

Conducting psychiatric research in the developing world: challenges and rewards[†]

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A significant number of psychiatric studies are conducted in the developing world, as can be seen by the contributions to the published biomedical literature. However, the results of such studies seem to be less likely to be published in international publications, particularly in influential psychiatric journals, compared with reports from institutions in developed countries (Patel & Sumathipala, 2001). Psychiatric studies from developing countries have been criticised on the following grounds:

- (a) several of these studies have not investigated major psychiatric problems, but have focused on non-significant problems;
- (b) studies have been donor-driven, usually catering to the priorities of external donor agencies, instead of national priorities;
- (c) the quality of research in many instances is lower;
- (d) the information generated from research has not been well documented, disseminated and put to use by policy- and decision-makers at all levels and sectors of society.

CHALLENGES

Although there may be some substance to the above assertions, it is also true that in most developing countries researchers have to do their work under extremely difficult conditions. The challenges facing these researchers can be grouped into four categories: the macro-environment, the work environment, personal factors and the intrinsic nature of psychiatric research.

The macro-environment

A fundamental determinant of the level of psychiatric research activity in developing

countries is the general social, economic and political environment. Natural disasters such as famine and drought, human disasters such as civil war and war with neighbouring countries, international economic recession and local administrative mishaps have changed (and continue to change) the socio-economic landscape of these countries. Such political, economic and social instabilities are obviously not conducive to fruitful research activity.

Another challenge is the lack of demand for (and social appreciation of) research from developing countries. Policy- and decision-makers do not demand and utilise it. The public, and politicians who represent them, are not aware of the utility of research. The main reason for this is a low level of scientific culture, owing to underdevelopment. For certain countries in sub-Saharan Africa, 70% illiteracy and 50% absolute poverty rates are reported (United Nations Development Programme, 1999).

Resource allocation for health research from public funds is essential if research is to be of use for national development. However, few governments in the developing world are willing to allocate a sizeable amount of resources for health research in general and for psychiatric research in particular. Because of limited funding from the public sector, researchers have a restricted choice of topics, and thus are frequently unable to institute research into wider problem areas; objectives of investigations are usually dictated by donors.

The work environment

The research infrastructure in low-income countries is generally weak. Inadequate and insecure budgets, inadequate equipment and supplies, and scarcity of technicians and support staff are commonplace.

Limited access to up-to-date journals and books in their particular disciplines is probably the greatest challenge facing psychiatric researchers. Literature review is essential in order to be able to learn the background to a particular research problem, to justify research proposals, to avoid 'reinventing the wheel', and to write good reports. Although the internet is expected to alleviate this problem, staff with computer and internet facilities are still in a small minority.

National and institutional research protocol review and approval mechanisms are other major challenges facing researchers. The evaluation mechanisms are prolonged, multi-staged and, at times, redundant. The protracted delays in obtaining approvals have frustrated many researchers, and have also made potential donors hesitant to support studies in such settings. Administration of research funds by investigators has been another source of problem. The financial system has been slow to respond adequately to investigators' needs for speedy withdrawal, dispersal and accounting of research funds.

Because of the low level of development of human resources in biomedical sciences, particularly psychiatrists and neurologists, in developing countries the number of skilled researchers is limited. For example, there are only nine psychiatrists and the same number of neurologists in Ethiopia, a large country with a population of over 60 million. Exchange of experience between investigators is thus not possible or is extremely limited. This can be seen in the rarity of journal clubs, research seminars, and annual or semi-annual poster days to communicate and display ongoing and completed research.

Personal factors

Low salaries of researchers are a perennial problem. This has forced researchers and scientists to devote substantial amounts of their time to income-generating activities such as private clinical practice and consultancies instead of research. In many countries psychiatric staff engaged in research are not allowed remuneration from research grants to complement their salaries.

Insufficient training of staff working in psychiatry on protocol development, fund soliciting, project execution and financial management is another challenge. Although these workers are highly skilled in their respective disciplines, few have had the

[†]See pp. 188–189, this issue.

necessary training to plan and implement research projects.

Intrinsic nature of psychiatric research

Obtaining valid data is more difficult for researchers in the developing world than in developed countries, for a number of reasons. For instance, many of the psychiatric instruments used in developing countries to collect information are geared to Western culture and their direct translation into local languages would definitely make the validity of the instruments questionable. The validity of even those screening instruments developed by the World Health Organization (WHO) for global applicability is questionable in some cultures. The Self-Report Questionnaire (SRQ) is a good example of this (Kortmann, 1988). The SRQ was developed by WHO as a screen for psychiatric disturbance, especially in developing countries, and has been used as such in many countries (World Health Organization, 1994). Moreover, there are no instruments whose usefulness has been accepted for assessing cognitive function in an illiterate community. Using the available instruments in such communities has resulted in inflated prevalence of cognitive problems (Kebede & Alem, 1999). Furthermore, in many developing countries there is no vital-event registration system, making it difficult to obtain reliable socio-demographic information. Because of this, retrospective data analysis suffers from recall problems, especially with people who are illiterate. Owing to the prevailing and pressing problems of malnutrition and other preventable diseases, mental health services are given the least priority in the developing world. However, researchers would have the obligation to treat persons identified in their research as cases, despite the scarcity of places where such people could receive any form of modern treatment.

REWARDS

Research in psychiatry, as in other disciplines, is a systematic process for generating new knowledge, using the scientific method to identify and deal with health problems. In industrialised countries psychiatric research has been used to identify and set priorities among health problems, to guide and accelerate application of knowledge to solving mental health

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problems, to advance the frontiers of knowledge in neuropsychiatry and to inform the public.

Despite the enormous challenges facing psychiatric researchers in developing countries there are documented instances where their research output has contributed to advancing knowledge and influencing practices in the psychiatric community. A number of prevalence and incidence studies conducted in developing countries, for example, have been used to estimate the burden of disease due to mental health problems using the disability-adjusted life-year (DALY) method. This has subsequently been used in setting priorities among health problems both globally and in individual countries (World Health Organization, 2001). A number of clinical trials have been (and continue to be) conducted in several developing countries to evaluate the efficacy and effectiveness of mental health interventions, particularly new drug regimens. Even basic research into psychiatric disorders, usually the preserve of scientists in industrialised countries, is being conducted in some developing countries. For example, we completed a survey in a rural district of Butajira, Ethiopia, in May 2001 in which we were able to identify over 850 cases of major mental disorders by interviewing 68 378 adults. The study was launched to describe the course and outcome of schizophrenia and bipolar disorders in a rural setting (further details available from the authors upon request). We are now in the process of studying the molecular genetics of schizophrenia and bipolar disorders in this and another isolated island population in Ethiopia. Informing the public when most of the population has no access to the media or is not literate is difficult; however, there have been attempts to use research outputs to disseminate public information.

There are also positive aspects of psychiatric research in the developing world. Because of the uniqueness of developing countries it is usually difficult or inadvisable to extrapolate results of mental

health studies from the developed to the developing world. Thus, there are no short cuts to psychiatric research in this part of the world. For many communities the start of psychiatric research projects has meant the establishment of local psychiatric health services, capacity-building in terms of human resources and employment opportunities. For example, before the start of the Butajira study on the course and outcome of schizophrenia and bipolar disorders there was no psychiatric service of any kind in that district, which had a population of over 300 000. As part of the research study, however, a psychiatric clinic was established in the health centre, staffed by two psychiatric nurses and two psychiatric residents, a continuous psychiatric and counselling service was maintained, and treatment is now being offered to all people in the district with schizophrenia or bipolar disorders. Furthermore, a number of physicians were able to use the research infrastructure for their PhD or MPH dissertations.

Another unique feature of psychiatric studies in this part of the world has to do with their cost. Often large-scale projects, which would cost countless millions if done in developed countries, can be conducted inexpensively in developing countries. This has important implications for psychiatric epidemiological studies on major mental disorders, which may need to enrol a large number of study participants to attain sufficient power, as these conditions are relatively infrequent.

Despite the multitude of challenges facing them, probably the most important incentive for psychiatric researchers in developing countries is their conviction that they are working in places where the need for their research is greatest, that at some future date (hopefully soon) policy- and decision-makers will recognise mental health problems as a priority that needs resource allocation, and that the results of their research will improve the mental health conditions of individuals, families and communities.

DECLARATION OF INTEREST

None.

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