the past and move on. Attachment theory is one successful example of using evolutionary principles in psychiatry, and there will be more to come.

**Abed, R. T. (2000)** Psychiatry and Darwinism. Time to reconsider? *British Journal of Psychiatry*, **177**, 1–3.

**Barkow, H. J., Cosmides, L. & Tooby, J. (1995)** *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. New York: Oxford University Press.

**Kandel, E. R. (1998)** A new intellectual framework for psychiatry. *American Journal of Psychiatry*, **155**, 457–469.

**Leckman, J. E. & Mayes, L. C. (1998)** Understanding developmental psychopathology: how useful are evolutionary accounts? *Journal of the American Academy of Child and Adolescent Psychiatry*, **37**, 1011–1020.

**A. Ayton** West End Child and Family Service, 2062–2068 Hessle Road, Hessle HU13 9NW

Delighted though I was to see Abed’s editorial on evolutionary theory (Abed, 2000), I have reservations about its ability to provide an integrated scientific psychiatry as the author implied. Rather, it provides a welcome additional frame of reference. Like all ultimate theories, it applies to everything but lacks power with specifics (for example, to clarify whether an antidepressant or psychotherapy is best for an individual patient). Evolutionary theory seldom generates new treatments. It offers ultimate causes over which we have no control.

Although I am an enthusiast of both, I am concerned that evolutionary theory has the same drawback as psychodynamic theory; it can accommodate any combination of facts. If I devise and test a theory that adolescent males will be less or more inclined to form lasting sexual relationships than older men, I can explain either. If they desire to form casual relationships, then I can argue that in the ancestral environment

this benefited their genes at a stage in life when it was difficult to get a permanent mate. And if they do not, I can argue that their male ancestors propagated best by acquiring a mate in youth, reserving infidelity until later. Hence, it is difficult to establish whether a proximate or ultimate cause has determined the outcome. A true sociological explanation for the sexual strategies of adolescent males might be hidden by our adherence to evolutionary theory. Furthermore, the specific evolutionary mechanism alongside the sociological mechanism might be different from the one proposed.

An unmentioned benefit of evolutionary theory is reassurance. If cyclothymia was adaptive in the ancestral environment (by optimising peak function), then the risk of depression may have been increased in subsequent generations. Instead of ‘defective’ we can think of ourselves as highly adapted. When vandals wreck the playground where my children play I can reflect that this is normal behaviour for male primates. By exerting themselves against the environment they intimidate rivals – a pleasant zoological perspective preferable to saying that society is falling apart.

**Abed, R. T. (2000)** Psychiatry and Darwinism. Time to reconsider? *British Journal of Psychiatry*, **177**, 1–3.

**C. Dewar** Larkfield Resource Centre, Garngaber Avenue, Lenzie, Glasgow G66 3UG

### Comments on the UK700 case management trial

The UK700 Group (2000) presents a comparative cost analysis of intensive case management (ICM) *v.* standard case management for patients with severe mental illness. It failed to find any significant difference in duration of in-patient treatment between the two groups at 2 years, and the cost of care was thus roughly equal. The authors conclude that “the policy of advocating intensive case management for all patients with severe psychosis is not supported...”.

While the execution of the UK700 study is admirable in terms of its sheer number of subjects, the design is critically restricted by the very nature of the ‘intensive case management’ offered. Indeed, the mean number of contacts per client was 100 (s.d.=64) *v.* 64 (s.d.=30) in the control group; this equates to around one visit per week and one per fortnight, respectively. Comparison with our local (ICM) service shows that our case managers visit clients