



special articles

Psychiatric Bulletin (2009), 33, 181–183. doi: 10.1192/pb.bp.108.020487

AMINA TAREEN, ILYAS MIRZA, AYESHA MINHAS, FAREED MINHAS AND ATIF RAHMAN

Developing a child and adolescent mental health service in a low-income country: a global partnership model

AIMS AND METHOD

To develop a child and adolescent mental health service in a low-income country. This was a collaborative effort involving governmental and non-governmental organisations in the UK and Pakistan, where a training clinic was established.

RESULTS

We assessed and treated 169 children and adolescents. A team of mental health professionals was trained, including one consultant psychiatrist; the consultant psychiatrist is now leading the clinic. Links were further developed with healthcare, social care and educational organisations, as well as efforts made to engage the public in relation to child and adolescent mental health.

CLINICAL IMPLICATIONS

Our development highlights a model of research collaboration and service development which may be sustainable in low-income settings. Such initiatives need support from a variety of organisations. There is a need to consider whether there should be a formal funding mechanism to support the Royal College of Psychiatrists Senior Volunteer Programme.

Child and adolescent psychiatric disorders are a public health priority in low- and middle-income countries.¹ There is a large unmet need to train the workforce and develop services which are feasible and sustainable in such settings.² Pakistan is the 6th most populous country in the world, with a population of over 160 million; 40% of the population is under the age of 18.³ However, there are about six child psychiatrists in the country with an estimated under-18 population of 64 million. In 2006, there were only three child and adolescent mental health services in Pakistan, the oldest at the King Edward Medical University in Lahore, Punjab, which is an independent department. The second is located in Children's Hospital, Lahore, and is part of the paediatrics department. The third is in Karachi, based at the Aga Khan University Hospital, a private medical university, and is part of the adult psychiatry department but has a child psychiatrist.

However, there was no child psychiatrist north of Lahore, an area that roughly comprises about a third of the population of Pakistan. In 2004, a child and adolescent psychiatry special interest group was established in Rawalpindi by A.R.⁴ He used methods of distance learning such as store and forward email techniques to support the development of child psychiatry. This process was also instrumental in sensitising trainees to the importance of using psychosocial therapeutic techniques rather than predominantly psychopharmacological approaches. The director of the Institute of Psychiatry in Rawalpindi wanted to further develop this service, so that the Institute could have fully functioning departments of

psychiatric subspecialties for training, research and development. This highlighted the need for a child psychiatrist to train local doctors and develop a child psychiatry clinic.

The Royal College of Psychiatrists organises a scheme for senior volunteers to take up teaching, training and capacity-building roles in low- and middle-income countries (www.rcpsych.ac.uk/college/boardofinternationalaffairs/seniorvolunteersprogramme.aspx). This paper illustrates one example of this scheme in action, with its strengths and limitations.

Method

Preparatory phase: identifying a trainer

In October 2005, over 80 000 people lost their lives and a significant number of children were orphaned following a major earthquake in Pakistan. A number of UK doctors of Pakistani origin volunteered their services. A.T. worked briefly in the earthquake-affected areas with a team of paediatric surgeons from Alder Hey Hospital in Liverpool and Royal Manchester Children's Hospital, and later returned to Pakistan to conduct exploratory research on intellectual disability. One day a week she worked on capacity building of professionals in childhood mental disorders.

Service development

Physical space

An old electroconvulsive therapy suite had been earmarked for the service. This was a large hall with a

special
articles

couple of stretchers in it. A part of the room was partitioned off and used as a waiting area, so that the children would not share the same waiting area as acutely ill adult patients; toys for different age groups were placed in the main area. As families came in, the adults were asked to take a seat in the waiting area while children were free to wander around the room playing with the toys. This often resulted in quite a lot of chaos, but it kept the children occupied and gave their parents some space; parents gave each other a lot of support while they were waiting. It was also a good opportunity for the clinicians to observe the children during unstructured play – their interactions with other children, with their caregivers and with unfamiliar adults.

Staffing

An adult psychiatrist with an interest in child mental health was seconded to the service; she is now running the clinic. It was also attended by two adult psychiatric trainees, on 3-monthly rotation, two psychologists, a general practitioner with an interest in community paediatrics who worked for a major charity, and a general practitioner from a school for children with special needs.

Process

The training clinic met once a week. For the first couple of months, patients were seen by all trainees in the group, with interviews led by A.T. After they had learnt basic assessment skills, trainees divided into groups of two, with each group seeing a patient and discussing them with A.T. afterwards. Each week at the clinic one particular case was discussed. Relevant articles were downloaded from ProQuest and emailed to the group to study. The first hour of the clinic the following week was spent discussing these papers and implications for management of the child and the family in the light of what we had learnt. The case notes were filed according to diagnostic categories, thus forming a practical handbook/resource for trainees not in the clinic. A number of consultations were also video-recorded and with the families' consent have been kept as a training resource. Once a month case presentations were organised for a larger group of psychiatric trainees.

Results

In the training clinic itself, 169 new patients were seen and discussed over 1 year. Management mainly focused on psychological therapies, predominantly behavioural, cognitive-behavioural and systemic. Medication was used in a minority of patients, mainly those with attention-deficit hyperactivity disorder.

The diagnostic frequency and mean age according to diagnosis of new presentations to the clinic are outlined in Table 1.

Capacity building and liaison with other professionals

Three workshops for school teachers of the twin cities of Rawalpindi and Islamabad were conducted. Each workshop was attended by more than 50 teachers from government and private sector schools. Popular topics in these workshops were promoting children's mental health, classroom management and behaviour management at school.

Public engagement

Electronic media such as television is a vital tool for public information and engagement. A.T. appeared on a number of talk shows to discuss child mental health, covering various aspects of children's development and issues that arise at different ages.

Discussion

The Lord Crisp report, *Global Health Partnerships: the UK Contribution to Health in Developing Countries*, makes a number of recommendations about how to support individuals, organisations and countries.⁵ These include the need to develop new partnership arrangements with voluntary organisations and mechanisms to support staff wishing to volunteer abroad and then return to the National Health Service (NHS) (one such example is an initiative in Malawi, funded by the Scottish Executive⁶).

Table 1. Characteristics of new patients at the training clinic

Problem	Frequency of new presentations, %	Total number of new patients, %	Age, years: mean (s.d.)	Boy:girl ratio
Intellectual disability	54	32	9.3 (4.1)	34:20
Behavioural problems (no formal diagnosis given)	31	18	10.4 (3.7)	29:2
Anxiety	17	10	11.7 (2.7)	10:7
Epilepsy	16	9	9.9 (4.9)	10:6
Multiple problems	14	8	8.9 (3.9)	6:4
Autism	9	5	6.5 (3.3)	5:4
Dissociation	7	4	11.8 (1.3)	1:6
Somatic complaints	6	4	14.8 (4.1)	0:6
Depression	5	3	16.6 (2.1)	1:4
Speech problems	3	2	7.6 (1.1)	3:0
Obsessive-compulsive disorder	3	2	13.3 (0.6)	1:2
Attention-deficit hyperactivity disorder	3	2	5.6 (2.0)	3:0
School refusal	1	1		0:1



Our experience demonstrates that this is possible; however, it requires commitment and support both from the NHS employing organisation and the Royal College of Psychiatrists. In our case, financial support to enable a consultant child psychiatrist to contribute to this development was received through a non-UK research capacity building programme and was made possible because the Institute of Psychiatry in Rawalpindi was a centre for the research project. The contribution to the NHS of health workers trained in the Commonwealth and working in the UK raises the question whether the UK National Institute of Health Research, perhaps in collaboration with the Department for International Development, has a role in financially supporting priority service development projects to improve mental health systems in Commonwealth countries.

Syed et al⁷ report the development of a similar service at the Aga Khan Medical University in Karachi, Pakistan. They conducted 290 assessments over a 3-year period. The most common ICD-10 diagnoses were attention-deficit hyperactivity disorder (24.8%), depression (15.9%) and intellectual disability (mental retardation 7.9% and borderline intellectual functioning 3.9%). In our clinic, 31.95% were diagnosed with intellectual disability, only 2.9% had depression and 1.7% had attention-deficit hyperactivity disorder. Approximately 18% of our patients had behavioural problems (not meeting criteria for oppositional defiant disorder or conduct disorder). This difference may be a reflection of differences in the population accessing the service, such as socioeconomic status and accessibility to rural population. Our previous study of a child and adolescent sample in rural Punjab has identified that the unmet treatment needs may be greatest for those with intellectual disability, epilepsy and depression.⁸ There is therefore the need to build capacity to deal with these conditions.

Next steps

This development represents the second stage of a process which began with a pilot study of training in child psychiatry via the internet.³ In the next stage, there is a need to consolidate the training of local child psychiatrists to enable them to further develop services. An NHS scholarship programme, perhaps as part of an existing one (e.g. the Commonwealth Scheme), specifically to support service improvement in low- and middle-income countries, is advocated in the *Global Health Partnerships* report. Such a scheme is suggested by Lord Crisp to be open to candidates from low- and middle-income countries – resident at home or abroad – over a 5-year period while they work on service development in their own country and develop their own experience and expertise with support from the UK and local institutions. The College's Department of International Affairs and its Senior Volunteer Programme could take a lead in taking this forward. The College has played a positive role in supporting such programmes through members volunteering in Pakistan, Sri Lanka and Malawi. Recent changes in immigration regulations that abolished permit-free

training (which allowed doctors to take up employment in NHS training posts without the need for a work permit) means that few individuals from the Commonwealth countries can be trained formally and return to develop services in their countries. Such schemes need to evolve to fill the gap left by these changes.

There is also the need to create a faculty within the College of Physicians and Surgeons, Pakistan, in order to develop a formal curriculum for child and adolescent psychiatry and establish a local training programme for postgraduate trainees in Pakistan so as to ensure local sustainability. This would require support from the Royal College of Psychiatrists, and especially from its members in the UK with links to Pakistan.

Acknowledgements

We thank the Royal College of Psychiatrists and Barnet Enfield and Haringey Mental Health Trust for their support.

Declaration of interest

A.T. and I.M. were supported by NIH grant R21 TW 07554 through Fogarty International Center's (of the USA National Institute of Health) Brain Disorders Program to build Sustainable Research and Development Capacity in Low and Middle Income Countries.

References

- 1 World Health Organization. *Caring for Children and Adolescents with Mental Disorders: Setting WHO Directions*. WHO, 2003 (http://www.who.int/mental_health/media/en/785.pdf).
- 2 Lancet Global Mental Health Group. Scale up services for mental disorders: a call for action. *Lancet* 2007; **370**: 1241–52.
- 3 Population Reference Bureau. *2007 World Population Data Sheet*. PRB, 2007 (http://www.prb.org/pdf07/07WPDS_Eng.pdf).
- 4 Rahman A, Nizami A, Minhas A, Niazi R, Slatch M, Minhas F. E-Mental health in Pakistan: a pilot study of training and supervision in child psychiatry using the internet. *Psychiatr Bull* 2006; **30**: 149–52.
- 5 Lord Crisp. *Global Health Partnerships: The UK Contribution to Health in Developing Countries*. Department of Health, 2007.
- 6 Beaglehole AL, Baig BJ, Stewart RC, Platt JE, Strachan J, Kauye F, et al. Training in transcultural psychiatry and delivery of education in a low-income country. *Psychiatr Bull* 2008; **32**: 111–2.
- 7 Syed EU, Hussein SA, Yousafzai AW. Developing services with limited resources: establishing a CAMHS in Pakistan. *Child Adolesc Ment Health* 2007; **12**: 121–4.
- 8 Tareen A, Mirza I, Mujtaba M, Chaudhry HR, Jenkins R. Primary care treatment for child and adolescent neuropsychiatric conditions in remote rural Punjab, Pakistan: a cross-sectional survey. *Child Care Health Dev* 2008; **34**: 801–5.

Amina Tareen Research Associate, Human Development Research Foundation, Islamabad, Pakistan, and Consultant Child and Adolescent Psychiatrist, Barnet, Enfield and Haringey Mental Health Trust, London, UK, ***Ilyas Mirza** Principal Research Scientist, Human Development Research Foundation, Islamabad, and HEC Foreign Professor of Psychiatry, Institute of Psychiatry, Murree Road, Rawalpindi, Pakistan, email: iqmirza@gmail.com, **Ayesha Minhas** Consultant Psychiatrist, WHO Collaborating Centre for Mental Health, Institute of Psychiatry, Rawalpindi Medical College, Pakistan, **Fareed Minhas** Professor of Psychiatry and Director, WHO Collaborating Centre for Mental Health, Institute of Psychiatry, Rawalpindi Medical College, Pakistan, **Atif Rahman** Professor of Child Psychiatry, University of Liverpool, Alder Hey Children's NHS Foundation Trust, Liverpool, UK