Introduction

Most developing countries confront many challenges as they struggle to deal with economic, social and geo-political problems. Not least among these challenges is to assure the health and well being of their children. Health planners are faced with a wide range of pressing needs (for example, clean water, sanitation, nutrition and immunization); mental health is low on their list of priorities. In this article, we consider the current state of child mental health in Pakistan. We argue that in countries like Pakistan, there is a need to consider the field of child mental health a great deal more seriously than is currently the case. We address the question of research and service development in this area and suggest a broad framework within which this can take place. Psychiatrists in the developed world can contribute meaningfully to this process and we discuss the areas in which this contribution could be most productive.

Current state of child mental health in Pakistan

Pakistan has a young and rapidly growing population, which, according to the census in 1997, was 133 million. Half of the population is below the age of 18. The population annual growth rate is 2.6%. The changing economic structure has led to rapid urbanization, attracting young people in search of jobs from the countryside to the cities, thereby undermining the traditional role and structure of the family. Rapid urbanization has been shown to increase behavioural and emotional problems in children in developing countries. The spiraling rate of crime and violence in cities committed by young people is related, among other things, to this phenomenon. Widespread poverty and illiteracy have led to a high prevalence of child labour - an issue of grave concern to both national and international agencies. Only 50% of children enroll for primary education and of these, half drop out by secondary school, leading to one of the lowest literacy rates in the world. Paralleling this process, rates of drug abuse have begun to increase among young people. The poor health of parents, especially mothers, is also a cause for concern. Recent studies have shown the prevalence of common mental disorders such as anxiety and depression among rural women to be as high as 66%. Depression in mothers is linked to emotional and behavioural problems in children.

For developing countries like Pakistan, UNICEF estimates that one in 5 children suffer from chronic malnutrition and a similar number take diets deficient in one or another essential nutrient. This leads not only to physical but also cognitive and behavioural abnormalities. Other environmental hazards that produce mental retardation are also more widespread in developing countries. In addition, risk factors such as poverty and child labour are also prevalent in many areas. These conditions place Pakistani children at a high risk of mental disorders. Research in Pakistan is scanty, but available evidence suggests that there are a substantial number of children with mental health problems, and that most have no access to modern, effective treatment. The rate of serious mental retardation is 1.5%, which is amongst the highest in developing countries. Of about half million children with epilepsy, 94% are untreated or maltreated by the traditional healers. The prevalence of emotional and behavioural problems among school children in Pakistan has been estimated to be 9.3%. There are no reliable estimates for prevalence rates in children not attending school.

At present in Pakistan, there are no formal services to meet the needs of the vast majority of these
children. There is an urgent requirement for research to define the need for child and adolescent mental health service, to identify priority areas of child mental health and to assess the effectiveness of interventions. There is also a need to train and enhance the skills of primary health care workers and other professionals working with children.

Issues in service development and research

Current state of mental health services

In Pakistan, there are approximately one to two psychiatrists per million population, most of them in urban centres. This ranges from one psychiatrist per 50,000 to 300,000 population for other developing countries. Very few of these psychiatrists are trained in child mental health. In contrast, the standards set out for a country like U.K are two child psychiatrists per 200,000 population, in addition to the general psychiatrists. It is clear that under existing circumstances, services comparable to the developed world will not be appropriate or available for the majority of the population. There are, however, ways in which this problem can be tackled. The approach espoused by the WHO involves greater emphasis on prevention and on the use of skilled professionals to train and counsel those engaged in the provision of primary health care. This approach has been adopted successfully in some centers in Pakistan and may be the best way forward for child mental health also. But many clinicians who are trained in and used to the centralized consultative medical model, are not familiar with this model of working. This may give rise to apprehensions and misgivings. The effectiveness of the primary care and public health approach will therefore have to be carefully evaluated and demonstrated to convince professionals as well as administrators of its usefulness.

There is another caveat to the primary care approach. The quality and availability of primary care staff, especially in rural areas, varies widely. Resources at their disposal are limited and motivation for new initiatives is often low. The programme should not be designed to place additional burdens on the primary care service; instead, existing tasks, such as immunization and nutrition, which have important bearing on child mental health, should be strengthened as an objective. For training in specific child problems, staff should be selected who are relatively well equipped emotionally and mentally to deal such difficulties in children. Training of staff should have realistic goals. On the other hand, the community is generally motivated to invest in its children. In some cases, school children themselves are an important resource, being the only educated members of the society. The school mental health programme in Rawalpindi, designed to increase community awareness about mental health issues through teachers and school children, shows that such initiatives are welcome and can succeed.

Development of new services

Setting up new services is a matter that needs careful consideration. The blind application of Western models in developing countries can be counterproductive, and the need for a greater qualitative understanding of the meaning of disease and illness in a particular culture is crucial prior to introducing a service. For example, conduct disorders may be seen as disciplinary problems rather than as symptoms requiring medical attention. Similarly disorders of scholastic skills may not manifest themselves in non-literate communities. Many problems are managed effectively outside of the parameter of formal health care system. Even a small shift in the boundary between cases managed within the traditional care system and those cared for by health services could overwhelm the services, especially in developing countries, where such services are already under considerable financial and human resource pressure. On the other hand, exploring these systems and collaborating with them to achieve effective interventions can be a fruitful area of endeavour. It would be important for researchers close to the local culture to be involved in planning services, and research should focus on methods reinforcing existing protective and therapeutic factors within the community. It should also be noted that the scarcity of mental health professionals in developing countries has prevented the emergence of established sub-specialized professional groups; all manifestations of disturbed functioning of mind and brain generally tend to be dealt with by individuals with a special interest or training in some aspect of the above, drawn from a number of disciplines. Since these
professionals would be located mostly in urban areas, they could act as resource centers within the urban setting, with a referral system gradually extending to rural areas. In planning a comprehensive and cohesive child mental health service for developing countries, the term “child mental health” would include neurological disorders such as epilepsy, developmental disorders and mental retardation in addition to psychiatric disorders and disorders of scholastic skills. Child psychiatrists from developing countries will therefore need to function not only within a medical but within a public health model. It would be important to have collaborative networks between disciplines (e.g., psychiatry, clinical psychology, neurology and paediatrics) as well as departments (e.g., health, education and social welfare). The process could however result in difficult to resolve conflicts of interest for the various professional groups. This could, perhaps, be avoided to some extent by involving these groups in the planning phase. Not only could this allow a degree of goodwill amongst the groups, but also lead to useful cross-fertilization of ideas. It is important for interested Western researchers to be aware of the difference in the definition and scope of child mental health when applied to developing countries.

**Lack of research**

Lack of properly conducted research remains a problem in most developing countries, and Pakistan is no exception. Scarcity of funding is an important issue, and one where professionals in developed countries can collaborate usefully. as we shall discuss later. Even where research has been conducted, dissemination of research findings and their translation into policy development and service provision remains a big challenge. Scientific research is not without its skeptics. The more extreme critics may view it as a Western, neo-colonialist tool at loggerheads with traditional wisdom. More often, however, findings are not made available in an intelligible, interesting and relevant form for planners and professionals. The translation of academic jargon into understandable concepts should bean important function of all research, as should be efforts to ensure its widest possible dissemination. The challenge of establishing child mental health services in a developing country, although daunting, is also an opportunity to start with a clean slate, to avoid the mistakes others have made, and to try out innovative strategies. A broad framework within which a new service could be developed and evaluated is outlined below, it can be divided into three stages:

1. **Identification of priority problems**

This should begin with the study of demographic and sociocultural characteristics of the area. Morley has suggested four criteria for priority selection in developing countries: point prevalence rate, evidence of community concern, seriousness and susceptibility to management. These criteria can serve as useful benchmarks to prioritize the problems. It must, however, be kept in mind that it is difficult to conduct epidemiological studies in developing countries. Graham has identified problems in the areas of case definition, access to the population (high illiteracy rate, feudal system in rural areas, diversity of language) and development of suitable methods. These studies are also expensive to carry out. In our opinion the association between prevalence rates of mental disorders in a population and its needs for services is too complex and indirect to justify costly epidemiological surveys for the purposes of planning. On the other hand, it is clear that very little is known about the extent and duration of disability resulting from mental disorders, the burden these children place on their families, the community’s perceptions of the disorder, and the outcome. Epidemiological skills and resources would be better deployed in seeking this kind of information. Yach calls for an integration of qualitative and quantitative research and propagates innovative cost and time-effective methods to achieve this. A useful method that can help to achieve this objective is the key informant technique. The approach has been used in the WHO Collaborative Study on Strategies for Extending Mental Health Care to understand community reactions to mental disorders, study prevalence rates of Schizophrenia in Ireland and epilepsy in Kenya and health needs of a geriatric population in USA. The method has the advantage of being cost and time efficient, and it is increasingly becoming popular in health care
research. Questionnaires similar to those employed by Wig could be administered to a set of key informants in the community including school children, teachers, parents, local sources of care and guidance (Mosque Imams and faith healers), and providers of health care (lady health visitors, multi-purpose health workers and primary care physicians). The interviews would include questions related to the informants’ knowledge about major mental disorders in children, their causation, burden to the family and community, existing treatment and outcome. Culturally relevant vignettes based on the major categories of childhood mental disorders can be incorporated in the questionnaire to make the task of identification easier. The key informants could be asked to identify children in their community with such problems, and these, children could then be followed up for greater in depth study of their problems. The information obtained can be used to estimate the prevalence, concern and current knowledge and attitudes to cause and treatment. This information could then be considered alongside effective and feasible interventions to decide the priorities.

2. Development of interventions
In developing countries, it is increasingly recognized that indigenously’ sound approaches need to be used to implement diagnoses, understand factors affecting health service utilization and identify factors amenable to intervention, rather than relying on models used and tested in developed countries. Interventions should be selected where evidence suggests that they are likely to be acceptable, effective and available in Pakistan. Each intervention should have a clearly defined aim, type, and content along with an explicit measure of its success in achieving its aim. A limited number of feasible interventions should be chosen, though several complementary approaches may be chosen to address a particular problem. An example of a simple, cheap and acceptable treatment intervention producing measurable health gains is the clear vision project in rural areas of Rawalpindi, Pakistan. It has been shown that screening school children for refractory errors and provision of correcting spectacles significantly improves performance at Urdu, mathematics and reading, and improves mental health as measured by the Rutter Scale. Another example of treating children in a culturally appropriate way by designing new culture specific treatment is quoted by Minde and Nikapota, the so-called “ceunto therapy” developed by Constantino and colleagues for Peurto Rican and other Spanish speaking children. Traditional folk tales describing troublesome conflicts and suggesting approaches, which can modify unpleasant consequences, are read to young children and function as a stimulus to discuss ion and learning of coping strategies. It was shown that this therapy decreased anxiety in at risk young school children more than western-style therapy and no therapy and that the effect lasted for at least 12 months.

Another useful intervention that has already been mentioned is the participation of school children in programmes to improve the awareness and attitude of the community towards mental disorders. It must be kept in mind that if interventions such as improving awareness are likely to result in an increase in demand for primary health care facilities, then primary health care workers will need to be equipped with the skills, knowledge and resources to meet this demand. As mentioned above, they may lack resources or motivation to implement these interventions. At least initially, services should be directed at a very limited range of priority conditions and the aim should be to develop a few simple, effective, culturally acceptable and feasible interventions targeting these priority conditions, with an emphasis on those enabling the community to mobilize its own resources and exploring the possibilities of collaboration with traditional methods of care.

3. Evaluation of effectiveness
For the reasons outlined above, all interventions should have clearly demonstrable evidence of efficacy. The measures that will be used to assess the intervention should be piloted. The selection and development of process and impact indicators, as described by Nikapota in the evaluation of the child mental health and development programme in Sri Lanka, could form the basis for monitoring and evaluation of the service. These indicators include knowledge, attitudes and practice of children,
parents, teachers and primary care staff, or specific mental disorders, it could be appropriate to assess the effectiveness of the programme by studies of the identification of these disorders by children, their family, teachers, and primary care staff. Seeking pathways, the use of primary care, appropriate treatment by primary care staff and specialists, and outcome. Outcome could be measured using two approaches. Firstly by investigating the group of children with each of the priority disorder to compare their care and outcome in the areas with and without the service, and secondly, by comparing general outcome measures in the two areas such as school induction, drop-out, and use of primary care facilities by children.

The contribution of child psychiatrists from the developed world
A large number of Pakistani psychiatrists train in the West, especially the U.K. and USA. They may suffer from “reverse culture shock” on their return home, ill-equipped to deal with the problems for which they received no training. It would be important for training programmes in these countries to have components, which give the trainees opportunities to exercise the application of their knowledge and skills to their culture of origin. Opportunities should be provided to overseas doctors to meet and exchange ideas through special workshops and supervised research projects.

Research methodology is another area of weakness. Acceptance for publication in peer-review journals requires a great degree of methodological rigour. Much research in developing countries is a wasted effort because of methodological flaws. Collaborative projects where researchers can draw from the strengths of each other would help.

Even modest research, if it is to be of good quality, needs funding. Research funding has assumed the function of an exact science with its own jargon, methodology and procedures. Professionals in the developing countries inundated with clinical work may have little time, inclination, or experience to express their research ideas in the form of a feasible proposal. Library facilities are poor and computers few and far between. It becomes very difficult to access the work of others in this field. Technological assistance in methods to facilitate communication can be invaluable. For example information technology, the internet and teledicine could be used for training purposes, and also exchange of information.

Conclusion
More than four fifths of the world’s children live in circumstances not very different from those of Pakistan’s. These children are the future of a large part of our world. Everyone stands to gain if they grow up feeling confident and secure about themselves and others. It is therefore important that the mental health needs of these children are studied and effective, culturally appropriate services set up. These services should be subject to evaluation and the results widely disseminated to professionals and planners to try to influence policy development.

References