

Tomorrow's Cures Today? How to Reform the Health Research System

by Donald R. Forsdyke. London: Gordon & Breach, 2000. Pp. 168. US\$38.00.

The lack of cures for such high-profile diseases such as cancer and AIDS has called into question the effectiveness of health research. Is it simply a case of not enough money to do the research? Is something else required if cures are going to be found in time to save people's lives and decrease suffering and misery?

Forsdyke argues that the managers of medical research, the grant-funding agencies, are more concerned about their own security than with encouraging breakthrough opportunities in health research. He further argues that more funding support is required for those researchers "at interfaces between disciplines" (p. 135), instead of just specialists.

Forsdyke identifies three major impediments to the immediate improvement of health research. These are (i) lack of involvement by constituents including politicians, patients, health professionals, and disease-related charities; (ii) agency problems with those people responsible for approving and distributing grant monies, including those at the MRC; and (iii) conflicts of interest and understanding between peer reviewing and research conducting scientists.¹

The author suggests that funding be more widely distributed so researchers with radically new ideas do not have their "heads chopped off" before the validity of their ideas is tested. He also suggests that credible medical research scientists be given free rein to explore their new ideas. Specifically, Forsdyke recommends looking to the past history of the researcher and the research group for evidence of ability to accomplish what might appear to be "risky" research. He recommends funding 100 percent of the budget by the most credible researchers and funding less than 100 percent of the budget by less credible researchers on a pro-rated, sliding

scale. This proposal contrasts with the current practice of funding most grant applications at or near 100 percent until the money runs out, leaving the majority with nothing (80 percent in the case of MRC, according to a 1999 Manitoba survey conducted by R.G. and J. Pear). Forsdyke says it would buffer against errors in judgement and our inability to predict whose research will pan out.

The author supports his thesis with several examples in the field of health and biological sciences where ideas were not pursued because peers did not appreciate the ideas of pioneers. Only later were these pioneering ideas followed, and only sometimes were the originators given due credit. This is "post-mature scientific discovery": the discovery could and should have occurred much sooner in history — hence the title of the book. In these cases, a discovery would remain ignored by the scientific establishment for decades, waiting until a body of influential scientists had matured enough in their thinking to recognize past genius or overwhelming evidence. In the meanwhile, many people suffered and died needlessly. One of the author's graphic examples describes the tragedy of millions of children dying while the UK medical establishment delayed the decision on diphtheria immunization for more than 20 years!

Forsdyke's central message is that medical research funding and health agencies all too often fail to make the best choices. Managers of these agencies are tempted to make decisions that provide for incremental improvements and deny funding for the breakthrough initiatives. By so doing, these agencies fail the medical researchers and their various constituents, including all of us. Forsdyke contends that this overly conservative policy must not only be questioned but rectified.

Forsdyke's conclusion is that constituents must become more actively involved in how research is funded. More specifically he concludes that the research-funding agencies must be directed to establish a new set of criteria that recognize past accom-

plishment more than present promises, so that confidence is placed in credible researchers rather than fashionable research. He recommends "bicameral review" (pp. 95-97), looking to the past "track record" of the researchers instead of the promise of the proposed research, with a separate administrative review of the proposed budget. His argument is that the past, being more certain, should be given full weight in assessing the credibility of the researcher. Except in its financial aspects, the researcher's proposal should not be examined.

Forsdyke, at various junctures, invites us to imagine what was going on behind the scenes. This introduces a needless weakness in his argument. He excuses himself from archival research of the peer review system on the basis that he is an active medical researcher with little time for such endeavours. Hopefully such matters will be fully explored by historians of medicine. Enough time has passed since the "murky" beginnings of the peer review system in the 1940s (p. 18) to permit incisive historical analysis. Another weakness is in the author's foray into the commercialization of biomedical research ("Partnership with the Drug Industry?"). He correctly points out how large brand-name drug companies can obstruct unfavourable evidence and that this can have a negative impact on innovation. But unfortunately he stops short of considering the most obvious alternative, restructuring that would separate the funding of innovative research from that of commercialization of matured research.

In summary, this is an important and timely book. It examines how health and medical research is con-

ducted and by whom. The tragedy of funded and unfunded scientists alike, who are unable to pursue their novel ideas, comes through clearly. It is compellingly written, and the book contains a wealth of examples and insights on what ails health research, as well as some useful suggestions on what might be done. The lessons are applicable to granting agencies everywhere.

Forsdyke has called for leadership in the important area of health research in Canada, but where will it come from? *Tomorrow's Cures Today* represents hope for those stricken with disease, along with their relatives and friends. He calls upon *them* to clamour for reform of medical research funding, as he does not see reform coming from scientists, administrators, or government, all of whom are too enmeshed in the present inefficient system to see the way forward.

The book will be read with interest by those who are concerned with medical research and health sciences. This should include us all.

NOTE

¹MRC is the Medical Research Council of Canada, soon to be superseded by the CIHR, Canadian Institutes for Health Research.

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