Pan American Health Organization
Regional Office of the World Health Organization

Leprosy in Ecuador, 2006

PAHO/HDM/CD/420/06
Original: Spanish

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Background

In Ecuador, leprosy control can be divided into two stages: before and after multidrug therapy (MDT). Before MDT, the disease was considered incurable and mutilating; patients were kept apart from others and isolated in leper colonies, repelled by both society and medical staff, thus resulting in their being transferred to remote places. After MDT, the panorama changed. Today leprosy is curable and, if detected on time, does not produce disability. Treatment for leprosy works, curing lesions and preventing disabilities, and thus making it possible for patients resume their normal activities.

Leprosy prevalence was high in the country during the 1980s. With MDT, prevalence rate began to decline, to the point that the disease was considered to be eliminated as a public-health problem at national level by 1991, as certified by PAHO/WHO. This made Ecuador the first country in Latin America to reach the goal of leprosy elimination.

Once the elimination objective was reached at national level, however, surveillance and control activities started to slack off in all areas of care, due to different factors, e.g. lack of interest and political support. In the provinces, this pathology has not been given the importance it merits in that it can coexist alongside other highly prevalent diseases of epidemiological impact. Once the national program reduced the number of patients at national level, international assistance ceased to play a role in central-level coordination, which is the backbone for the epidemiological control of those pathologies subject to compulsory notification.

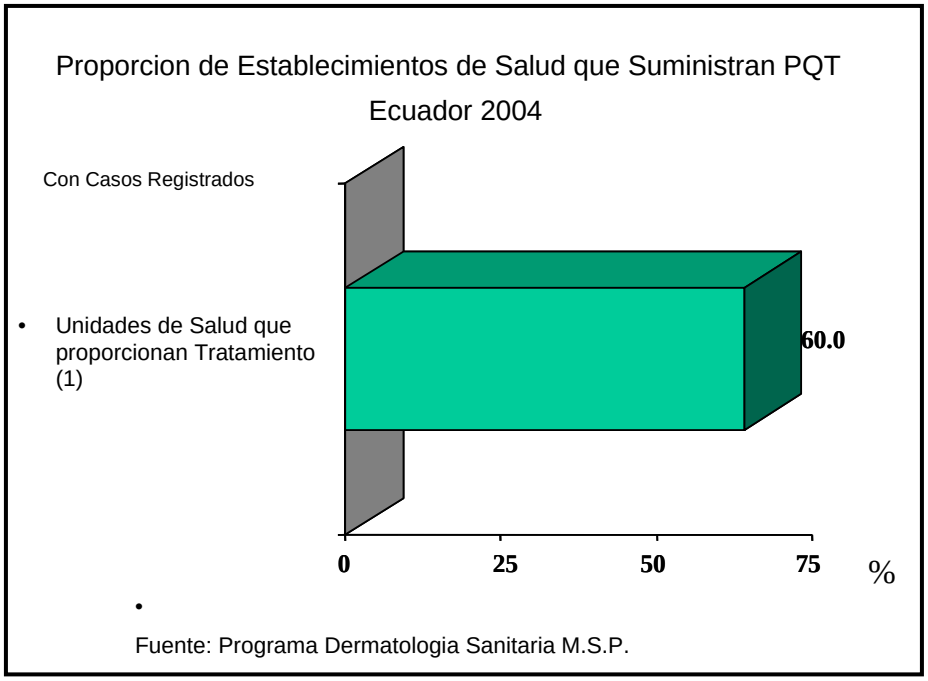
Given this background, it has become necessary in Ecuador to formulate new strategies and initiate new activities supported by international organizations in the area of social assistance and aimed at supporting leprosy elimination at the grassroots level, training health workers of endemic areas, and promoting community participation for epidemiological case-finding in order to tackle ‘hidden prevalence’ resulting from epidemiological or operational silence.

Current Situation

In general, at the local level, coverage can be considered insufficient due to the lack of decentralization and adequately trained human resources, which can result in some new cases not being detected or in their only being diagnosed at a late stage and thus promotes maintenance of transmission in endemic areas. Added to the deficit in economic development, this means that patients have to travel long distances for diagnosis and treatment.

Considering that the Provincial Departments of Epidemiology act as health units for the administration of MDT, it is observed that only 60% of existing health units in at-risk areas offer this service due to the lack of decentralization brought about by a concurring lack of political support.

Given the existence of a health infrastructure, decentralizing leprosy activities to a far greater number of health units might be considered feasible, as long as there is the necessary political support, advisory services, and economic resources to enable considerably increasing coverage and, accordingly, the number of facilities so that patients can receive treatment closer to home. Furthermore, having a greater number of health units involved in leprosy control would considerably diminish the number of undiagnosed patients whose illness is not detected on time.



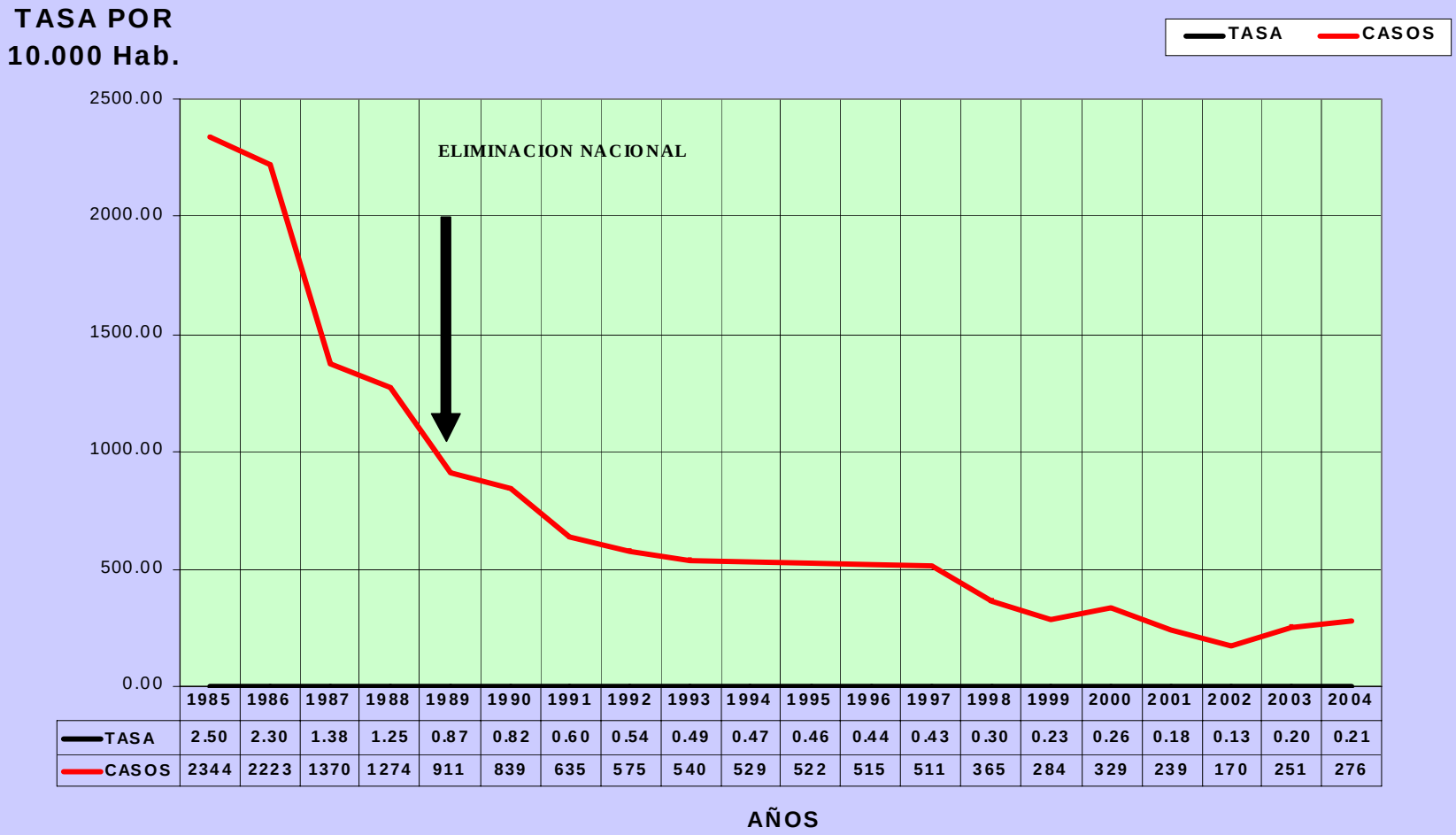
It is clear that the country needs to internalize the idea that it is indeed possible to carry out leprosy activities at the local health units, integrated into basic health activities; it needs to raise the level of awareness of the managers and staff in these units in what is necessary and what is feasible.

Leprosy Prevalence

In Ecuador, 2,332 patients were registered in 1983, with a prevalence rate of 2.7 per 10,000 inhabitants; by 1989, the number of cases declined to 911, with a prevalence rate of 0.9—thus reaching the PAHO/WHO threshold for elimination of leprosy as a public-health problem. By 1997, there was an even greater decline in the number of recorded cases, due to cleaner statistics in provincial facilities, the discharge of patients upon completion of their treatment regimen, and the elimination of registry duplications and clinical histories of deceased patients, along with cases erroneously diagnosed as leprosy. Thus, in 2004, only 276 cases were reported, corresponding to a prevalence rate of 0.21 per 10,000 inhabitants.

PREVALENCIA DE LEPRA

ECUADOR 1985 - 2004

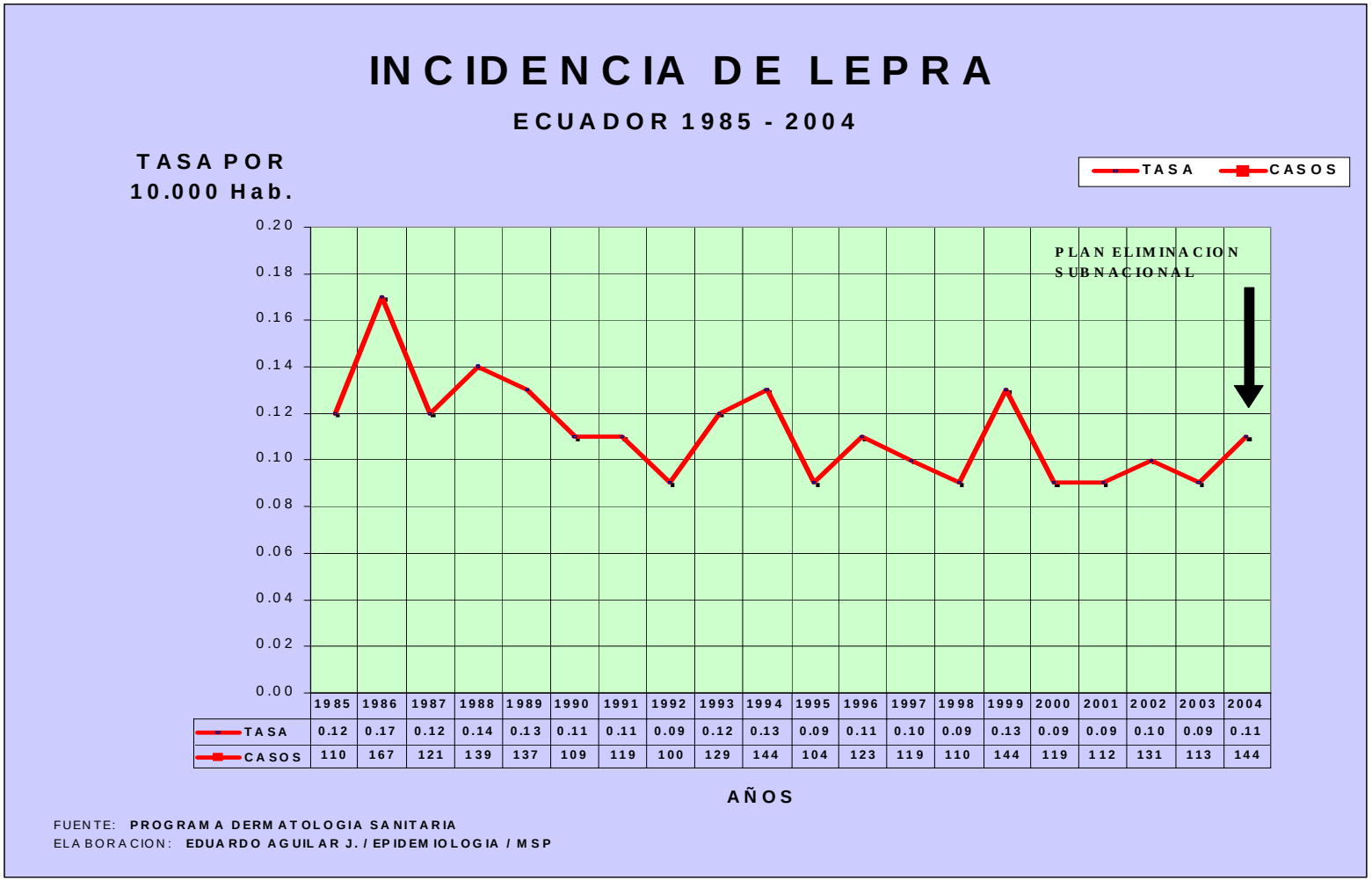


	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
TASA	2.50	2.30	1.38	1.25	0.87	0.82	0.60	0.54	0.49	0.47	0.46	0.44	0.43	0.30	0.23	0.26	0.18	0.13	0.20	0.21
CASOS	2344	2223	1370	1274	911	839	635	575	540	529	522	515	511	365	284	329	239	170	251	276

FUENTE: **PROGRAMA DERMATOLOGIA SANITARIA**
ELABORACION: **EDUARDO AGUILAR J. / EPIDEMIOLOGIA / MSP**

Detection Rate

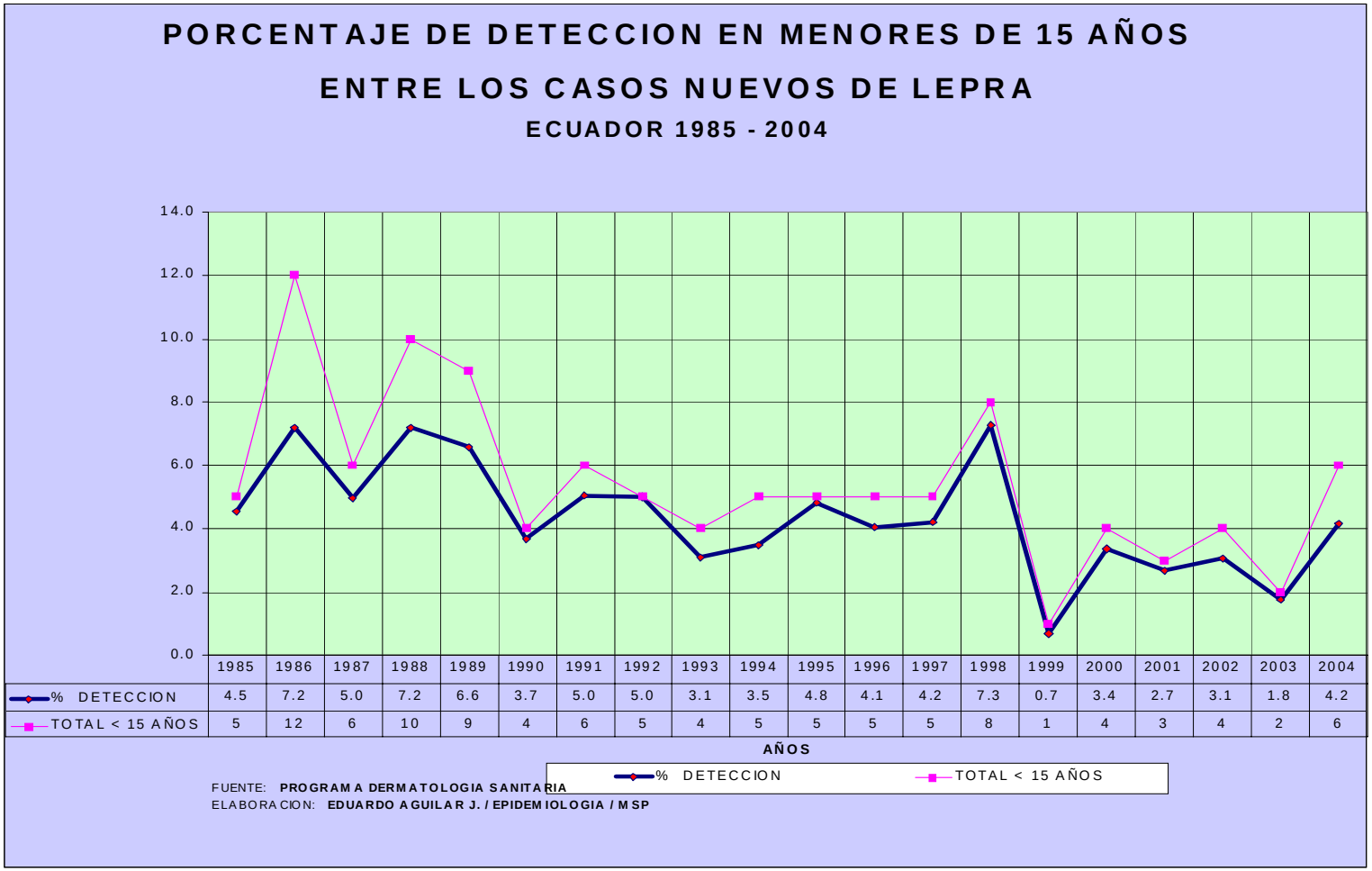
Leprosy incidence, on the other hand, has shows hardly any variation at all, with the number of patients remaining about the same. In 2003, 144 cases were recording, with an incidence rate of 0.11 per 10,000 inhabitants. This trend is similar to that shown by the other 32 leprosy-endemic countries.



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
TASA	0.12	0.17	0.12	0.14	0.13	0.11	0.11	0.09	0.12	0.13	0.09	0.11	0.10	0.09	0.13	0.09	0.09	0.10	0.09	0.11
CASOS	110	167	121	139	137	109	119	100	129	144	104	123	119	110	144	119	112	131	113	144

Percentage of Detection in Children under 15

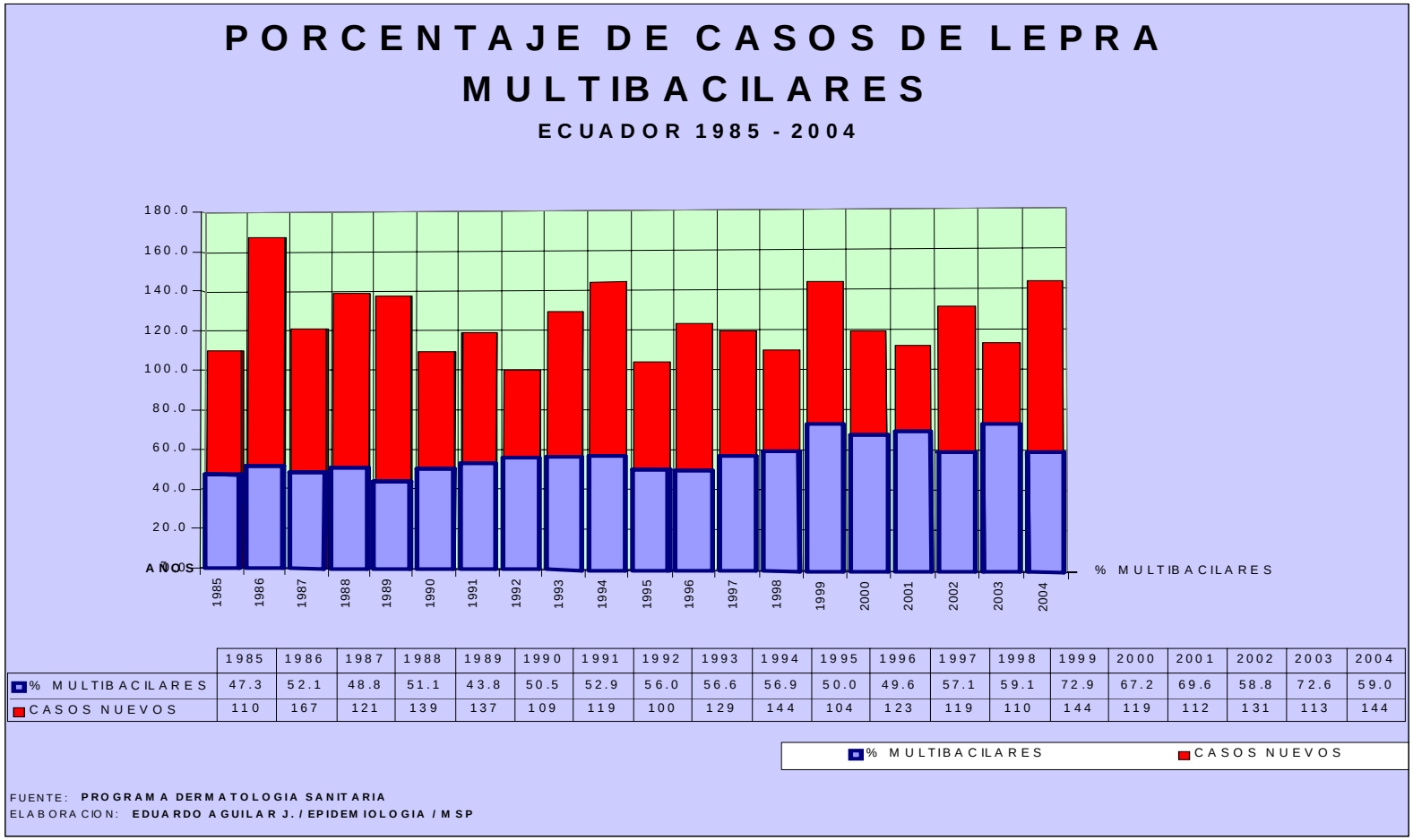
With regard to age, prevalence is highest among those over 15 years of age; the average registered percentage for children under 15 remained at 4% over eight years. In 1998, the percentage of children under 15 increased, since in the province of Guayas—the one with the greatest number of leprosy cases in the country—a dermatological survey was conducted in areas of high prevalence. This meant that new cases of the disease were detected among patients under 15. In 2004, six patients under 15 were reported in the province of Guayas y Santo Domingo en Pichincha.



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
% DETECCION	4.5	7.2	5.0	7.2	6.6	3.7	5.0	5.0	3.1	3.5	4.8	4.1	4.2	7.3	0.7	3.4	2.7	3.1	1.8	4.2
TOTAL < 15 AÑOS	5	12	6	10	9	4	6	5	4	5	5	5	5	8	1	4	3	4	2	6

Percentage of Multibacillary Leprosy Cases

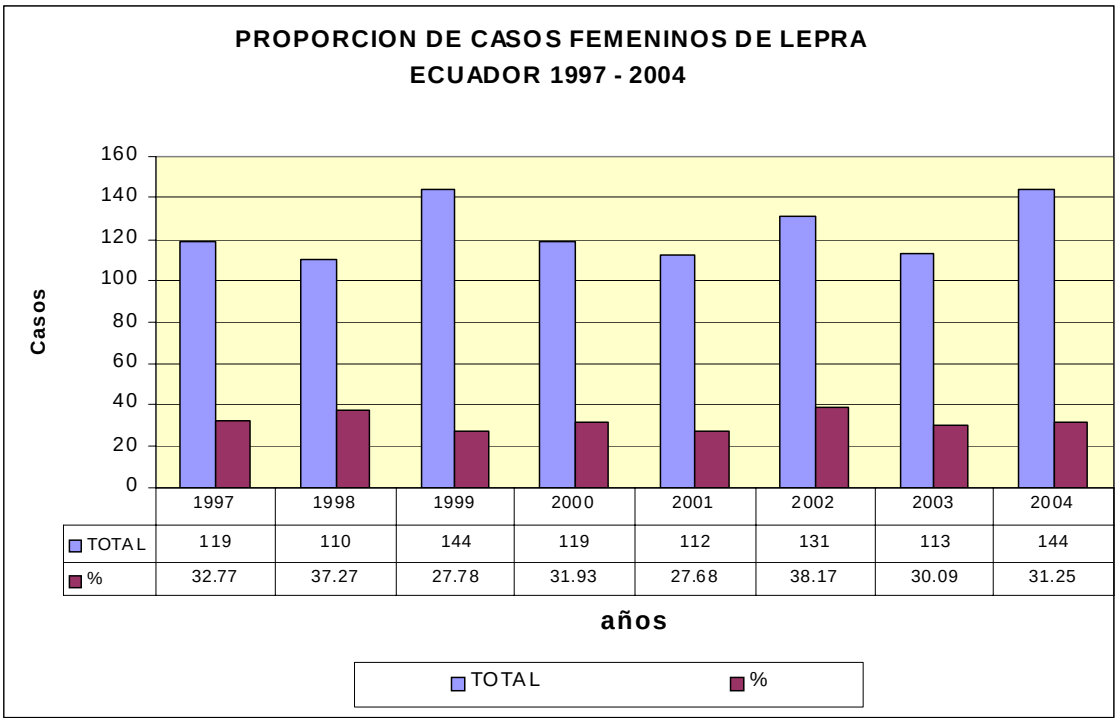
With regard to the various clinical forms, the percentages for multibacillary (MB) leprosy have been increasing. MB prevalence is used as an indicator of leprosy control in endemic areas: if MB is the predominant form in a given area, prevalence will be declining and disease dissemination will be smaller. On the other hand, if there is a greater proportion of paucibacillary leprosy (BP), prevalence will be increasing, thus bring about greater expansion of the disease.



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
% MULTIBACILARES	47.3	52.1	48.8	51.1	43.8	50.5	52.9	56.0	56.6	56.9	50.0	49.6	57.1	59.1	72.9	67.2	69.6	58.8	72.6	59.0
CASOS NUEVOS	110	167	121	139	137	109	119	100	129	144	104	123	119	110	144	119	112	131	113	144

Proportion of Leprosy Cases in Women

With regard to gender, multibacillary cases especially predominate among men and paucibacillary cases are more frequent among women.

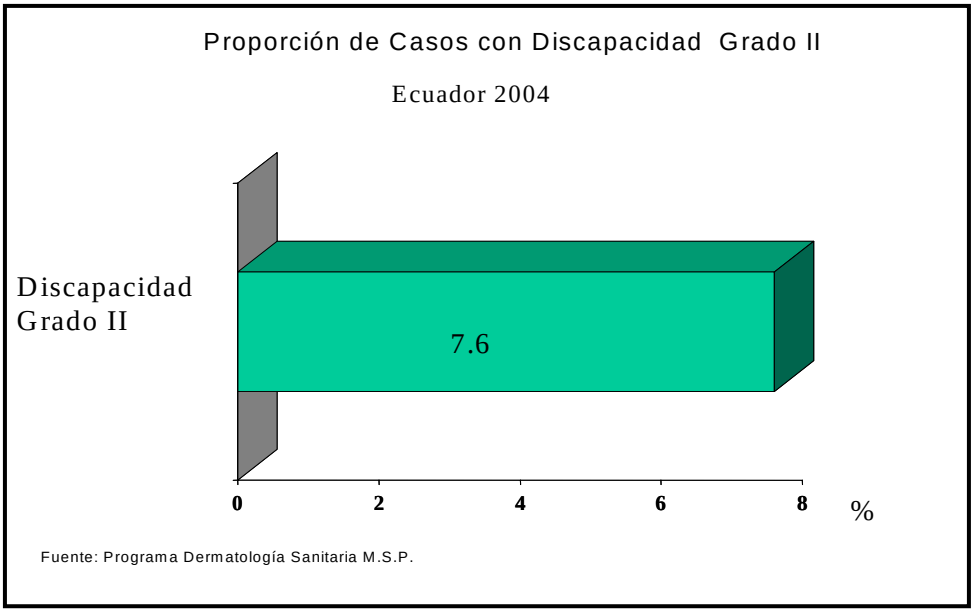


	1997	1998	1999	2000	2001	2002	2003	2004
TOTAL	119	110	144	119	112	131	113	144
%	32.77	37.27	27.78	31.93	27.68	38.17	30.09	31.25

Characteristics of New Cases

The proportion of new cases with Grade 2 Disability 2 is 7.6%, which demonstrates late diagnosis among a certain number of patients and indicates the possibility of a significant level of hidden prevalence.

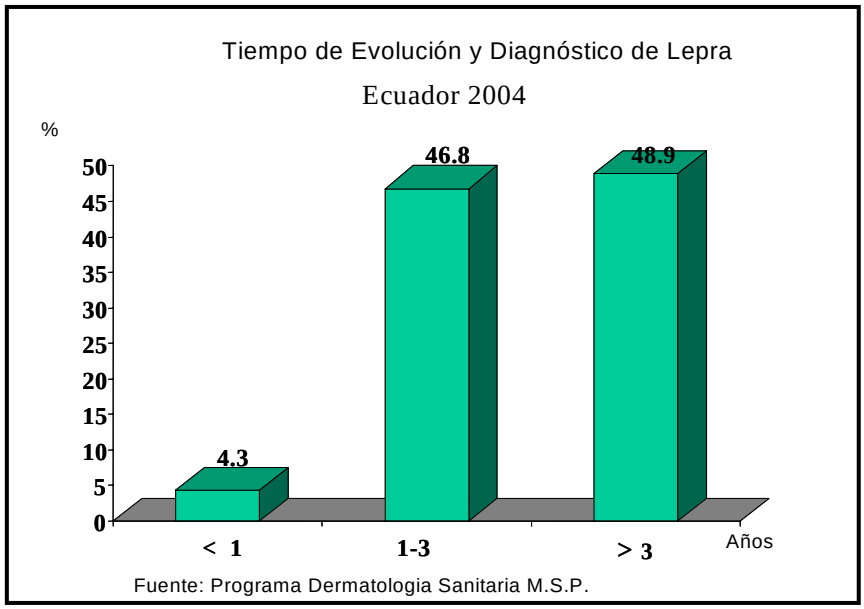
In 2004, there was diagnosis at the single-lesion stage, which could indicate that diagnosis was not carried out at an early stage and that MB forms are more prevalent—a situation matching up with what the patients themselves have to say.



Evolution Time

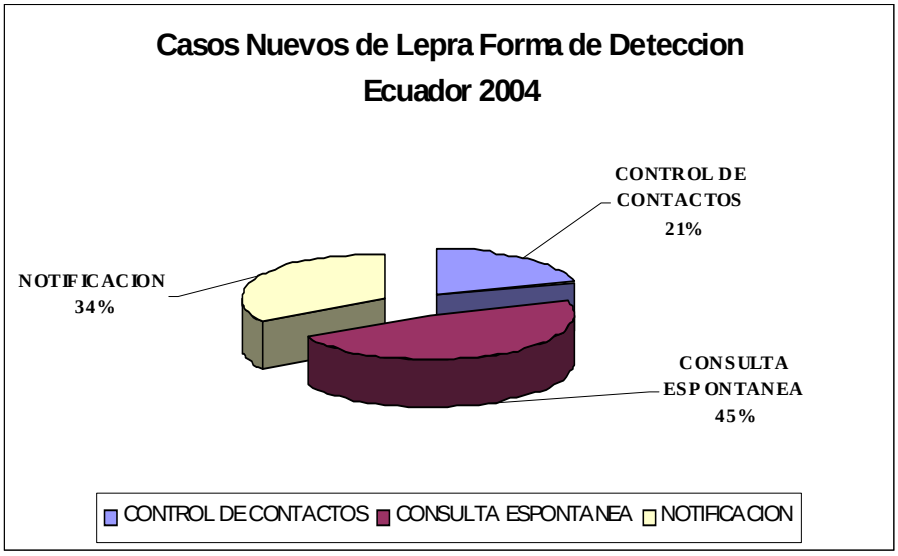
The time between onset of symptoms and diagnosis was less than a year in 4.3% of the patients interviewed; 46.8% was diagnosed between 1 and 3 years, and 48.9% over a period greater than 3 years.

These data on late diagnosis could be related to the limited coverage of leprosy activities at the local level, but it is also a factor that favors disease transmission in the community.



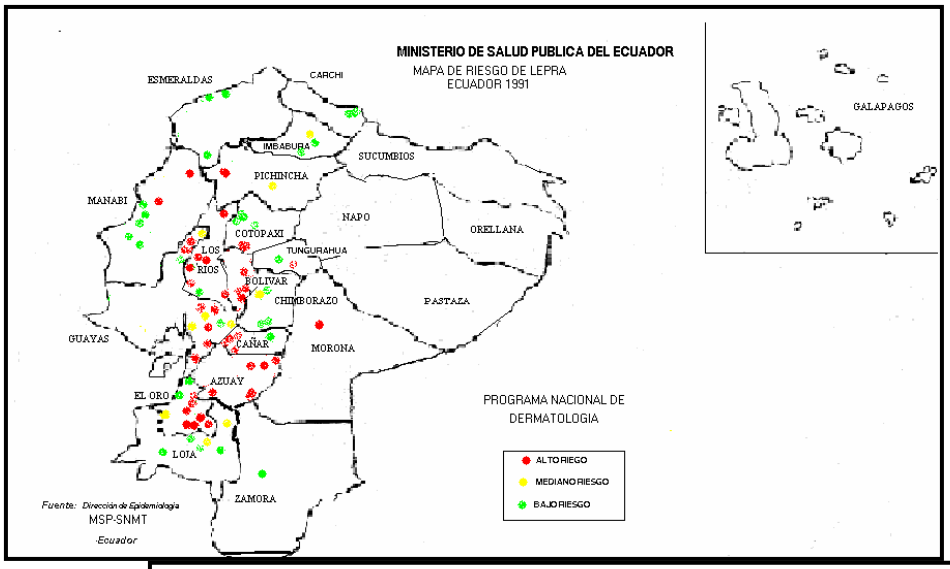
Detection of New Leprosy Cases

The main way in which new leprosy cases are detected is through reporting and spontaneous consultation, at 79%. Case-finding by contact control is only carried out in a limited way.



Stratification of Leprosy Cases

From the start of leprosy-control activities in Ecuador, prevalence has been gradually diminishing, having been targeted over time by the National Program. In accordance with risk maps, leprosy was still present throughout the national territory in 1991. By 2001, control activities were being aimed at the subtropical and tropical regions, especially the provinces of Los Ríos, Guayas, El Oro, and Loja, until by 2004 it was limited to 46 areas, the majority located in the provinces mentioned. Control tasks in these areas should be strengthened in coming years if success is to be achieved in diminishing the burden of disease and interrupting transmission.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MANABI
NAPO
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COTOPAXI
TUNGURAHUA
LOS RIOS
BOLIVAR
CHIMBORAZO
PASTAZA
GUAYAS
CAÑAR
MORONA
AZUAY
EL ORO
LOJA
ZAMORA
GALAPAGOS
PROGRAMA NACIONAL DE DERMATOLOGIA
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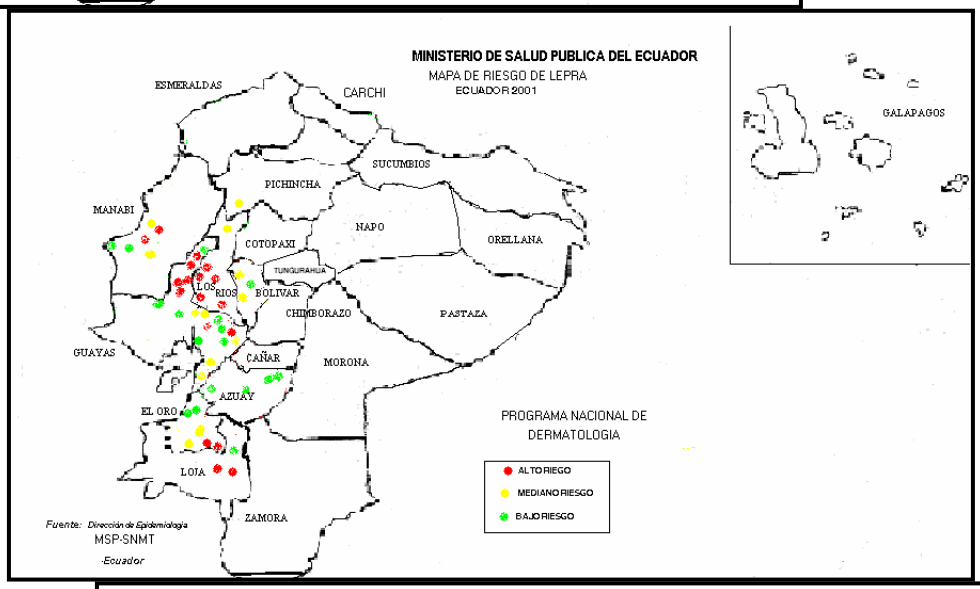
MEDIANO RIESGO
BAJO RIESGO
Fuente: Dirección de Epidemiología
MSP-SNMT
Ecuador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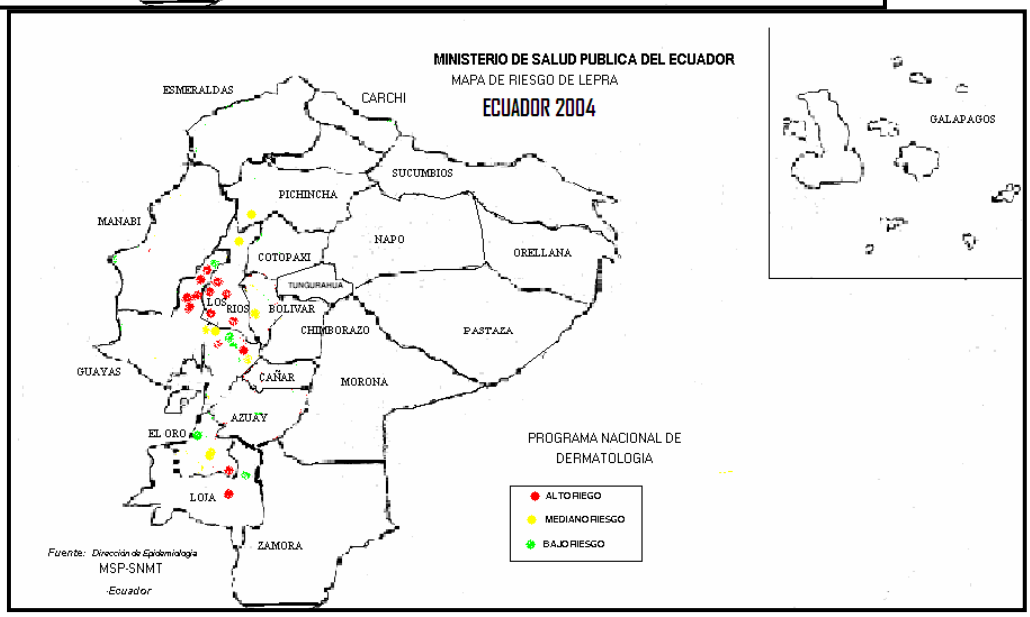
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