

Improving the quality of emergency care for children in developing countries

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The paper by Molyneux et al. in this issue of the *Bulletin* contains several valuable lessons for health professionals in developing countries.¹ Beyond the specific technical content, it shows how problems in health service delivery can be solved successfully through a systematic process of quality improvement: identifying a specific problem, addressing that problem through simple, low-cost, locally available and effective solutions, and evaluating the approach. Molyneux et al. improved emergency care for children by providing training in emergency care and triage and improving patient flow and collaboration between inpatient and outpatient services.

Emergency triage assessment and treatment (ETAT) was developed in Malawi, based upon and validated against the Advanced Paediatric Life Support course used as the standard training for paediatric emergencies in many developed countries. The ETAT course has been conducted as a 3½-day training course in several resource-poor countries, and trainer of trainer courses have been held in the Africa and South-East Asia Regions.² The ETAT course materials have been translated into several languages. Similar emergency care guidelines have been used in Brazil.³

Good quality emergency care can be the first step in improving hospital care for children, which is deficient in many countries.³⁻⁵ Experience is accumulating from resource-poor countries: the management of cases of severe malnutrition,⁶⁻⁸ pneumonia⁹ and neonatal care¹⁰ has been improved with better ward organization, clinical guidelines and staff participation.

Quality improvement as a strategy has been used by several projects. In

Nicaragua, the Russian Federation and South Africa, projects improving services for neonatal care have resulted in good outcomes ranging from immediate care of the newborn to a reduction in neonatal mortality. In Peru, a large-scale maternal and neonatal quality improvement project with self-identification of problems by the clinical teams, training, supervision and an accreditation system resulted in a range of improvements.¹¹ These included the availability of data on which to base clinical care, patient satisfaction, the availability of essential supplies, a participatory working approach and standardized care.

Quality improvement depends on showing a discrepancy between the existing situation and desired standards. In Brazil, a hospital assessment tool was initially developed and field-tested with involvement of local professionals and concurrent data collection, assessment and planning of identified improvements.¹¹ This tool was the prototype for subsequent hospital assessments in countries such as Cambodia, Indonesia, Kazakhstan, Kenya, Solomon Islands and Timor Leste, where the findings were the basis for initiating hospital improvement activities.^{4,12}

In Cambodia, the government set up a Quality Improvement Office and has been working with partners on quality improvement including improving hospital care for children. Hospital assessments were conducted in December 2003; based on the identified needs, quality improvement activities were initiated including management of severe malnutrition and development of ministry of health quality standards.^{7,13} Two quality improvement workshops were conducted, where progress was reviewed and quality improvement

methodology introduced. ETAT was introduced in March 2005 with a trainer of trainer course and a first provider course; since then, five courses were conducted in 2005 and other courses are planned in 2006. An ETAT follow-up visit to two provincial referral hospitals in December 2005 demonstrated that course participants had good retention of knowledge from the course and access to the necessary materials in the wards to practise their skills.

As highlighted by Molyneux et al. the key to improving hospital care for children is strong leadership, commitment and staff collaboration at all levels in hospitals. These elements must be fostered so that families are encouraged to bring sick children to hospital and to ensure the care they receive is appropriate. In this way inpatient mortality can be reduced as in Malawi and preventive interventions initiated while in hospital. Together with primary care interventions these steps can only lead to improvements in child survival. Primary care is crucial but very sick referred children must be managed appropriately.¹⁴

Quality care for children should be initiated at all levels from the community to the hospital. Scaling up should use the lessons learned from country experiences and aim to apply them on a national scale. In most countries there would be great benefit for the sustainability and coherence of these projects in developing a broader system perspective on strengthening quality for the country or for a district.¹⁵ Health-care workers will require capacity building in quality improvement techniques. These skills will improve job satisfaction and professional development. Lessons similar to that in Malawi should be documented to demonstrate success and inspire others to try out such approaches. ■

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