Research for Change: the role of scientific journals publishing mental health research

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There is an enormous gap between the burden of mental disorders and mental health resources in low- and middle-income countries. The Mental Health: Global Action Programme of the World Health Organization (WHO) envisions an active role for research in the multidimensional efforts required to change the current mental health situation in these countries (Research for Change). WHO's strategies to achieve this include developing a research policy and a priority agenda at country level with active collaboration from all stakeholders, building research capacity and infrastructure and involving scientific journals to stimulate and disseminate public health oriented research. A recently agreed joint statement by editors of prominent journals publishing mental health research and WHO sets major objectives and some possible strategies for achieving this. WHO is committed to making Research for Change a reality by working with partners who share this aim.

Key words: Mental health, research, developing countries, scientific journals, World Health Organization

There is an enormous gap between the burden of mental disorders and mental health resources in low- and middle-income (LAMI) countries (1,2). In absolute terms, the burden of neuropsychiatric conditions falls heavily on LAMI countries. In contrast, the resources available to meet mental health challenges in these countries are meagre: an overwhelming majority of countries in African and South East Asian regions spend less than 1% of their limited health budgets on mental health (2). In high-income countries themselves, between 44% and 70% of patients with common and severe mental disorders do not receive treatment (3). The treatment gap in developing countries could be as large as 90%. Closing this gap is a clear obligation; otherwise, no discourse around new classifications, concern about more sophisticated diagnosis, or development of innovative psychopharmacological research can be credible (4).

The Mental Health: Global Action Programme of the World Health Organization (WHO) envisions an active role for research in the multidimensional efforts required to change the current mental health situation at country level (Research for Change) (5). WHO intends to collaborate with countries and all other stakeholders to make research an instrument for change. Research-generated information is perceived as essential to determine needs; to propose new cost-effective interventions of an individual or collective nature, to monitor the process of their implementation and to evaluate the changes sought; and to explore the obstacles that prevent recommended costeffective action to be carried out. Conceivably, researchgenerated information will enable LAMI countries to better utilise their meagre mental health resources.

The difference between the research information that is needed to plan the best possible services in a given setting and what is currently available can be called the research gap. All available indications point towards the fact that the research gap is particularly large in LAMI countries. Doing more research alone does not suffice: research must be relevant to the needs of LAMI countries. The World Health Report 2001 (6) suggests that relevant research in and for LAMI countries should assist them in reducing the burden of common and disabling disorders through evidence based and feasible interventions, while ensuring equity and cultural relevance and safeguarding ethical principles.

Currently, the mental health effort in the developing world is based primarily on evidence from high-income countries. This approach has a serious disadvantage, in that the majority of the available information is collected from vastly different cultural and socio-economic contexts. Culturally relevant research should inform mental health policy and service development, treatment decision-making, and anti-stigma and discrimination programmes.

Similarly, mental health research in relation to LAMI countries that is done by academics from high-income countries (such research forms at least one quarter of the mental health literature available on LAMI countries) often has no real connection to local service development (7). The relevance of research may be better ensured if a consortium, run democratically by researchers, planners and administrators, decision-makers, donors and community representatives jointly establish the research policies of a country for a defined period of time.

STRATEGIES TO ADVANCE RESEARCH IN LAMI COUNTRIES

In order to advance research in LAMI countries, it is first of all necessary to set a priority agenda, viable and zealously tailored to country needs, characteristics and resources. Preferably, the research policy for a country should be developed in harmony with all other components of the national mental health policy and strategies, since research should provide to most of these components the necessary scientific inputs, with the baseline and evaluation data they require.

Second, a research-friendly cultural environment needs to be created. Policy makers, programme planners and managers, governmental officials, mental health advocates, professionals, users and carers, and university settings of LAMI countries should be involved in research efforts that will underlie national mental health action.

Third, a major undertaking on capacity building and infrastructural support is required. International agencies and donor countries and institutions should play a crucial role in training researchers and in helping them to return and remain in their respective countries of origin. Probably the best ways of doing this is to promote (truly) collaborative research and provide training or technical and scientific support to institutions in LAMI countries.

Fourth, methodologies that do not require sophisticated infrastructural support should be made available widely. Simple methods could solve important research problems and should not be devalued when compared with complex methodologies. Evidence resulting from these methods should not be regarded as unsuitable for application. It is the fit between problem and the method used to solve it that counts.

Fifth, as detailed later, scientific journals have to play a considerably greater role in decreasing the research gap in LAMI countries.

The research efforts from LAMI countries will have greater chances of success if research institutions in highincome countries, research foundations and country donors, and editors of scientific journals provide their fullest and sustained support to national and regional efforts in LAMI countries.

ROLE OF SCIENTIFIC JOURNALS PUBLISHING MENTAL HEALTH RESEARCH

Public mental health in LAMI countries can be improved by facilitating the generation and flow of information. Scientific journals can play a major role in achieving these ends. However, a co-ordinated priority driven program is required for mental health research dissemination and to facilitate the transfer of results of mental health research into policy and practice, as is evidenced by the current state of affairs.

LAMI countries contribute only about 6% of articles to leading psychiatric journals (8,9). Even more worrying is the fact that, in biomedical publications, the gap between countries with low and high level of publications is widening (10). The causes for this could be many, including less mental health research being done in LAMI countries due to low priority for research, lesser resources or limitations in research capacity and difficulties in reporting research due to language. But, it is likely that limited appreciation of the research needs of developing countries at the level of reviewers and editorial boards of international journals could also play a part. Only four out of a total of 530 editorial and advisory board members of the ten psychiatric journals with the highest impact factor rating for the year 2000 were based in LAMI countries (11). Similarly, there is a tendency among biomedical journals to send manuscripts to reviewers within their own region (12). The absence of well-informed interlocutors familiar with research needs of LAMI countries could lead to a bias against publication of research from or about these countries.

The trend towards increased publication of resourceintensive biological research in indexed journals (in order to maintain/increase the impact factor) may be another reason for the low rate of publications from LAMI countries (13). Of the twenty journals in the mental health field with the highest impact factor, ten publish papers exclusively on biological psychiatry and/or psychopharmacology topics and others, like Archives of General Psychiatry, American Journal of Psychiatry and Schizophrenia Bulletin, have increased the proportion of papers on biological psychiatry topics during the last two decades (13,14). Research focusing on mental health services is not less important than biological research, and may be more relevant to answering the mental health needs of LAMI countries. Such research does not need to be complicated and expensive and can certainly be carried out in LAMI countries (13).

As a result of these difficulties, the bulk of research from developing countries gets published in journals that are not easily accessible locally or internationally. The dice is loaded against journals based in LAMI countries becoming and staying visible. They face a multitude of problems, including those of resources for publication and dissemination (financial, managerial, marketing), editorial skills and review process, author pool and language, and perhaps biases in indexing systems (15). An overwhelming majority (98%) of biomedical journals indexed in international databases are from the developed world (16). The lack of visibility affects their dissemination opportunities - e.g., libraries in LAMI countries subscribe mainly to influential journals from the Western countries (17) - and thereby the possibility of application of research results contained in them.

LAMI countries also have problems in accessing scientific materials because of their cost. In the last couple of decades, the subscription costs of many scholarly journals (especially those published by certain powerful commercial publishers) have escalated at a rate far exceeding the rate of inflation (18). In addition, many new journals have been started. Even large academic libraries in high-income countries have had to be fairly selective about subscribing to journals and have indeed carried out extensive journalcancellation projects in the last few years.

Individual efforts have been made by journals and organizations to remedy the disproportion between research needs of populations and available publications (13,19,20). The World Psychiatric Association launched its journal World Psychiatry in three language editions (English, Spanish and Chinese), and made printed copies available free of charge to more than 31,000 psychiatrists in 121 countries. A significant improvement has occurred in electronic dissemination of research, due to the costeffectiveness of this medium. A number of organizations e.g., the WHO sponsored Health InterNetwork Access to Research Information (HINARI), the Scientific Electronic Library Online (SciELO) project of Latin America, scholarly societies and journals (including World Psychiatry) provide access at no or low cost to LAMI countries (21). These initiatives are beginning to have an impact, but a lot still needs to be done, since freely accessible literature forms only a small proportion of scholarly publishing and LAMI countries have limited access to Internet itself. Similarly, levying of page charges makes it difficult for authors from LAMI countries to publish in open access journals unless page charges are subsidized by research funding agencies or governments (18,21).

EDITORS TAKE UP THE AGENDA OF REDUCING THE RESEARCH GAP

As a part of the Research for Change initiative, the WHO Department of Mental Health and Substance Abuse and the WHO Bulletin organized an international meeting on 'Mental Health Research in Developing Countries: Role of Scientific Journals' on 20-21 November, 2003 in Geneva, Switzerland. The meeting was attended by twen-ty-five editors representing mental health journals and general and public health journals publishing mental health research. A number of other editors reviewed and contributed to the background and follow-up material.

Issues related to responsibility of scientific journals towards international mental health, supporting mental health researchers from LAMI countries, supporting mental health journals from LAMI countries, and enhancing dissemination of mental health research publications were discussed. It was felt that 'international' journals should strive for a global impact in terms of populations served, burden of diseases, and long-term economics. Editors also felt that there is much that health professionals and policy makers from high-income countries can learn from their counterparts in LAMI countries.

Established journals have an important role to play in developing mental health research and publishing capacity in low- and middle-income countries. Training in research methodology and scientific writing for researchers in LAMI countries could be done through mentoring, personal encouragement, training courses and research collaboration. Author helpful policies (e.g., detailed recommendations for revision, manuscript editing, etc.) could help in attracting more submissions from LAMI countries and in salvaging otherwise useful papers that have not been presented well. Editors' and reviewers' experience with and interest in LAMI countries could be an asset in facilitating such publications.

Journals in LAMI countries, besides being a repository of local mental health wisdom, can also help in educating their authors and in translating mental health research into action through dissemination of relevant local and international information to policy makers and public health officials in their countries and regions. Mentorship, twinning arrangements and training workshops on editorial procedures, peer review and overall journal management may be useful for editors and reviewers of journals based in LAMI countries.

A joint statement (Annex 1) was issued by the participants in the Geneva meeting (Annex 2). A catalogue of ideas (Annex 3) was also developed to guide follow-up actions by individual journals and editorial and international organizations. The joint statement represents a common vision to bring about policy changes to facilitate the publication of research from, enhance research and publishing capacity of researchers and journals from, and enhance dissemination of research to LAMI countries. It is hoped that this shared vision, along with concrete follow-up action, will help in reducing the research gap in LAMI countries.

MEASURES OF CHANGE

The WHO is committed to making Research for Change a reality in the near future. In relation to journals, some of the measurable effects could be:

- Increased participation of researchers from LAMI countries in editorial boards and peer review panels of internationally accessible mental health journals.
- Increase in the number of internationally accessible mental health journals with a multi-lingual approach to publication.
- Increased proportion of published work from LAMI countries in indexed internationally accessible mental health journals.
- Increased number of mental health journals from LAMI countries in international indexing systems and wider availability of these journals.
- Increased collaboration between editors of mental health journals from LAMI and other countries.
- Increase in number of mental health journals giving free access to their contents and increase in the volume of material to which free access is given by journals.

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ANNEX 1. Joint Statement: 'Galvanising mental health research in low- and middle-income countries: role of scientific journals'

The Department of Mental Health and Substance Abuse, WHO organized a meeting on 'Mental Health Research in Developing Countries: Role of Scientific Journals' in Geneva on 20 and 21 November 2003 that was attended by twenty-five editors representing journals publishing mental health research. A number of other editors reviewed and contributed to the background and follow-up material. This statement is issued by all participants jointly.

Research is needed to address the enormous unmet mental health needs of low- and middle-income (LAMI) countries. Scientific journals play an important role in production and dissemination of research. However, at present, only a minute proportion of research published in widely accessible mental health and psychiatric journals is from or about these countries. Yet over 85% of the world's population lives in the 153 countries categorized as low-and middle-income, according to World Bank criteria. Even more worrying is the observation that the gap between these and high-income countries may be widening in terms of their number of publications. The meeting was aimed at finding ways of resolving this unsatisfactory situation.

Responsibility of scientific journals towards international mental health

Science, in its quest to accomplish valid generalisations about nature, is inherently global. Researchers from all parts of the world should, desirably, contribute to new knowledge about mental health and mental illness, and publish their reports in widely accessible journals. This process is facilitated by a shared understanding of aims and scientific methods, formats of presentation and reference to previous published work. Mental health research from LAMI countries is needed for advocacy, policy development, establishment and expansion of clinical services and to educate investigators in research skills. A steady stream of information about mental health issues in these countries would also contribute to a greater international and multicultural understanding of mental health and ill-health.

Unfortunately, substantial barriers impede publication of mental health research from LAMI countries in widely accessible journals. Researchers from LAMI countries are often unable to meet the requirements of these journals because of limited access to information, lack of advice on research design and statistics, difficulty in writing in a foreign language, and overall material, financial, policy and infrastructural constraints. Limited appreciation of the research needs of, and realities in LAMI countries and the comparative anonymity of their researchers and research centres in editorial offices of journals may constitute additional barriers. Many researchers from LAMI countries are daunted by the seemingly insurmountable chasm between their research effort and its publication in international journals.

Supporting mental health researchers from low- and middle-income countries

We need to face the challenge of reducing the barriers to publication of mental health research by investigators working in LAMI countries. Time, skills, resources and commitment are needed to publish relevant studies from these countries. Editors' and reviewers' experience with and interest in LAMI countries could be an asset in facilitating publication. Meeting researchers from these countries on 'their home ground' could assist this process. International journals could also help researchers improve their submissions by diligent assessment, detailed recommendations for revision and sympathetic consideration of revised versions, even if it means requesting reviewers to 'take an extra round' to make papers suitable for publication. This is not to say that journals need to lower their standards in publishing papers from LAMI countries; rather, they should devise strategies to help authors attain those standards. Other approaches to support contributions from LAMI countries could be to launch 'starter' sections such as information pages and special columns or even dedicated issues of the journal.

Capacity building is the paramount factor in the long term. Training in research methodology and scientific writing is needed. This could be done through mentoring, personal encouragement, training courses and research collaboration. Increased access to mental health research publications would, by itself, help in capacity building.

Supporting mental health journals from lowand middle-income countries

A major impediment in accessing mental health research from LAMI countries is the lack of visibility of journals published in these countries. Most of them are not indexed in international databases and are often not available beyond their country or region of origin. These journals are published under strained circumstances, in that they often lack sound financial support and have a hard time becoming self-sufficient. They also have difficulty in obtaining suitable articles for publication because their author pool is limited; moreover, influential authors from this pool prefer to publish their best research in indexed journals. Some authors who submit their articles to LAMI country based journals may have limited skills in conducting research and/or in writing up their reports. However, it must be stressed that some excellent work does find publication in these journals.

The task of strengthening journals in LAMI countries begins from the recognition of their role as contributors to the enhancement of the mental health knowledge base and as partners in the international research community.

Editors of LAMI country based journals require support to elevate standards in editorial procedures, peer review and overall journal management since sufficient expertise and experience may be lacking. This could be achieved through their participation in the publication process of established journals, mentorship, twinning arrangements and training workshops.

Enhancing dissemination of mental health research publications

Many high quality mental health journals have a wide distribution, but most of their subscribers are from highincome countries. Special attention to dissemination of research findings is needed urgently in order to maximize their impact on mental health policy and practice and advance relevant research in LAMI countries. Increasing online availability is cost-effective since little additional expenditure is required to provide access to new users apart from the initial costs of posting material on a website. Free access to many categories of electronic resources is provided by many journals. Initiatives such as the WHO-led Health InterNetwork Access to Research Initiative (HINARI) offer institutions in LAMI countries electronic access to thousands of journals at no or very low cost. The Open Access model provides free online access along with the possibility of unrestricted dissemination of research materials, but charges for publication may be prohibitive for authors from LAMI countries unless support comes from funding agencies and governments, e.g., the Scientific Electronic Library Online (SciELO) project in Latin America. Governments in other LAMI countries need to be made aware of the opportunities provided by information technology for dissemination and application of research knowledge.

The role of various stakeholders

Editors of journals, editors' associations and international organizations, including WHO could help achieve the aforementioned objectives. A catalogue of ideas is presented to act as a starting point for specific action. Although these ideas have been developed for the field of mental health, many of them may apply to other areas of health.

ANNEX 2. Signatories to the Joint Statement

Acta Psychiatrica Scandinavica (Povl Munk-Jorgensen), American Journal of Orthopsychiatry (Carlos Sluzki), Annals of General Hospital Psychiatry (George St. Kaprinis, Konstantinos N. Fountoulakis), Anthropology and Medicine (Sushrut Jadhav), Australian and New Zealand Journal of Psychiatry (Sidney Bloch), BioMed Central Psychiatry (Pritpal S. Tamber), British Journal of Psychiatry (Peter Tyrer), British Medical Journal (Kamran Abbasi), Bulletin of World Health Organization (Hooman Momen), Child Abuse and Neglect, The International Journal (John M. Leventhal), Chinese Journal of Nervous and Mental Disease (Li Yingxi, Guan Jinli), Comprehensive Psychiatry (David L. Dunner), Culture, Medicine and Psychiatry (Mary-Jo Delvecchio Good), Epidemiologia e Psichiatria Sociale (Michele Tansella), L'Evolution Psychiatrique (Yves Thoret), Indian Journal of Psychiatry (Utpal Goswami), L'Information Psychiatrique (Thierry Tremine), International Journal of Social Psychiatry (Dinesh Bhugra), International Psychiatry (Hamid Ghodse), Journal of Child and Adolescent Mental Health (Alan Flisher), Journal of Nervous and Mental Disease (Eugene B. Brody, Kathy McKnight), Lancet (Laragh Gollogly), Primary Care Psychiatry (Sean Lynch), Psychiatry: Interpersonal and Biological Processes (Robert Ursano), Psychiatry Research (Monte Buchsbaum), Psychological Medicine (Eugene Paykel), Psychology and Psychotherapy: Theory, Research and Practice (Phil Richardson), Psychopathologie Africaine (Momar Gueye), Quarterly Journal of Pakistan Psychiatric Society (Amin A. Gadit), Revista Brasileira de Psiquiatria (Jair Mari), Salud Mental (Hector Perez-Rincon), Social Psychiatry and Psychiatric Epidemiology (Paul Bebbington), South African Journal of Psychiatry (Robin Emsley, Susan Hawkridge), Transcultural Psychiatry (Laurence J. Kirmayer), World Psychiatry (Mario Maj), Forum for African Medical Editors (James K. Tumwine), Global Forum for Health Research (Andres de Francisco), World Association of Medical Editors (Ana Marusic, Peush Sahni), World Health Organization (Shekhar Saxena, Pratap Sharan, Benedetto Saraceno, Barbara Aronson, Vladimir Poznyak, Izthak Levav, Edith Certain, R. Srinivasa Murthy, Tikki Pang).

ANNEX 3. Catalogue of ideas

Individual journals

Giving priority to relevant mental health research from low- and middle-income countries

- Educate editors and reviewers on research needs of and research infrastructure in LAMI countries.
- Use surveys of various stakeholders such as readers (including those from other regions) for shaping journals' priorities.
- Sensitize readers and other stakeholders to international mental health issues (e.g., through special sections and dedicated issues, guest editorship and the commissioning of relevant research from LAMI countries).
- Critically re-examine the use and limitation of measures such as citation rates and impact factors.
- Adopt a multilingual approach, such as translation of relevant articles and abstracts into other languages.
- Include reviewers and correspondents with a special interest and expertise in LAMI countries on editorial boards.
- Accept a higher proportion of submissions from LAMI countries for review.
- Encourage general medical journals to publish mental health research especially in countries/regions where no mental health journal exists at present.

Supporting authors/researchers from lowand middle-income countries

- Familiarize researchers from LAMI countries with the peer review process.
- Provide constructive critical feedback/detailed recommendations for revision.
- Make provision for extra rounds of editing, assistance with language and use of technical editors.
- Pay attention to the educational goals of the review process (e.g., availability of reviewer's comments to readers or recruiting young researchers in LAMI countries to referee papers).
- Provide mentorship and support prior to submission.
- Organise training workshops for LAMI country

researchers and students on scientific writing and research methodology.

- Facilitate the involvement of researchers in multi-centre projects and research groups.
- Accept and process submissions online.
- Devise strategies to prevent economic exclusion of researchers from LAMI countries in author/input paying publishing models.

Supporting journals from low- and middle-income countries

- Support 'twinning' or 'pairing' arrangements, such as invited editorials, exchange of journals, cross-publication of contents/abstracts/summaries/articles and joint publications.
- Agree to serve on editorial boards or as reviewers.
- Agree to mentor reviewers and editors.
- Provide training workshops for editors and reviewers.
- Support national/regional journals in developing their own websites and/or seeking inclusion in specialized websites on mental health.

Enhancing dissemination

- Participate in electronic dissemination initiatives or provision of free/open access through the journal's website.
- Participate in 'buddy system'/peer sponsoring initiatives.
- Employ user-friendly technology for easier downloads.
- Subsidize journal subscriptions for LAMI countries.
- Explore mechanisms for publication of selected papers in more than one journal for wider dissemination.

Editors' associations

- Develop guidelines for good editorial practice concerning publishing and research ethics and conflicts of interest.
- Facilitate access to literature and bibliographic services (e.g., through a directory of databases).
- Support authors to access appropriate specialized journals and specific audience (e.g., through a database of journals and instructions to authors).
- Facilitate mentoring for editors, reviewers and researchers.
- Organise training of editors, reviewers and researchers from LAMI countries.
- Facilitate the multidirectional flow of articles, resources and expertise (e.g., translation of relevant articles and support with information technology).

International organizations

Supporting mental health research, research infrastructure and publications

• Influence other international institutions to give

priority to mental health research in their agendas for LAMI countries.

- Support national institutions in LAMI countries to urge their governments to give higher priority to mental health research.
- Support inclusion of researchers/editors from LAMI countries in relevant decision-making forums.
- Facilitate capacity building for researchers and journals from LAMI countries.

Enhancing dissemination

• Assess information needs in LAMI countries and raise awareness of these.

- Provide access to journals publishing mental health research (e.g., expansion of HINARI or enabling journals to be open access).
- Encourage and facilitate the application of information technology.

Enhancing collaboration

- Develop networks between editors, editorial organizations, professional bodies, publishers, funding agencies, national and international organizations and the media.
- Adopt a systematic approach for follow up: statement of changes hoped for, development of outcome criteria, assessment of progress.