## US changes trade policy on essential medicines

## Gavin Yamey BMJ

Bill Clinton, the president of the United States, has promised that his government will change its trade policy to support greater access to essential medicines in the developing world.

At the World Trade Organisation ministerial meetings in Seattle, President Clinton said: "The United States will henceforward implement its healthcare and trade policies in a manner that ensures that people in the poorest countries won't have to go without the medicine they so desperately need."

The United States trade representative, Charlene Barshefsky, and the health and human services secretary, Donna Shalala, also announced a new cooperative arrangement in which public health officials will assess the health ramifications of US policy on intellectual property rights. These rights currently afford powerful patent protection to US pharmaceutical companies.

The policy change is important because the United States has previously prevented poor countries from adopting legal measures to produce their own cheap generic versions of patented drugs (4 December, p 1455).

While Mr Clinton's speech was welcomed by non-governmental health organisations, many remain suspicious of whether his promise will translate into action. James Love, the director of the Consumer Project on Technology, said: "If Clinton is to be taken seriously, we'll have to see something concrete. For example, the US could signal to Thailand that it can proceed with compulsory licences for ddI, an important HIV drug that was invented by the US government but sold at high prices by Bristol-Myers Squibb."

A coalition of health and legal professionals has called for the creation of a World Trade Organisation working group on access to medicines to review how patent protection of drugs may prevent their affordability to the developing world.



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Protesters march through the Seattle streets demonstrating against the World Trade Organisation

Daniel Berman, the coordinator of the Médecins Sans Frontières campaign on access to essential medicines, said: "Although this US policy change is an important first step, it is important that health concerns become more broadly integrat-

## ed into the WTO rules." $\Box$

An Open Letter to the WTO Member States, written by Médecins Sans Frontières, Health Action International and the Consumer Project on Technology, is available at www.msf.org.

## Zinc supplementation prevents diarrhoea and pneumonia

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Dietary zinc supplementation reduces the incidence of childhood pneumonia by 41% and the prevalence of diarrhoea by up to 25%, according to a systematic review of 10 randomised controlled trials all performed in the developing world (*Journal of Pediatrics* 1999;135:689-97).

This compares favourably with other preventive interventions for diarrhoea, such as sanitation and breast feeding, and is more effective than any other intervention to prevent pneumonia.

Zinc deficiency is common in young children in the developing world and is associated with reduced immunocompetence and increased rates of serious infectious diseases. Several trials in poor countries have shown the benefit of zinc supplementation in reducing infection (*BMJ* 1998;317:369), but these have varied in the magnitude of the effect and the presence of a differential effect by age and sex. Some trials were underpowered to detect the effects on infrequent outcomes, and others remain unpublished.

A pooled analysis was conducted by the Child Health Research Project, a group of researchers from Johns Hopkins School of Public Health and the World Health Organisation, who had access to the original trial data. Trials were included if they provided oral supplements containing at least half the US recommended daily allowance of zinc for children, and if morbidity surveillance was carried out for at least four weeks. Two sets of trials were identified-those in which zinc was given continuously, and those giving only a short course.

For the zinc supplemented

children in the seven continuous trials, the pooled odds ratios for diarrhoeal incidence and prevalence were 0.82 (95% CI 0.72 to 0.93) and 0.75 (0.63 to 0.88) respectively. Supplemented children had an odds ratio of 0.59 (0.41 to 0.83) for incidence of pneumonia.

No significant variations in the effects were seen in the subgroups of children stratified by age, sex, and weight, and nor was there a significant difference between short course and long term supplementation.

The authors conclude that "the development of effective and feasible interventions to improve the zinc status of developing country populations is essential." One such intervention, zinc fortification of bread, was shown in a randomised controlled trial to reduce diarrhoea, respiratory illnesses, and skin infections in Turkish schoolchildren (*Cereal Chemistry* 1995;73:424-6).

Dr Robert Black, of Johns Hopkins School of Public Health and co-author of the study, said: "Zinc fortification is potentially a powerful tool for settings which produce commercial food, and the idea has been acceptable to food manufacturers. If there's no commercial food, increasing zinc intake is possible by reducing the amount of dietary phytates, which interfere with zinc absorption. This can be done by soaking or fermenting food. Long term, it is possible that plant breeding could be used to increase zinc or reduce phytate content."

But several questions still remain before zinc therapy can be incorporated into diarrhoeal disease control programmes, including the optimal dosing regime and duration of therapy. Dr Shammim Qazi, from the Division of Child Health and Development of the World Health Organisation, said: "At present the WHO is not recommending zinc supplementation as routine. We are waiting for the results of larger trials, and we are planning a trial ourselves." □

The Child Health Research Project's Special Report, *Zinc for Child Health*, is at http://ih.jhsph.edu/chr/publicat.htm