which must be reported to the Public Ministry by the direction of the hospital, was subject to much controversy but was eventually adopted.

Education in psychiatry

Brazil has at present 95 medical colleges from which about 9300 doctors graduate each year. According to Zago *et al* (2001), only 16 of them conduct scientific research.

Scientific research in Brazil began in a modern form after the creation of postgraduate education in 1969. In the area of mental health, there has been a very important increase in the number of indexed Brazilian journals since 1990, while the situation in other areas, such as haematology, rheumatology and oncology, has remained the same. Postgraduate programmes have undergone considerable improvement recently. Nowadays two centres, the University of São Paulo and the Federal University of São Paulo, gain the best ratings in the external evaluation carried out by the Ministry of Education. Other centres – such as the Federal University of Rio Grande do Sul, the Federal University of Rio de Janeiro and the Federal University of São Paulo (Ribeirão Preto campus) – also showed good results in this evaluation.

Residence in psychiatry

The National Council of Medical Residence (CNRM) was created in September 1977 by means of Decree 80.281. It defines medical residence as a modality of postgraduate education in the form of specialist courses characterised by in-service training aimed at doctors. The programmes comprise two years in psychiatry, with an optional third year. Presently there are 462 residence places in psychiatry in Brazil, most (43.7%) of them in the state of São Paulo.

Professional bodies

The Brazilian Association of Psychiatry (ABP), founded in 1966, has about 3000 associated psychiatrists. It holds congresses (originally biennial and now annual). The last, the XX Brazilian Congress, was attended by 3100 medical professionals, most of whom were psychiatrists.

In June 1993 the ABP was one of the organisers of the 9th World Congress of Psychiatry, held in Rio de Janeiro, which had approximately 7000 participants. The ABP has published the *Revista Brasileira de Psiquiatria* (Brazilian Psychiatry Journal) since 1979; at first it was called *Revista ABP–APAL*, when it was jointly produced by the ABP and the Latin-American Psychiatry Association (APAL). The ABP's newsletter, *Psiquiatria Hoje* (Psychiatry Today), was founded in 1976. Both the journal and the newsletter are distributed to all members.

The Association maintains ongoing educational programmes via the internet at www.pecabp.ecurso.com.br

The Institute of Psychiatry at the Federal University of Rio de Janeiro also publishes a journal of good scientific quality and national circulation, the *Jornal Brasileiro de Psiquiatria* (Brazilian Journal of Psychiatry).

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COUNTRY PROFILE

Psychiatry in India

Vikram Patel[1] and Shekhar Saxena[2]

[1]Senior Lecturer, London School of Hygiene and Tropical Medicine, and the Sangath Society, Goa, India

[2]Coordinator, Mental Health: Evidence and Research, Department of Mental Health and Substance Abuse, WHO, Geneva, Switzerland

India is a low-income country that is characterised by huge diversity within and between its 35 states and union territories. For example, the infant mortality rate (per 1000 live births) ranges from a low of 16.3 in Kerala to a high of 86.7 in Uttar Pradesh, over a fivefold difference (International Institute for Population Sciences & ORC Macro, 2001). This considerable variation is evident in virtually every aspect of human development in India, and any summary figures are likely to be unrepresentative of most parts of the country. Within the scope of this short article, this important limitation of averages must be recognised at the outset.

The latest population figures for India show that the population has now crossed the 1 billion mark and is continuing to grow, although at a gradually slower pace than before. The substantial epidemiological evidence base in

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relation to mental disorders shows that severe and common mental disorders are at least as common as in the developed world. The social and economic risk factors for mental disorders are on the rise in many parts of the country and there has been a reduction in the already pitiful level of spending by the Government on health and social welfare (5.2% of gross domestic product). There is evidence that a substantial proportion of health care in India is delivered in the private sector; some estimates put this at above 75% of all health consultations.

Mental health resources

There are an estimated 4000 psychiatrists in India, which represents a ratio of approximately one psychiatrist for 250 000 people (WHO, 2001). However, as mentioned earlier, this rate varies hugely between urban and rural areas, and between more developed and less developed states. Thus, in some states the ratio falls to one psychiatrist for more than one million people. The majority of psychiatrists work in urban areas, and in the private sector. The number of other mental health professionals, such as psychologists or psychiatric nurses, is even lower: there is one nurse for every 10 psychiatrists and one psychologist for every 20. There are an estimated 25 000 psychiatric beds in the country, or one bed for every 40 000 people. About 80% of these beds are situated in mental hospitals, where the quality of care has been found to violate even basic human rights (National Human Rights Commission, 1999).

If one considers that the estimated number of persons with schizophrenia alone is 10 million, it is obvious that the vast majority of persons with mental disorders will not have access to a mental health professional in India. The numbers of professionals in specialised areas of psychiatry, such as child, substance misuse or elderly mental health, cannot even be estimated because, barring in a few academic centres, these specialities do not exist (the provision is within general services). Thus, it may be fair to say that the primary provider of mental health care in India is the primary health sector, with its wide (though uneven) network of primary health centres and general hospitals, in both the private and public sectors.

The traditional and complementary medical sector is also a vibrant player in mental health care. This sector includes an array of religious, spiritual and alternative healing systems such as Ayurveda, faith-healing and *unani* medicine. Recently, there has been a renaissance of traditional systems of health promotion, such as yoga.

The non-governmental sector is also playing a key role in mental health care, in particular by filling in niche areas of need such as child mental health care, and by developing innovative community-based models of care (Patel & Thara, 2002).

A large, mostly indigenous, pharmaceutical industry ensures that most psychotropic drugs are available in India, often at a fraction of their cost in high-income countries; however, this low cost does not translate into consistent availability in Government-run primary and general health care settings.

Mental health education and qualifications in psychiatry

India has about 125 medical colleges, most of which have departments of psychiatry; about a quarter of these departments are recognised by the local universities for higher training in psychiatry. The most common qualifications are the MD (doctor in medicine), which is different from the MD in the USA (in that it is a specialist qualification) and that of the UK (in that a research dissertation is only one component; the other components include written and clinical examinations). The MD requires a residency of three years, followed by another three years of senior residency training to become a consultant.

Other qualifications include the Diploma in Psychological Medicine (DPM), which requires a two-year residency, and the Diplomate of the National Board, administered by the National Academy of Medical Sciences, which is an all-India examination styled along the lines of the Membership of the Royal College of Psychiatrists.

Government policies and programmes

Mental health has been receiving increasing attention in national health policy and programming; this is best illustrated by a specific mention of mental health as a priority area for the new National Health Plan drafted for the coming decade. The National Mental Health Programme was formulated in 1982 with the objective of ensuring the availability and accessibility of basic mental health care, particularly to the most vulnerable and under-privileged sections of the population. The programme, though visionary in its conceptualisation, made slow progress, mainly because of a lack of dedicated finances. It is implemented at present in 22 districts (out of 593) and will be extended to over 100 districts in the next few years. The key approaches used are the training of primary health care personnel, the provision of neuropsychiatric drugs in peripheral institutions, the establishment of psychiatric units at the district level, with streamlined referrals, and the encouragement of community participation. However, it is worth noting that, despite this programme, less than 1% of the total health budget is devoted to mental health.

Psychiatric associations

The flagship psychiatric association is the Indian Psychiatric Society, established in 1947. The Society holds an annual conference and organises continuing medical education; it also publishes the *Indian Journal of Psychiatry*. The Society has five regional zones, which all hold annual conferences; some also publish their own journals.

There are several other associations in India, including the Indian Association for Child and Adolescent Mental Health, the Indian Association for Social Psychiatry, Indian chapters of world associations, such as the World Association for Psychosocial Rehabilitation, and, most recently, the Indian Association for Private Psychiatry.

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Research and journals

India has a substantial research base in mental health. A recent review of the contribution of various non-Western countries to the international psychiatric literature found that 14% of the papers published over three years in six high-impact journals were from India, a figure second only to Japan (Patel & Sumathipala, 2001).

The requirement that every MD in psychiatry must complete a research dissertation means that about 100 research projects are completed each year; many, however, suffer from methodological problems as a result of inadequate supervision and research skills (Patel, 2001). Another problem is that the research often consists of drug trials funded by industry, with the primary purpose of meeting the national regulations for the introduction of new medicines. Health services and public health research is conspicuously missing.

The research infrastructure in India centres on medical school departments of psychiatry and national centres for higher research, such as:

- the National Institute for Mental Health and Neurosciences (NIMHANS) in Bangalore
- the All India Institute for Medical Sciences (AIIMS) in New Delhi
- the Post-graduate Institute for Medical Education and Research (PGIMER) in Chandigarh.

Research is also being conducted by non-governmental organisations; some of the best-known studies on schizophrenia in India, for example, have been the result of research by the Schizophrenia Research Foundation (SCARF) in Chennai (Thara & McCreadie, 1999).

There are more than 10 journals in psychiatry and allied specialities in India, the best-known being the *Indian Journal of Psychiatry* and the *NIMHANS Journal*. However, despite a continuous publication record of several decades, the *Indian Journal of Psychiatry* is still not indexed on major international citation databases, and this limits its impact on world psychiatry. Not surprisingly, some of the best scientific studies from India still go to international journals.

Mental health legislation

The Mental Health Act of 1987 replaced the Indian Lunacy Act of 1912. The Act has provided new definitions, simplified admission and discharge procedures, introduced licensing of psychiatric hospitals, set up central and state mental health authorities and promoted human rights for people with mental illnesses (WHO, 2001). However, the implementation of this law has been very uneven across the states. Courts in India have provided much support to the mental health field by repeatedly asking the Government to provide better care, within the framework of basic human rights. Another key piece of legislation has been the Persons with Disabilities Act, which includes mental disabilities, and which provides access to social welfare and employment schemes. The Narcotic Drugs and Psychotropic Substances Act (amended in 2001) deals with the prevention, treatment and rehabilitation of people with drug-dependence.

Role of Indian members of the Royal College of Psychiatrists

India has a considerable human resource base for mental health initiatives, but this base is very inadequate to meet the mental health needs of the population. The key to closing the treatment gap is to use the resources available (for example, including private psychiatrists and non-governmental organisations in mental health programmes), strengthening services in primary care, providing more effective referral systems and building the research evidence on cost-effective health service interventions. Members of the College can play a number of important roles by strengthening links with Indian associations and organisations. In our view, the key priorities for such collaborations are:

- to build research capacity through collaboration on specific research projects and strengthening research training opportunities
- to share models of training for primary and general health care practitioners in mental health interventions
- to share models for the development of community care, in particular for severe mental disorders, learning disabilities and mental disorders affecting children and the elderly
- to facilitate the training of general psychiatrists in specialist areas such as substance abuse, child psychiatry and forensic psychiatry
- to facilitate the process of reforming mental hospitals in India by enabling hospital staff to improve the physical, social and therapeutic environment of the hospital.

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