

A global action plan for the prevention and control of pneumonia

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An unintended consequence of the current focus on the control of HIV/AIDS, tuberculosis and malaria has been a relative neglect of other infectious diseases, such as pneumonia and diarrhoea, which still kill many children in the developing world.¹ Why has the control of pneumonia in young children been so neglected? Reasons that have been suggested include the nature of the target group (children in deprived communities), the multiple etiologies of pneumonia, lack of agreement among experts on the most appropriate intervention strategies and incorporation of case management of pneumonia into the Integrated Management of Childhood Illnesses (IMCI) strategy, which has reduced the disease's visibility.

Over the past few years, several attempts have been made to raise the profile of childhood pneumonia as a public health priority² but much more needs to be done. A recent step forward has been the establishment of the Global Action Plan for the Prevention and Control of Pneumonia (GAPP), which to date has held two formal meetings (March 2007 and February 2008), several informal discussions, and developed a draft action plan. This issue of the *Bulletin* contains a series of papers commissioned by GAPP, together with some other relevant papers.

The GAPP initiative is helping to advance the case for control of childhood pneumonia as a public health emergency; however, an enhanced, high-level, sustained advocacy campaign is needed if pneumonia in children is to receive the attention that it deserves from those who guide and fund international health. A successful advocacy programme requires a clear definition of the problem, identification of effective interventions to deal with it, a plan for implementing these interventions,

and an assessment of their likely costs and economic benefits. Until recently, there was insufficient information to mount such a campaign for childhood pneumonia, but a great deal of progress in this direction has recently been made, as evidenced in the papers in this issue of the *Bulletin*.

As reported by Rudan et al.,³ there are now reasonably accurate estimates of the annual number of episodes of pneumonia among children less than 5 years old (ca. 150 million) and of the annual number of pneumonia deaths (ca. 2 million), and two groups of effective interventions have been identified – vaccination and case management. Excellent progress has been made recently in increasing coverage with measles vaccination,⁴ and Madhi et al.⁵ report that there is now solid evidence to support widespread introduction of *Haemophilus influenzae* type b and pneumococcal conjugate vaccines in developing countries. These vaccines are safe; and DeStefano et al.⁶ report that the only possibly significant side-effect associated with pneumococcal conjugate vaccines has been an increase in the incidence of reactive airway disease shortly after vaccination. Other potentially effective ways of preventing pneumonia in young children include the promotion of exclusive breastfeeding during the first few months of life, zinc supplementation (Roth et al.)⁷ and a reduction in indoor air pollution (Dherani et al.).⁸ However, more research is needed on how the latter two interventions could be implemented most effectively before national scale-up can be recommended.

None of these preventive measures is likely to completely prevent childhood pneumonia so there is still a need for an effective case-management strategy. Treatment with antibiotics in the community reduces mortality and

morbidity from pneumonia⁹ but, as reported by Marsh et al.¹⁰ this approach has not been implemented widely because of concerns over the use of antibiotics by relatively untrained staff. To ensure that every child with severe pneumonia has rapid access to treatment with an effective antibiotic, treatment in the community by workers with limited training is necessary in many developing country situations (Källander et al.)¹¹ and is essential in ensuring equity in access to treatment (Mulholland et al.).¹² Community management programmes can be scaled up effectively, as reported for Nepal by Dawson et al.¹³ Community health workers are likely to be most effective in rural areas with scattered populations. In many urban areas in the developing world, treatment for pneumonia is frequently provided outside the formal health sector by practitioners with various levels of training. More could be done to improve the quality of the care that they provide, for example by training and franchising shop keepers. Care of children with pneumonia in health facilities also needs to be improved (Graham et al.)¹⁴ and requires the availability of oxygen (Enarson et al.).¹⁵

A strong and competitive case will be needed to persuade the major international donors to invest in the control of pneumonia in children at country and global levels. Drawing this up is now an urgent priority and will require a substantial amount of work by a dedicated team of qualified experts who will need appropriate financial support.

The papers presented in this issue of the *Bulletin* provide a good basis for starting this process.

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Available at: <http://www.who.int/bulletin/volumes/86/5/08-053348/en/index.html>

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doi:10.2471/BLT.08.053348

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