

# Towards Rational Use of Drugs in The Management of Diarrhoea in Children

World Health Organization  
*Programme for*  
Control of Diarrhoeal Diseases

The availability of a multitude of "antidiarrhoeal" drugs throughout the world is one of the factors contributing to the widespread inappropriate use of drugs for diarrhoeal diseases, and therefore a cause of considerable concern to the WHO Programme for the Control of Diarrhoeal Diseases (CDD).

In 1986, in an initial effort to address this problem, the Programme issued a policy document which emphasized that the cornerstone of correct case management of diarrhoea is oral rehydration therapy, and that selected antibiotics and antiparasitic agents should be used only in cases of dysentery, amoebiasis, giardiasis and suspected cases of cholera, according to clearly defined diagnostic criteria (see box).

Although a few countries deregistered antidiarrhoeal drugs in the 1980s, the vast majority continued to register these products, in both solid and liquid formulations. In 1989, in order to provide a strong scientific basis for intensified activities to promote the rational use of drugs, the CDD Programme enlisted the collaboration of experts from all over the world to review the world literature on the efficacy and safety of the most commonly used antidiarrhoeal drugs. The results were published by WHO in late 1990 under the title "The rational use of drugs in the management of acute diarrhoea in children".<sup>1</sup> The drugs reviewed were: diphenoxylate hydrochloride, loperamide, streptomycin, neomycin, hydroxyquinolines, nonabsorbable sulfonamides, kaolin and pectin, activated charcoal, attapulgit, and smectite. Since publication, the review has been widely distributed to health policy-makers, drug manufacturers, health professionals, trainers and educators of medical students, nurses, pharmacists and other health workers. Major medical journals have published book reviews, and encouraging comments have been received from professionals worldwide.

Between 1990 and 1992 several countries took action to deregister antidiarrhoeal drugs. The regulatory actions reported to WHO are summarized in the table. All but one of the countries that took action deregistered at least the paediatric formulations of loperamide, and several also deregistered other antidiarrhoeal agents. Since deregistration is a difficult process, which can often only be accomplished after the registration cycle of a product (often several years) has ended, this can be considered encouraging progress. More regulatory actions against antidiarrhoeal products are expected in the future, along with educational activities to improve the rational use of drugs.

By the end of 1992, guidelines will be available from the WHO CDD Programme to assist national CDD programme managers in selecting and planning country activities to promote the rational use of drugs in the management of acute diarrhoea in children.

### USE OF DRUGS FOR CHILDREN WITH DIARRHOEA

- ANTIBIOTICS should ONLY be used for dysentery and suspected cholera. Otherwise, they are ineffective and should NOT be given.
- ANTIPARASITIC drugs should ONLY be used for:
  - Amoebiasis, after antibiotic treatment of bloody diarrhoea for *Shigella* has failed or trophozoites of *E. histolytica* containing red blood cells are seen in the faeces.
  - Giardiasis, when diarrhoea has lasted at least 14 days and cysts or trophozoites of *Giardia* are seen in faeces or small bowel fluid.
- ANTIDIARRHOEAL DRUGS and ANTIEMETICS should NEVER be used. None has proven practical value. Some are dangerous.

### Regulatory Actions Against Antidiarrhoeal Drugs for Use in Children

As reported to the World Health Organization Programme for the Control of Diarrhoeal Diseases from January 1990 to July 1992

Country	Drugs affected	Action	Date
France	Brand-name paediatric products containing loperamide	Restriction on use in children	August 1991
India	Kaolin/pectin in combination with any other drug	Banned	February 1991
Indonesia	Paediatric formulations of loperamide	Banned	November 1990
	94 brand-name antidiarrhoeal products containing antibiotic mixtures, hydroxyquinolines, nonabsorbable sulfonamides, and other substances	Deregistration of solid and liquid formulations	October 1991
Lebanon	All products containing loperamide, diphenoxylate, diphenoxine and furazolidone. All liquid forms of streptomycin	Restriction on use in children, deregistration and banning of products	August 1991
Libyan Arab Jamahiriya	10 brand-name antidiarrhoeal products, which include substances like antimotility drugs, antimicrobials and adsorbents	Use in children banned	May 1990
Mexico	5 brand-name paediatric products containing loperamide and diphenoxylate	Deregistered	December 1990

<b>Nepal</b>	Large group of single component or combination products which include substances like hydroxy-quinolines, nonabsorbable sulfonamides, diphenoxylate, loperamide, antispasmodics, inappropriate oral rehydration solutions, and other anti-diarrhoeal products	Banned	March 1991
<b>Pakistan</b>	Paediatric formulations of loperamide, diphenoxylate, and pipenzolate	Banned and deregistered	June 1990
<b>Peru</b>	All paediatric products containing loperamide and phthalylsulfathiazole	Deregistered	May and October 1990
<b>Philippines</b>	Paediatric formulations of loperamide and diphenoxylate	Deregistered	September 1991
<b>Republic of Korea</b>	Loperamide	Restriction on use in children	May 1991
<b>Sri Lanka</b>	Paediatric products containing loperamide, mixtures containing kaolin and/or pectin	Banned	November 1990
<b>Thailand</b>	Paediatric products containing loperamide and diphenoxylate	Banned	February / March 1992
<b>Turkey</b>	Paediatric formulations of loperamide	Banned	September 1991

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