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Depressing research

It is hard to imagine the anguish experienced by the parents, relatives, and friends of a child who has taken his or her own life. That such an event could be precipitated by a supposedly beneficial drug is a catastrophe. The idea of that drug's use being based on the selective reporting of favourable research should be unimaginable. In this week's issue of *The Lancet* (p 1341), however, a meta-analysis by Craig Whittington and colleagues suggests that this is what has been happening for research into the use of antidepressants in childhood. Their results illustrate an abuse of the trust patients place in their physicians. They also represent an abuse of the trust placed by trial volunteers in the medical and pharmaceutical establishments.

The story of research into selective serotonin reuptake inhibitor (SSRI) use in childhood depression is one of confusion, manipulation, and institutional failure. Although published evidence was inconsistent at best, use of SSRIs to treat childhood depression has been encouraged by pharmaceutical companies and clinicians worldwide. Last month, the Canadian Medical Association Journal revealed excerpts from an internal GlaxoSmithKline memorandum demonstrating how the company sought to manipulate the results of published research. Concerning a study of paroxetine use in children, the memorandum states "It would be unacceptable to include a statement that efficacy had not been demonstrated, as this would undermine the profile of paroxetine". Last year the UK Committee on Safety of Medicines prohibited the treatment of childhood depression with any SSRI except fluoxetine. Despite this, the Food and Drug Administration in the USA appears last week to have failed to act appropriately on information provided to them that these drugs were both ineffective and harmful in children.

In a global medical culture where evidence-based practice is seen as the gold standard for care, these failings are a disaster. Meta-analysis of published data supports an increasing number of clinical decisions and guidelines, which in turn dictate the use of vast levels of health-care resources. This process is made entirely redundant if its results are so

easily manipulated by those with potentially massive financial gains. The global sales of the GlaxoSmithKline SSRI paroxetine, for example, amounted to US\$4.97 billion last year alone. Moreover, the utility of organisations such as the National Institute for Clinical Excellence (NICE) is significantly undermined in circumstances where they are only able to access data on health-care products that are seen as advantageous to the products' manufacturers.

How confident is society that similar failings will not occur on a larger scale in the future? UK Biobank intends to recruit and follow a cohort of around 500 000 volunteers. The data collected will be used in part to develop new pharmaceutical products and diagnostic tests. Much time and effort has already been invested into ensuring appropriate regulatory and ethical principles are in place for all stages of the project. However, the links of UK Biobank with the pharmaceutical industry are already clear. John Bell, chair of the UK Biobank science committee is also a director at Roche. In addition, at least part of the estimated £70-500 million required to complete the project is envisaged as coming from industry sources. With this level of involvement, will a pharmaceutical company really feel obliged to publish information derived from these volunteers that one of its products does not work?

Changes are required at every level of the global health-care infrastructure. Governments need to collaborate effectively over issues of patients' safety rather than duplicating efforts. Governmental institutions such as NICE require legal powers to ensure that biomedical research is used to improve health even if this does not equate with improved profits. On an individual level, doctors and pharmaceutical company employees must remember that without the trust of trial volunteers and patients medical research and practice will become impossible. People around the world understand the desire to achieve success and to work in a profitable environment. They will not, however, tolerate the notion that in biomedical research this could be at the expense of their children's lives.

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