

# Research in lower middle income countries – recommendations for a national mental health research agenda in South Africa

J Chipps<sup>1</sup>, S Ramlall<sup>2</sup>

<sup>1</sup>Department of Nursing and Public Health, University of KwaZulu-Natal, Durban, South Africa

<sup>2</sup>Department of Psychiatry, University of KwaZulu-Natal, Durban, South Africa

## Abstract

In the current mental health environment in South Africa, the development of a relevant mental health research agenda poses several challenges. This paper provides a brief overview of the current state of published research in mental health and, using a translation research framework, makes recommendations for five strategic directions to be considered in the development of a national mental health research agenda.

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## Introduction

South Africa, similar to other lower middle income countries (LMICs), has a high burden of mental health problems<sup>1</sup> and most mental health care users experience a substantial treatment gap.<sup>2-5</sup> Services for people with mental health problems in the public sector have been affected by a shortage of skilled personnel, poor service provision with outdated psychiatric hospitals, difficulties in developing tertiary level specialist psychiatric services and underdeveloped community and psychosocial rehabilitation services.<sup>4</sup> In addition, mental health services are not equitably distributed, with specialists localized to urban areas, usually around academic centers<sup>6</sup>, and about 56% working in the private sector.<sup>7</sup>

Mental health research, including research in mental

health, psychiatry or psychology, is needed to inform the development of locally-relevant, cost-effective mental health services and to ensure that these services are evidence-based.<sup>8</sup> In this environment, the development of a mental health research agenda presents a number of challenges and opportunities. Nationally there has been a decline in published clinical research in South Africa due to two "decades of uncoordinated policy, a systemic withdrawal of provincial health departments from research support, underfunding of the agency component of the Medical Research Council, and the poor positioning of health research in the recent initiatives rolled out on behalf of the Department of Science and Technology by the National Research Foundation."<sup>9</sup> Researchers believe that there is a lack of mental health research resources in South Africa<sup>10</sup> and though South Africa has a small, effective group of highly skilled and internationally recognized mental health researchers, lack of investment in the training of new health researchers<sup>11</sup>, the relative neglect of mental health and the heavy demand of clinical service and teaching on the small core group of academic clinicians is seen as an impediment to progress.<sup>12</sup>

The aim of this paper is to provide an overview of the current state of published research in mental health in South Africa and, using a translation research framework, to suggest five strategic directions to be considered in the development of a national mental health research agenda.

## Correspondence

Ms J Chipps

Department of Nursing and Public Health, University of KwaZulu-Natal  
Private Bag 7, Congella, 4013, South Africa  
email: chipps@ukzn.ac.za

## Background

In the early 1990s the South African Medical Research Council, the National and Provincial Departments, as well as the Centre for Health Policy at the University of Witwatersrand made various attempts to coordinate a national mental health research agenda. In 1994 a process of Essential National Health Research was established with mental health and substance abuse being prioritized in the top ten.<sup>13</sup> Further attempts to identify gaps in mental health research through the European Commission project called 'Methods for intervention on mental health in sub-Saharan Africa', were followed by a workshop in 1999, which identified mental health research priorities.<sup>13</sup> Since then, mental health has been recognized as a subcategory of communicable diseases, evident in the publication of the National Health Research Committee<sup>12</sup>, a statutory body established by the Minister of Health in terms of the National Health Act, 2003 (Act No. 61 of 2003), Section 69(1), the MRC National Research Strategy 2005 - 2010<sup>14</sup>, and the National Conference on Priority Setting for Health Research.

## Current state of published research in mental health in South Africa

### *Publications in psychiatry and mental health*

In 1997, 542 references for mental health research in South Africa up to May 1999 were reported in a research database; more than half of these were not original research articles.<sup>15</sup> Fourie, et al (2001) reviewed psychiatric research published by South African-based authors during the years 1966-1997 and found that there were few collaborative research groups, few authors wrote more than one paper and most papers were published in medical journals.<sup>11</sup> This was similar to the WHO findings that 57% of 114 LMICs contributed less than five articles to the international mental health indexed literature for a 10-year period (1993–2003).<sup>16</sup> A dissemination workshop found that up until 2001, a significant amount of research had already been done in South Africa, but the bulk was descriptive or analytic research with limited interventions evaluations.<sup>13</sup> Similarly, in World Psychiatric Association psychiatry journals prior to 2008, a search in Medline and the Institute of Scientific Information (ISI) did not find any psychiatric journal indexed from the African region in at least one of the two databases<sup>17</sup> but there was some evidence that articles were being published in high profile journals.<sup>18</sup> Recently there has been some improvement in output<sup>19</sup> with psychiatry scientific outputs according to publication counts from South Africa moving from position 120 (1990-1994) to 21 (2004-2008).<sup>20</sup>

### *Priorities for mental health research*

Various studies have addressed the question as to whether mental health research in South Africa addresses locally relevant priorities. In 2000, Flisher et al conducted a cross sectional survey of South African Research Conferences, comprising 627 conference abstracts, and concluded that the reported mental health research was less than half (267, 43%) and did not address priority issues (78, 29% addressed identified priority areas).<sup>21</sup> In addition, of the 73 mental health papers, 33 (45%) addressed topics in health problem research, 7 (10%) aetiology research, 22 (30%) intervention research, and 11 (15%) operational and health systems research.<sup>21</sup> In 2007, Lund et al<sup>22</sup> identified the following

national priorities for mental health: economic evaluations, evidence base for interactions between mental health and other health conditions, trials examining the cost-effectiveness of a range of psychosocial and psychopharmacological interventions and mental health consequences of wider social interventions and routine monitoring of mental health. This was similar to the global priorities identified by Thomlinson : health policy and systems research, where and how to deliver existing cost-effective interventions in a low-resource context, epidemiological research, child and adolescent mental disorders and substance use.<sup>23</sup> Sharan et al, identified priorities for LMIC countries based on a framework of the burden of disease, social justice, and availability of funds, namely: epidemiology (burden and risk factors), health systems and social science, depression/anxiety, substance use disorders and psychoses; children and adolescents; women, and people exposed to violence/trauma.<sup>16</sup> In 2011, Petersen concluded that more intervention research is needed in South Africa, focusing on organizational and human resource mix requirements, cost-effectiveness of a culturally appropriate, task shifting and stepped care approach.<sup>3</sup>

## Recommendations for a national health research agenda

Translational research is defined as 'comprehensive applied research that strives to translate the available knowledge and make it useful...'<sup>24</sup> and includes a range of research activities, from epidemiological perspectives, clinical research and translating effective interventions into research and practice to the pivotal role for evidence synthesis.<sup>25</sup> Using a translational framework for mental health research and strategic directions from the NSW Ministry of Health, Australia<sup>26</sup>, five strategic directions are suggested for the development of a national health research agenda.

### *1. Facilitate the generation of high quality research that is relevant to policy and practice in the following areas*

#### *a. Analytical and descriptive mental health epidemiological studies*

The first nationally representative epidemiological survey of common mental disorders in South Africa, or indeed in Africa, the South African Stress and Health (SASH) survey<sup>1</sup> established the importance of ongoing regular collaborative (nationwide, multi-site) epidemiological surveys to establish the actual mental health disease burden, mental health determinants, the status and evidence for mental health service planning and current mental health priorities.

#### *b. Clinical Mental Health Research*

To address issues of aetiology and cost-effective interventions in local contexts, researchers must conduct clinical research designed to meet the needs of clinicians and others who are making decisions about patients' care.<sup>22,27</sup> There is a lack of controlled intervention studies undertaken outside the context of tertiary centers in the developed world.<sup>28</sup> The importance of supporting and funding locally relevant clinical studies in neuroscience, psychopharmacological and psychotherapeutic interventions in LMICs was aptly illustrated in the study by Burns, which dispelled the myth, that the course and outcome of schizophrenia was better in developing countries.<sup>5</sup> This finding necessitates

a reappraisal of treatment strategies for LMIC, emphasizing that local clinical practice must be supported by locally relevant evidence.

- c. ***Systematic reviews of mental health evidence***  
The development of systematic reviews applicable to LMIC and with internal and external validity is essential. While current involvement in evidence-based centers such as the South African Cochrane Centre and the two Joanna Briggs Institute Affiliate Centres at the University of KwaZulu-Natal and Witwatersrand is encouraging, only three systematic reviews based<sup>29-31</sup> and two current registered systematic review protocols<sup>31,32</sup> on a mental health related topic were found relevant to these Centres to date.
2. ***Facilitate the generation of high quality surveillance and mental health service data relevant to policy and practice***  
Routine data collection from all tiers of the health system is essential to report on baseline mental health indicators and should be included in service delivery agreements. An integrated national surveillance system and appropriate monitoring and evaluation systems for mental health care should be functioning in all mental health services. In LMICs specifically, it is essential to establish a national minimum mental health data set, which does not overburden the already stretched health workers, is based on ICD10 and includes standard measures for outcomes and economic data.<sup>33</sup>
3. ***Foster mental health research funding and links to promote partnerships between funded research bodies, clinical academics, clinicians and mental health care users***  
It is essential to increase resources (human and technical) for mental health research. South African research is underfunded relative to the burden of psychiatric disorders<sup>22</sup> and has problems attracting talented researchers to neuroscience and mental health research. There should be political will from Government<sup>34</sup> to support the funding of Mental Health Service and Research in line with the WHO recommendations for LMICs<sup>35</sup>, and the Academy of Science of South Africa's recommendations for revitalizing clinical research in South Africa.<sup>36</sup> The National Department of Health should ensure that the National Health Research Committee<sup>12</sup> incorporates specific priorities for research in mental health, and that mental health participation in the recent national health research scholarship program are ensured.<sup>37</sup> Lastly, collaborative funding initiatives of research between local and international institutions, Departments of Health and Universities and public and private partnerships should be fostered and supported.
4. ***Improve translation of research into practice***  
The planning and provision of mental health services should be evidence-based, include the translation of evidence into practice and the evaluation of implementations.<sup>19,28,38</sup> To ensure the translation of evidence to policy, there should be a focus on evidence-based policy development which is subject to scientific scrutiny.<sup>28</sup> Currently there is a lack of integration of academic research and service and policy priorities. It is essential to involve policy makers in the planning and conduct of mental health research<sup>35</sup> and to involve researchers and clinicians in the development and evaluation of policy.  
In a limited resource setting like South Africa conducting

empirical pilot studies for research translation and new interventions is difficult. A way to address this is using implementation research to monitor and evaluate innovative new interventions. An example of this is the action research framework for the implementation and evaluation for telepsychiatry services in KwaZulu-Natal.<sup>39</sup>

#### 5. ***Build mental health research capacity***

One of the challenges facing mental health is the dual role of clinician and researcher resulting in the need to invest in ongoing research training at undergraduate, postgraduate and managerial levels. Due to the resource constraints in LMICs, possible strategies that could be employed are: integrating formal systematic reviews as part of MMED or Masters Programs in collaboration with the South African evidence-based centers, involving mental health students in small scale action research projects in the clinical context as part of the implementation of evidence based practice<sup>40</sup>, providing mental health research and information literacy training to health managers and improving access to evidence based summaries, guidelines and mental health research publications.<sup>28</sup> In addition, more Centers such as the Alan J. Flisher Centre for Public Health should be established. Recent outputs from the Centre include publishing the findings of the international collaborative Mental Health and Poverty project, which aimed to develop mental health research capacity in four LMICs<sup>41</sup>, and launching the first public mental health postgraduate training program in Africa in 2012.<sup>42</sup>

#### Conclusion

There are a number of challenges and opportunities for mental health research in LMIC.<sup>28</sup> Though some progress has been made on the national research front, the challenges facing mental health research are compounded by the well-documented current difficult state of psychiatry in the country.<sup>4</sup> To ensure the implementation and development of research in a stressed system, special focus and attention should be given to establishing a translational research agenda for mental health in this setting.

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