THEMATIC PAPER

# Brain drain: the issues raised for Egypt by the emigration of psychiatrists

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**The practice of Egyptian psychiatrists emigrating to high-income countries is not a recent phenomenon. Egyptian doctors have long travelled in search of training and education and to better their standards of living. The debate continues. What effective measures can be taken to reduce the brain drain, or at least its effect on Egyptian mental health services?**

Egypt's 19th-century Ottoman ruler Mohammed Ali Pasha was keen on sending educational missions to Europe. He argued that sending students to Europe would expose them to a more modern way of thinking. In the 1820s, 319 Egyptian students travelled to France to study medicine. The Pasha's chief surgeon, Clot Bey, warned him in a letter that 'Useful institutions, to be durable, should be national and independent of foreign competition. It is from amongst the natives that doctors should be chosen' (Clot, 1840).

Nearly 200 years later, the debate continues, with arguments for and against sending Egyptian doctors overseas. The line between training and service delivery is now often blurred. The offer of training to doctors from low- and middle-income countries (LMICs) is frequently perceived as a way to fill shortages in the mental health services of high-income countries (Patel, 2003). Egyptian policy makers have traditionally encouraged the migration of doctors, particularly to the more economically affluent Arab Gulf countries, as this not only brought back to Egypt much-needed foreign currency but also extended political influence to newly formed communities as their health services were being set up. The 2013 Household International Migration Survey, which visited 5259 families in Egypt, found that 5855 (6.3%) family members had emigrated (Farid & El-Batrawy, 2015).

## Migration and mental health services

The shortage of human resources for mental health is in fact worldwide, but more acute in LMICs. This is a serious issue that is very likely to escalate and it is essential that it be addressed by policy makers. Improving training programmes and upgrading skills, together with applying innovative and effective strategies to involve a broad set of workforce categories, is likely to facilitate the development of career opportunities and to improve mental healthcare in LMICs (Kakuma *et al*, 2011).

Jenkins *et al* (2010) reviewed the emigration of mental health professionals from LMICs, as well as rural-to-urban migration. They pointed out that it seriously constrained the development of human resources for mental health. The UK, the USA, New Zealand and Australia employ almost 9000 psychiatrists from India, the Philippines, Pakistan, Bangladesh, Nigeria, Egypt and Sri Lanka. Without this migration, many source countries would have more than double (in some cases five to eight times) the number of psychiatrists per 100 000 population (Table 1).

**Table 1**

Numbers of psychiatrists with and without migration (brain drain)

| | No. in UK | No. in Australia | No. in New Zealand | No. in USA | Population of country (1000s) | No. per 100 000 population | No. per 100 000 population if there had been no brain drain | No. remaining in country | No. remaining if there had been no brain drain |
|---|---|---|---|---|---|---|---|---|---|
| Afghanistan | 1 | | | 18 | 24 926 | 0.04 | 0.11 | 9 | 28 |
| Bahrain | 1 | | | | 739 | 5.00 | 5.14 | 37 | 38 |
| Egypt | 100 | 2 | | 382 | 73 389 | 0.90 | 1.56 | 661 | 1145 |
| Iran | 27 | 3 | | 238 | 69 789 | 1.90 | 2.28 | 1326 | 1594 |
| Iraq | 67 | 3 | | 46 | 25 856 | 0.70 | 1.15 | 181 | 297 |
| Jordan | 1 | | | 8 | 5 613 | 1.00 | 1.16 | 56 | 65 |
| Kuwait | 1 | | | 2 | 2 595 | 3.10 | 3.22 | 80 | 83 |
| Lebanon | 3 | | | 91 | 3 708 | 2.00 | 4.54 | 74 | 168 |
| Libya | 2 | | | | 5 659 | 0.18 | 0.22 | 10 | 12 |
| Morocco | | | | 7 | 31 064 | 0.40 | 0.42 | 124 | 131 |
| Oman | 1 | | | | 2 935 | 1.40 | 1.43 | 41 | 42 |
| Pakistan | 181 | 1 | 4 | 972 | 157 315 | 0.20 | 0.94 | 315 | 1473 |
| Saudi Arabia | 4 | | | 5 | 24 919 | 1.10 | 1.14 | 274 | 283 |
| Sudan | 28 | | | 3 | 34 333 | 0.09 | 0.18 | 31 | 62 |
| Syria | 4 | | | 73 | 18 223 | 0.50 | 0.92 | 91 | 168 |
| UAE | 2 | | | | 3 051 | 2.00 | 2.07 | 61 | 63 |
| Total | 423 | 9 | 4 | 1845 | | | | | |

Source: Jenkins *et al* (2010).

A report from the World Psychiatric Association Task Force on Brain Drain recommended that more support be offered to psychiatrists in LMICs, in order to reduce the rate of emigration (Gureje *et al*, 2009).

## Some approaches to the problem

Evidence suggests that mental healthcare can be delivered effectively in primary healthcare settings, through community-based programmes and task-shifting approaches. Non-specialist health professionals, lay workers, affected individuals and carers, with brief training and appropriate supervision by mental health specialists, are able to detect, diagnose, treat and monitor individuals with mental disorders and reduce carer burden (Kakuma *et al*, 2011). Task shifting (also known as task sharing), defined as 'delegating tasks to existing or new cadres with either less training or narrowly tailored training', is an essential response to shortages in human resources for mental health (Jenkins *et al*, 2010).

Several examples from LMICs have demonstrated that health workers who are not specialised in psychiatry can effectively deliver mental healthcare. They have been involved in a variety of activities, including detecting, diagnosing, treating and preventing common and in some instances severe mental disorders, epilepsy, intellectual developmental disorders and dementia. The mental health specialists' concern regarding marginalisation of their role by extensive task shifting is not supported by the evidence. Even with extensive task shifting, specialists will continue to have an essential role in providing clinical care, with an emphasis on complex psychiatric cases, training and supervising non-specialist health workers to manage less complicated cases (Patel *et al*, 2014, pp. 193–224).

The evidence of the shortage of psychiatrists in Egypt is not debatable. The World Health Organization's 2014 *Mental Health Atlas* shows a further decline in the number of psychiatrists per 100 000 population compared with 2011. Data from the UK's General Medical Council points to an increasing number of Egyptian physicians in the UK (Jenkins *et al*, 2010).

What cannot be measured, though, is the number of doctors in Egypt who would have specialised in psychiatry had the opportunity of emigration not been available. Or, more generally, how many students would study medicine if they knew that they would not be able to better their financial situation by emigrating.

Limiting the access of Egyptian psychiatrists to high-income countries would probably compromise training. It has not proved feasible in the past, as recent waves of migration following political upheavals in the Middle East have made it clear that policies and legislation have little effect on determined migrants. Building walls and maritime patrols have also failed at their task.

A constructive approach will have to focus on supporting and upgrading the development of mental health services in LMICs. In Egypt, as in other countries of the Eastern Mediterranean region, mental health is still a neglected area, as evidenced by the huge treatment gap deriving from the mismatch between needs and resources. The mental health system in the country operates with limited resources in terms of infrastructure, workforce and finance, and with an imbalance between urban and rural areas. Mental healthcare continues to rely on large psychiatric hospitals, while community services such as rehabilitation programmes and social support resources are limited.

## Egyptian projects

A number of projects in Egypt have proved effective in engaging mental health professionals through collaborative work. With support from Finland, Egypt started to reform its mental health legislation, and enacted a new Mental Health Act (Law 71, 2009) 'for the protection of psychiatric patients', which replaced the 1944 law (Loza & El Nawawi, 2012). Furthermore, with a European Commission grant, the 'family health model' – merging several vertical programmes within primary care services – was implemented at a district level in the 27 governorates according to the Health Sector Reform Programme launched towards the end of the 1990s; however, mental health services remained mainly based in the 17 psychiatric hospitals, with 5239 beds.

The Mental Health Network (Mehenet) project is an Egyptian–Italian initiative implemented between 2010 and 2012. This pilot project targeted and successfully resulted in the setting up of the first community mental health centre in Egypt (Sorour *et al*, 2014). The project involved the training of physicians, nurses and health visitors working in primary care. The training included both theory and clinical aspects. Although limited in mental health experience, primary care physicians within the piloted district are currently running mental health psychoeducational programmes and are able to detect the onset of mental health disorders and to refer cases to the local community mental health centres.

In Egypt, a few health visitors and primary care nurses who were trained in psychosocial interventions through an international cooperation rehabilitation programme (Psychosocial Rehabilitation of Mental Disability – REMEDY project, 2013–2015) were successfully involved in psychoeducational and prevention programmes as well as conducting self-help groups, and following step-by-step progress of service users in the workplace, after vocational training. On a district level, and through this project, Egypt is witnessing the birth of the first primary mental healthcare unit. A training department, within the district primary care directorate, was set up in January 2016, utilising the nurses and health visitors who were trained in psychosocial interventions in the REMEDY project, to allocate and train at least one staff member at each primary care unit across the

district, in order to build human resources in this field. Patients and carers who participated in the REMEDY project were trained to support peers and to facilitate self-help groups. This experience resulted in an observable improvement in patients' overall quality of life. Although on a small scale, it shows the potential Egypt has to enhance its mental health services, to reach out to patients in small villages, and to compensate for the shortage of professionals.

In 2009, Egypt's civil society set up the Egyptian Society for the Protection of the Rights of Mental Patients. Currently, through collaboration between different Egyptian non-governmental organisations that work in the fields of psychosocial rehabilitation and mental disability under the umbrella of mental health users' rights and dignity, a plan is proposed, and has been agreed by involved specialists, experts, users and stakeholders, to set up the first social enterprise in Egypt operated by users, with the aim of promoting social inclusion.

These collaborative efforts in upgrading services and involving informal services, health and psychosocial workers as well as users and families have had a positive impact on reducing the mental health gap, reducing the pressure on mental health hospitals and on retaining psychiatrists, while respecting their basic right to mobility and ensuring exchange of expertise.

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# Brain drain: a challenge to global mental health


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**The brain drain of medical professionals from lower-income to higher-income countries contributes to the current inequity that characterises access to mental healthcare by those in need across the world and hinders efforts to scale up mental health services in resource-constrained settings, especially in Nigeria and other West African countries. The migration of skilled workers is driven by a combination of the globalisation of the labour market and the ability of highly resourced countries to attract and retain specialists from poorer countries. If we are to ameliorate the worldwide shortage of mental health professionals, we need to find innovative ways of attracting young doctors into psychiatric training in all countries. We must also introduce measures to improve health worker retention in low- and middle-income countries.**


## Background

The challenge to global public health posed by the migration ('brain drain') of health workers from low- and middle-income countries (LMICs) to high-income countries has been recognised for decades. Despite measures taken by some countries to stem the flow, and attempts to reach international agreements, the migration of health workers has accelerated significantly in recent years, fuelled by a combination of global shortages in the health workforce, population changes in higher-income countries and the globalisation of the labour market for healthcare professionals, allowing them to seek better conditions of service away from their home countries (World Health Organization, 2006; Aluttis *et al*, 2014). This has greatly exacerbated the global disparities in health workforce distribution. For example, North America bears 10% of the global burden of disease, but possesses