

More Research? Less Research? Better Research?

The following papers (pages 38-50) were presented in a session on research at the Autumn Quarterly Meeting held in November 1980. (For a brief review and comments, see page 51.)

The Outside View

By SIR DOUGLAS BLACK, President of the Royal College of Physicians

I hope that there is no need for me to argue the general case for research in psychiatry, or indeed in any branch of medicine where our knowledge is incomplete—which, of course, means every branch. I do not, of course, imply that research is a necessary component of individual careers in psychiatry; but for the health of the discipline as a whole it is quite essential. The greatest enemies of progress in any branch of science are dogmatically held beliefs; and I believe—not I hope too dogmatically—that the best protection from a dogmatic cast of mind comes from some experience or research. Research is sometimes portrayed as something which may inhibit the taking of necessary decisions—but in my experience indecision has not been peculiar to research-workers, who are, however, less likely to take decisions lightly and on insufficient evidence.

What then are the requirements for research in general, before I turn to the particular case of research in psychiatry? They are good ideas; sound methodology; and adequate support.

Good ideas presuppose a thorough acquaintance with the relevant field of study; open-minded reflection on the phenomena which it presents; and the scientific imagination to identify problems—and to estimate their solubility in a finite time with finite resources.

Sound methodology is based on adequate training; on critical evaluation of techniques; on appropriate statistical treatment of numerical results; and, in clinical studies, on proper regard for ethical considerations.

Support, of course, includes money, but also goes beyond it. Access to library facilities, to technical and statistical advice; opportunities for discussion with colleagues in the same and in related disciplines; an institution such as a university which has as one of its major aims the encouragement of inquiry—all these are important.

Ideas and methodological competence are primarily the responsibility of the individual; but unless he is a Croesus he must look elsewhere for support. This can be obtained on a limited scale from locally-organized research funds in the NHS; or from voluntary agencies. For someone who chooses a research career, training and long-term support come mainly from the Medical Research Council, supplemented by DHSS research monies, by the larger independent research foundations, by industry for applied research, and from university research monies, sadly depleted though these currently are.

Specific problems of psychiatric research

Some years ago, I was given an opportunity to study these in the context of an MRC Committee on Biochemical Research in Psychiatry (of which your President was also a member). A few years later, I was a midwife at the birth of the DHSS Research Liaison Group on Mental Health. More recently, I have been involved with the RCP Working Party on Mental Impairment in the Elderly. I mention these matters simply to show that I have an interest in your problems and even some acquaintance with them; but I retain my amateur status, and I hope the humility which should go with it.

Some difficulties

Many years ago, Patrick Blackett said to Robert Platt that what he saw as the relative lack of progress in medical, as opposed to physical, research was not due to stupidity but to the intractable nature of what was being studied. This consideration seems to me to apply *a fortiori* to psychiatric research as compared with biochemical research in general. The central nervous system, which we must assume to be the basis of mental activity, is highly complex at all levels of organization, from what appears as integrated activity right down to the molecular level. The organic approach to these matters is bedevilled by inaccessibility of the relevant material, for both practical and ethical reasons. Credible animal models of mental dysfunction are not necessarily relevant to the human situation, which reaches a new level of quantitative and qualitative cerebral development and organization. To my mind, the work which has been carried out even in the higher primates has emphasized, rather than diminished, the singularity of the human species, difficult though it may be to disentangle individual potential from the effects of a socialization of our species greatly more diverse than is seen in any other. In saying this, I am not decrying the contribution of ethology, except to say that transfer of concepts from animal to human behaviour calls for a degree of caution.

It could, of course, be maintained that the troublesome complexities of the brain can be cut away with a psychodynamic version of Occam's razor. Ernest Jones' biography of Sigmund Freud is a masterpiece of biography; and I read it with enjoyment and sympathy. But I also agree with Popper's criticism that theories which can be adapted to explain everything may in the last resort be incapable of

explaining anything to an acceptable standard of rigour; and to this outsider, at least, the practical pay-off of the psycho-analytic approach has been meagre. So I do not see this as a valid way of escape from the complexity of neurobiology.

When we come to the clinical level, there are great difficulties in taxonomy and in the ascertainment of outcomes. I am not, of course, beguiled by the wilder extravaganzas of Laing or Szasz, which see psychiatric illness as a sort of Red-Queen dream in the mind of physicians; but there are real problems in the characterization of disease entities and in the evaluation of therapeutic measures.

Consideration of these difficulties, together with the immensity of the clinical load of mental illness, could lead to the making of excuses for not embarking on a research career in psychiatry. I would like to think that such an attitude will be seen as plainly wrong. These things must be seen as challenges. And there is the further consideration that real progress has already been made in the alleviation of mental illness.

Directions for research

I am not, of course, going to give 'directions' in any prescriptive sense. On the contrary, my message is that research related to mental illness must come from a considerable variety of disciplines, in other words be in many directions, though not perhaps quite in all directions.

The neurobiological base, already well-developed, needs further strengthening, exploiting more sophisticated biochemical and electro-physiological techniques as they become available; and also applying them so far as possible, to abnormal as well as to normal states of mind. Basic psychology and sociology are also capable of providing insights applicable to mental dysfunction. General medicine and geriatric medicine can make a contribution to the understanding of the organic dementias. Neuropathology is a discipline which calls for special encouragement, in view of

the prevailing shortages of adequately trained workers in that field.

At the clinical end of the spectrum, there are still problems in the natural history and in the classification of mental disorders which call both for detailed study of individual patients and for systematic analysis of larger groups. The interactions between the patient and his family, and between the patient and society, require further study to supplement the progress which has already been made in social psychiatry.

When we were looking at the biochemical approach to psychiatry, we were impressed by the importance of what we called 'bridging disciplines', by which we meant studies which applied neurobiological concepts to the clinical field. Psychopharmacology is a notable example, from which spring both important theoretical concepts and practical benefit to patients.

On a more pragmatic level, we identified the need for a more satisfactory career structure for research in psychiatry, from the encouragement of training through to the establishment of career posts. Another practical question which we had to face was the physical location of major effort in psychiatric research. Should it be in the large mental hospitals, where there are masses of patients; or should it be in a university environment, with smaller number of patients but regular access to a wide range of disciplines and to the general facilities of an institute of advanced study? Without in any way denying the importance of clinical studies carried out in large hospitals, we came down firmly in favour of the university environment.

My outside view, while recognizing the difficulties of research relating to mental illness, is one of cautious optimism. I think that real progress has been made, and that it will continue. It can only be enhanced by greater contact between research-workers in this and other areas of medical research.

Can Planning Change the State of Research? The Experience of the Wellcome Trust

By PETER WILLIAMS, Director, The Wellcome Trust

For the past 24 years during which time I have been concerned with the management and financing of medical research, either at the MRC headquarters or the Wellcome Trust, I have heard it said that psychiatric research is backward and something ought to be done to improve the situation. My earliest memory of something being done was in 1959 when Professor (now Sir) Denis Hill, as a member of the Medical Research Council, wrote a report making the recommendation that the Council should set up research units, and the universities should establish more academic departments in medical schools. The reasons for these

recommendations were fairly obvious. Unless established posts are available one cannot expect to recruit potential research workers to the field. The proposition accepted that even if the perfect head of department was not initially available, the next generation would have the right experience. Professor Hill's recommendations were, I think, very largely implemented. Between 1957 and 1962 the Medical Research Council set up five new units and one new research group. Only two of these units still exist but others have been established since. A number of university departments were also created.