

The Integrated Management of Childhood Illness (IMCI) project was presented by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) in 1996 as the principal strategy to improve child health, especially in poor communities. IMCI addresses the comprehensive health and development needs of children under the age of 5 years in an integrated way and concentrates on the accurate identification and management, in outpatient and home settings, of the medical conditions that most frequently cause morbidity and mortality. It also focuses on preventive measures, immunisation, good nutrition and health promotion by improving the performance of health workers and community care practices, as well as the provision of careful counselling of caregivers and appropriate referral of seriously ill children. Recently IMCI has been expanded to include the care of newborn and young infants and children infected with HIV. The IMCI philosophy has also been used in the Integrated Management of Adult and Adolescent Illness (IMAI) project.

IMCI has been implemented in primary health care facilities in more than 100 countries and has improved the case management skills of first-level health professionals and the quality of services they provide.<sup>1</sup> The major challenge has been to scale up IMCI implementation to tackle the millions of preventable under-5 deaths that occur each year in poor countries and thereby reach the 4th Millennium Development Goal of reducing these deaths by two-thirds by 2015.

Introducing and implementing the IMCI strategy in both pre-service and continuing in-service training has often been problematic, preventing the large-scale coverage hoped for. Major obstacles in reaching a critical mass of trained health care workers include the cost of a model reliant on centralised, tutor-based training, a shortage of experienced trainers, an inadequate supply of training materials, poor follow-up support, and frequent attrition of trained staff. Attempts to address these deficits have included shortened IMCI courses and the use of Internet learning or interactive programmes such as the IMCI computerised adaptation and training tool (ICATT).<sup>2</sup>

A recent article on the poor performance of nurses following IMCI training in Bulawayo quoted a number of studies in Brazil, Tanzania, Uganda and South Africa that documented important gaps in the assessment and management of children by health workers trained in IMCI. Poor performance was thought to be related to inadequate health system support and supervision.<sup>3</sup> Attempts to reduce costs by relying on a train-the-trainer model for improving health care, rather than employing experienced teachers, have been disappointing,<sup>4</sup> while sending teams of teachers to provide on-site courses is often unsustainable, as illustrated by the demise of the Continuing Perinatal Education (COPE) programme in the former Cape Province.

Other practical difficulties of IMCI training in southern Africa include family responsibilities of participants, releasing essential staff for off-site training, salary, travel and accommodation costs, the questionable practice of offering 'per diem' payments, lack of appropriate drugs and equipment, reluctance to apply locally what has been learned at a centralised course, and rotating trained staff to other services. It is also essential that doctors at referral hospitals understand the syndromic approach to diagnosis and management used in IMCI.

At a technical consultation on IMCI training held in Geneva during November 2007, it was recommended that innovative approaches to a competency-based IMCI training package be sought with strengthened individual study, group learning, local clinical mentoring, limited facilitation by a regional trainer and ongoing evaluation and monitoring. This 'blended approach' to training would increase IMCI coverage and sustain a culture of continued learning within current funding and tutoring constraints. A key element will be suitable learning material which would enable large numbers of participants to take responsibility for acquiring most of the knowledge needed to understand the prevention, identification and management protocols. Emphasis should be placed on learning rather than teaching to develop confidence, competence and pride. Important principles of IMCI such as the chart book, recognition of danger signs, colour coding of risk categories, the assess-classify-treat format, communication with caregivers and the integrated approach will be retained. Material used for self-learning must be specifically designed to promote questioning, problem-solving and understanding and should not be presented in the standard textbook layout. It should be offered in a logical progression of 'knowledge bites'. This helps to engender a belief among participants that they can play an active role in their own learning process and not simply be 'empty minds' that have to be passively filled by a formal teacher. Finally, the course should be based on measurable core competencies. Learning at the place of employment, rather than at a distant site, will probably increase the chances that the knowledge and skills will be incorporated into daily practice.

The Perinatal Education Programme (PEP), which relies on local health workers managing their own continuing education courses and professional growth, uses a training model based on self-study and group learning with local mentors to assist with practising clinical skills.5 Using a question-and-answer format, all the important facts are presented in an easy-tolearn way. Participants encourage and support each other in study groups while learning most of the material on their own at a convenient time. No formal tutors are required, although regional facilitation within a structured programme is very helpful when available. Local champions with a commitment to continuing education are invaluable. The programme is based on the belief that health professionals can, with support and encouragement, manage their own training programmes. All the learning material is available free on an open website, making access easy.<sup>6</sup> A number of prospective studies have documented the effectiveness of this cheap method in improving knowledge, clinical skills, attitudes and the standard of care provided by nurses working in level I and II institutions.<sup>7-11</sup> The experience gained through the development and use of 9 PEP courses by 60 000 participants over the past

17 years will help craft a new approach to offering IMCI courses to the enormous number of health workers needed to implement the planned scale-up of health care for all in South Africa.

Within the next few months it is hoped to start field trials to assess an innovative model of IMCI in the Eastern Cape. The promise of enabling all primary care workers to access IMCI training within their own facilities, and without reliance on expensive tutoring at a centralised site, holds exciting challenges and could open the way to a new vision of self-help learning in under-resourced countries in Africa where child health care is largely dependent on adequate numbers of welltrained nurses and medical officers. With the commitment of all role players, an appropriate package to accelerate IMCI training could provide the key to resuscitating our child health care service.

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## **Childhood TB**

Childhood TB empowers health care workers to learn about the primary care of children with tuberculosis. The book's aim is to improve the care of children with TB in all communities, especially poor peri-urban and rural districts of southern Africa. It covers an introduction to TB infection, the clinical presentation, diagnosis, management and prevention of tuberculosis in children, and HIV/TB co-infection, and was developed by paediatricians with wide experience in the care of children with tuberculosis, under the auspices of the Desmond Tutu Tuberculosis Centre at Stellenbosch University.

Developed by the Desmond Tutu Tuberculosis Centre, editor Professor Dave Woods. Extent: 78 pages Retail price: R100 (incl. VAT) Binding: Paperback Last updated: 12 April 2010 Format: 240×170 mm ISBN: 9781920218461

