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Title: A Global Mental Health Fund for the treatment of Serious Mental Illness in Low Income and Middle Income Countries

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Corresponding Author: Prof. Saeed Farooq,

Corresponding Author's Institution: NHS

First Author: Saeed Farooq

Order of Authors: Saeed Farooq; Jonathan Burns, PhD. FCPsych (SA) ; Athula Sumathipala; Farooq Naeem

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Abstract: Serious Mental Illnesses (SMI) are psychiatric disorders (excluding developmental and substance use disorders) that result in considerable functional impairment. These conditions receive little or no funding in most Low and Middle Income (LAMI) countries. The huge gap in resources for SMI can only be met by a global fund to provide the treatment of SMI in LAMI countries. The Global Fund to fight AIDS established more than two decades ago, not only provided enormous funding but most importantly, generated the hope that the condition could be treated. We argue that SMI stand today where HIV-AIDS was a couple of decades ago. The cost effective interventions for these disorders are available. For example, it is estimated that that an extra 11 Naira or I$ 0.27 per capita would need to be invested each year to increase the present treatment coverage for schizophrenia of 20% to a level of 70% in Nigeria. The treatment package should include free access to essential medicines to treat psychotic disorders and a component of appropriate evidence based psychosocial intervention, which have been evaluated in number of studies in these countries. It is ethical and public health imperative that a Global Fund to provide the basic treatment for those suffering from SMI is established and the seed money for the proposed fund should be provided by rapidly developing LAMI countries such as India and South Africa.

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A Global Mental Health Fund for the treatment of Serious Mental Illness in Low Income and Middle Income Countries

Dr. Saeed Farooq
PhD, MCPS (Psych), FCPS (Psych)
Clinical Senior Lecturer,Research Institute for Primary Care & Health Sciences

Keele University
&
Visiting Professor Staffordshire University,
Honorary Consultant Psychiatrist, South Staffordshire and Shropshire NHS Foundation Trust

Prof. Jonathan Burns

PhD. FCPsych (SA)

Department of Psychiatry, University of KwaZulu-Natal, Durban, South Africa

Prof. Athula Sumathipala
Professor of Psychiatry
Director, Internationalisation
Research Institute for Primary Care & Health Sciences
Keele University
Staffordshire, ST5 5BG

Dr. Farooq Naeem

MRCPsych, MSc Research Methods, PhD

Associate Professor, Queens University, Canada

Total words: 898 (excluding references)

The economic, social and human costs of Serious Mnetal Ilness (SMI), defined as psychiatric disorders (excluding developmental and substance dependence) which radically interfere with one or more major life activities, are well documented[1].The arguments for providing access to treatment for these conditions in low-income and middle-income countries are also well known. However, the treatment gap for SMI in most of these countries remains a major public health challenge. On average, patients suffering from the first episode of psychosis are likely to remain untreated for more than two years[2]. Despite the fact that the actual cost of antipsychotic treatment is quite low in most low-income and middle-income countries, the economic factors remain a major barrier in the lack of treatment[2]. Even if the patients are able to purchase antipsychotic medication, it may be at the expense of other forms of essential medical care or even food.

The public health impact of SMI is comparable to that of many infectious and chronic physical illnesses that receive much more funding for both treatment and research. For example, in low-income and middle-income economies schizophrenia results in 14.8 Millions YLDs (Years Lost due to Disability). As sixth leading cause of disability this is marginally less than the cataract (17.4 Millions YLD) and much greater than Iron deficiency anaemia (12.6 Millions YLD)[3]. The GBD 2010 (Global Burden of Disease) study does not provide ranking for low income and middle income countries together but the situation has only become worse, as the burden of mental and substance use disorders has increased by 37.6% in 2010. [4]. The public health and research funding for schizophrenia, however, is not even a fraction of that allocated to either of these conditions.

The Global Fund to Fight AIDS, Tuberculosis and Malaria, was established in 2002. The fund increased the resources available to fight these diseases, stimulated the domestic investments in health and helped to reduce stigma[5].Most importantly, the global fund generated the hope that these illnesses could be treated and brought these devastating conditions in the mainstream public health arena.

We believe that the SMI stands today where HIV-AIDS were a couple of decades ago. The case for establishing a similar fund for SMI is compelling in view of the sheer size of the problem, the associated human rights violations, and the need to combat stigma. We challenge countries and multilateral agencies to establish a Global Mental Health Fund to provide free treatment for SMI in low-income and middle-income countries.

The provision of free basic treatment for SMI in these countries has been shown to be feasible and economically viable. For example, in schizophrenia, the most cost-effective interventions are those using first-generation antipsychotic drugs combined with psychosocial treatment, and delivered via a community-based service model[6]. It is calculated that to increase the present treatment coverage of 20% to a coverage of 70% in Nigeria would require an extra 11 Naira or I$ 0.27 per capita.[7] These estimates are based on first-generation antipsychotics. Most second generation antipsychotics,

recommended by many treatment guidelines, have also become generic which has reduced costs considerably.

A major challenge in low-income and middle-income countries is the shortage of specialist mental health professionals. Non-specialist health workers are effective in improving outcomes in psychiatric disorders and supervised community health workers have been successfully employed in providing community-based treatments for moderate to severe schizophrenia[8]. Research is also providing evidence for the efficacy of psychoeducational strategies to improve treatment adherence, to decrease relapse rates and to have positive impact on social functioning[9,10]

Like AIDS, treatment for SMI is required for extended periods of time. However, the appropriate management of SMI does not require expensive diagnostics and in most cases, the drug costs are relatively low. The mhGAP initiative of the World Health Organization (http://www.who.int/mental_health/mhgap/en/) is integrating existing evidence into appropriate, cost-effective packages of care – thus we largely already know what is needed.

We suggest that low-income and middle-income countries such as India, Brazil, South Africa and China take the lead in providing the seed money to establish such a fund. It is estimated that about 41.7 million people need treatment for schizophrenia and related disorders in these countries. The majority of cases is concentrated in Asia (70%) and Africa (16%) [11]. It is therefore an ethical imperative for these countries to take a leading role in such an effort.

The treatment package should include free access to essential medicines to treat psychotic disorders and a component of appropriate psychosocial intervention. At the very least, it may be possible to provide such a treatment package during the initial two to three years after the onset of psychosis. This will help to prevent significant disability and possibly higher mortality as there is compelling evidence that untreated illness during this critical period can result in long term disability and higher mortality in such contexts[12]. The early intervention services to treat the first episode of the illness during this critical period of illness are now well established way of imrproving outcomes.

Such a global initiative would likely prove to be an effective anti-poverty measure, as there is compelling evidence that lack of treatment for SMI leads to a vicious cycle of poverty both for patients and extendedfamilies(http://www.who.int/mental_health/policy/development/en/). Most importantly, perhaps, such a global fund, even at a limited scale, would help to put mental health on the public health agenda, the lack of which is a key barrier to service development.

Authors contributions, conflict of interest and funding: SF conceived the idea and wrote the first draft. JB, AS and FN contributed equally to the final draft of the article. Authors have no conflict of interest to declare. The ethics approval was not required. There is no funding involved in writing of this article.

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*Manuscript with revisions highlighted

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Dr. Saeed Farooq
PhD, MCPS (Psych), FCPS (Psych)
Clinical Senior Lecturer,Research Institute for Primary Care & Health Sciences

Keele University
&
Visiting Professor Staffordshire University,
Honorary Consultant Psychiatrist, South Staffordshire and Shropshire NHS Foundation Trust

Prof. Jonathan Burns

PhD. FCPsych (SA)

Department of Psychiatry, University of KwaZulu-Natal, Durban, South Africa

Prof. Athula Sumathipala
Professor of Psychiatry
Director, Internationalisation
Research Institute for Primary Care & Health Sciences
Keele University
Staffordshire, ST5 5BG

Dr. Farooq Naeem

MRCPsych, MSc Research Methods, PhD

Associate Professor, Queens University, Canada

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***Reply to Reviewers Comments**

13th March, 2016

Joan Marsh Deputy Editor
The Lancet Psychiatry
125 London Wall, EC2Y 5AS

Dear Joan

Re: 2nd resubmission Manuscript reference number: THELANCETPSYCH-D-16-00060

Title: **A Global Mental Health Fund for the treatment of Serious Mental Illness in Low Income and Middle Income Countries**

Thank you for considering and accepting this manuscript, I have again revised the paper in the light of your comments. The draft with Track Changes and a clear version with all changes accepted, are submitted. Following changes have been made. Your comments are highlighted in red.

The number of references is now 12. I agree that reference 1& 2 can be omitted as these cover points which are well known to the specialist readers. This has necessitated minor changes in the text. Another reference is added to cite the GBD 2010 study but after deleting four references from previous version, the number of total references is 12. There are minor edits. The total words are no 898.

Reference 5 is to data from 2004. The latest GBD figures are from 2013 though I'm not sure whether they include economic costs. Please can you check that you have the most current available data for this?

I spent considerable time on finding the relevant figures in GBD10 study. The GBD 2010 does not provide the comparisons mentioned in our draft in its tool 'GBD Compare' (http://vizhub.healthdata.org/gbd-compare/). I have added a sentence to this effect in the paragraph 2 and provided GBD 2010 reference.

As advised the WHO references (12 and 15 in previous version) are now included in parentheses and removed from the reference list.

I have checked the current reference 13 (now reference No. 11). This is correct.

- The signed conflict of interest statements and their contribution to the manuscript is

attached. .

I am impressed by your prompt review and very efficient editorial processing. Thanking you again for accepting this paper.

Yours sincerely

Dr. Saeed Farooq

Clinical Senior Lecturer,

Research Institute for Primary Care & Health Sciences

Keele University
&
Visiting Professor Staffordshire University,
Honorary Consultant Psychiatrist, South Staffordshire and Shropshire NHS Foundation Trust