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REPORT ON LEPROSY ELIMINATION MONITORING IN SRI LANKA

24 July to 6 August 2005

WHO Project: ICP CPC 600

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A leprosy elimination monitoring (LEM) exercise was carried out in Sri Lanka at the request of the Ministry of Health. The exercise was guided and led by Dr Jalal Uddin Ahmed, WHO Short-term Professional and Dr Kyaw Myint, WHO Short-term Consultant. Their contribution in collecting data and the cooperation of the Director-Anti Leprosy Campaign and his staff is gratefully acknowledged.

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1. INTRODUCTION

Sri Lanka is an island country with a land area of 61 705 sq. km.

The estimated population in 2004 was 19.1 million, with an annual growth rate of 1.1%.

Some Basic Population Parameters and Vital Statistics:

Population density per/square km	301 (2003)
IMR (per 1 000 live births)	12.2 (2001)
MMR (per 10 000 live births)	2.3 (1996)
Life expectancy (years)	Male 70.7, Female 75.4
Literacy rate	90.1% (excluding Northern and Eastern provinces)

Source: Registrar General's Department, Annual Health Bulletin 2001, Ministry of Health.

Organization of Health Services

In Sri Lanka, both the public and private sectors provide health care; the public sector provides health care for nearly 60% of the population. The Department of Health Services and provincial health sector encompass the entire range of preventive, curative, promotive and rehabilitative health care services. The private sector provides mainly curative care, which is estimated to be nearly 50% of the out-patient care of the population and is largely concentrated in the urban areas.

National Health Policy

The broad aim of the national health policy is to increase life expectancy at birth and to improve the quality of life. This is to be achieved by controlling preventable diseases and by health promotion activities. However, the concern of the government is to address health problems like inequities in provision of health services, care of the elderly and the disabled. Noncommunicable diseases, accidents, suicides, substance abuse, malnutrition and HIV/AIDS are also emerging problems.

Health Administration

With the implementation of the Provincial Councils Act in 1989, the health services were developed, resulting in the Ministry of Health at the national level and separate Provincial Ministries of Health in the eight provinces.

The Central Ministry of Health is primarily responsible for policy guidelines, medical and paramedical education, management of teaching and specialized medical institutions and public procurement. The eight Provincial Directors of Health Services (PDHS) are totally responsible for the management and effective implementation of health services and/or programmes in the respective provinces.

Health Facilities

There is a network of curative care institutions ranging from sophisticated teaching hospitals with specialized consultative services to small central dispensaries which provide only out-patient services. The distinction between hospitals is basically made on the size and range of facilities provided. There are three levels of curative care institutions. However, patients can seek care in a medical institution of their choice.

- The central dispensaries (CD), maternity homes, rural hospitals (RH), peripheral units (PU) and district hospitals (DH) are primary health care institutions.
- The Base and Provincial (General) Hospitals (BH&GH) are secondary care institutions.
- The teaching and specialized hospitals are tertiary care institutions.

As of December 2001, there were 15 teaching hospitals (TH), six provincial hospitals, 36 base hospitals (BH&GH), 157 district hospitals, 93 peripheral units (PU), 171 rural hospitals (RH), 71 central dispensaries and maternity homes; 265 health units (MOH Office) headed by Medical Officers of Health, providing preventive services throughout the country.

Since integration of leprosy services into the general health services, in 2001, all health institutions are provided with trained workforce and adequate MDT supply to treat leprosy cases.

History of leprosy in Sri Lanka from segregation to integration

The history of leprosy in Sri Lanka goes back to Dutch colonial times with segregation of affected persons in the leprosy asylum at Hendala in 1708. For almost three centuries, segregation of patients in two hospitals, one at Hendala and the other at Mantivu island, Batticaloa, was the main mode of control of leprosy.

The introduction and expansion of MDT in 1982 and launching of a social marketing campaign (SMC) in 1990 (awareness campaign to educate the general public about early signs of leprosy and to dispel misconceptions surrounding the disease) are two important activities that contributed to Sri Lanka achieving the elimination target set by WHO in 1995, the second country in the SEA Region to achieve this goal (the first being Thailand).

Since 2001, leprosy services have been completely integrated into the general health services to reach the final objective of achieving the elimination at sub-national level and to further reduce the burden of leprosy.

Land Marks in elimination of leprosy in Sri Lanka

- Strict segregation (1708-1930)
- Evolution of field activities (1931-1970), introduction and continuation of Dapsone monotherapy
- Strengthening of field activities and introduction of MDT with 100% patient and geographical coverage (1971-1990)
- Community involvement in the Social Marketing Campaign for elimination of leprosy as a public health problem (1990)
- Elimination achieved at national level (1995)
- Integration of leprosy elimination activities into general health services (2001)

Current Status

As of now, all health facilities in the country are provided with manpower trained in leprosy and with adequate supplies of MDT.

- Prevalence rate of 0.7 per 10 000 population (2004);
- New case detection rate of 9.9 per 100 000 population (2004);
- Disability grade-2 rate among newly detected cases 6.8% (2004);
- Child rate (<15 yrs) among newly detected cases 10.5% (2004);
- Proportion of MB cases among newly detected cases 41% (2004);
- Number of provinces that have achieved elimination 6/8 (2004), and
- Number of districts that have achieved elimination 20/25 (2004).

2. JUSTIFICATION FOR THE STUDY

MDT is recognized as a major technological improvement in leprosy control. Its impact on disease prevalence led to the concept of eliminating leprosy as a public health problem.

The government of Sri Lanka launched the MDT-based leprosy control programme in 1982 and achieved WHO-defined elimination at the national level in 1995 which has been sustained. However, Sri Lanka has been reporting about 1500 to 2000 new cases every year. Five districts in two provinces have a prevalence of more than one case per 10 000 population (2004).

In order to get a clear picture of the leprosy situation in the country, a leprosy elimination monitoring (LEM) exercise was planned as an additional tool for assessing progress.

LEM was conducted through the use of standardized and tested procedures for collection of direct and indirect indicators, standardization according to age, sex and cohort analysis. The results of LEM would give valuable information to the programme manager and health planners in order to improve planning and implementation of the leprosy programme, including supply of MDT at all levels.

In addition, LEM is expected to assist the decision makers and programme managers in assessing progress towards the elimination of leprosy at the most peripheral levels.

3. OBJECTIVES OF LEM

The overall objective of the exercise is to assist decision makers and programme managers to assess the progress towards leprosy elimination.

The specific objectives are:

- To assess NLEP activities on specified elimination indicators;
- To assess the progress of integration of leprosy control activities with the general health care system on specified key indicators;
- To assess the quality of MDT services provided at field level;
- To assess the awareness about leprosy on specified indicators, and
- To identify potential issues of programme implementation and make practical recommendations for solution.

4. MAIN STEPS OF THE STUDY

Sri Lanka achieved the leprosy elimination goal at national level at the end of 1995. The National Leprosy Control Programme decided to conduct a leprosy elimination monitoring exercise to assess the elimination status and to monitor the qualities of MDT services after integration with the general health services. Accordingly, a request was made to WHO/SEARO through the WHO Representative to Sri Lanka, for support towards conducting the LEM in Sri Lanka.

WHO recruited Dr Kyaw Myint, Deputy Director, National Leprosy Control Programme, Ministry of Health, Yangon, Myanmar and Dr Jalal Uddin Ahmed, former National Programme Manager, Leprosy in Bangladesh to conduct the LEM exercise in collaboration with the National Leprosy Programme. The period of the LEM exercise was from 24 July to 6 August 2005.

It was agreed that, in conducting LEM, the WHO guidelines for LEM monitors 2000 will be used by the STC, STP and national programme manager. Accordingly, eight districts in six provinces were selected. Teaching hospitals, general hospitals, base hospitals, district hospitals, rural hospitals and peripheral units with considerable case load were randomly selected as LEM sites.

Selection of Indicators

Group I: Elimination Indicators

Internal validity of information on prevalence and detection and analysis of trends. This was based on reviewing records and verifying reports through site visits.

Group II: Integration Indicators

After integration of leprosy services with the general health services, all health facilities are provided with trained workforce and logistics for MDT services. Here, progress towards integration was monitored through a cross-sectional survey of selected health facilities and interviews with health care providers and patients.

Group III: Quality of MDT services

Diagnosis, classification, case holding and other relevant information. This was based on review of individual patient forms, leprosy registers and interviews with individuals in communities. The quality of MDT services was reviewed on the basis of cohort analysis.

5. METHODOLOGY

Sri Lanka is administratively divided into eight provinces, 25 districts and 321 divisional secretary areas. Six of the eight provinces were selected for LEM by the national programme manager and WHO STP and STC to make available a significant number of cases. Among health institutions, two teaching hospitals, two general hospitals, three base hospitals, one district hospital, one rural hospital and two peripheral units were randomly selected.

The six provinces were selected on the basis of the number of registered and new cases.

Limitations and Biases

- Very few cases in most peripheral health facilities;
- Short duration for data collection;
- Long travel time to reach health facilities, and
- Collecting information on denominators (population by sub-national levels over the last 5 years).

5.1 Profile of the Selected Health Institutions

Province	District	TH	GH	BH	DH	RH	PU	MOH	Total
Western	Colombo	1							1
	Gampaha			1					1
North Western	Puttalam								
Sabaragamuwa	Kurunegala	1							1
Central	Kandy								
Central Northern	Polonnaruwa		1	1		1	1	1	5
Southern	Hambantota			1					1
	Matara		1		1			1	3
Total		2	2	3	1	1	2	2	13

Apart from health institutions, eight offices of Deputy Provincial Directors of Health Services and two MOH offices were visited.

5.2 Sample Size

Group 1: Elimination indicators	1. Case finding activities 2. Prevalence 3. Detection trend	Minimum sample size -100. Report for 5 yrs. Report for 5 yrs.
Group 2: Integration indicators	1. Number of health institutions providing MDT 2. Accessibility to MDT 3. Availability of MDT	Minimum sample size -15. Minimum sample size -15 patients and 15 health institutions. Minimum sample size -15 health institutions.
Group 3: Quality of MDT services	1. Number of patients treated with MDT 2. Case Holding 3. Quality of MDT	Minimum sample size -100 PB 60, MB 40 Individual patient forms. MDT centres – 15.

5.3 Type of Study

Indicators	Type of study
I. 1. Case finding activities II. 1. Proportion of health centres providing MDT 2. Accessibility to MDT 3. Availability of MDT III 1. Proportion of patients treated with MDT 2. Quality of MDT	Cross-sectional study of the selected MDT centres
II. 1. Prevalence 2. Detection	Review of reports of last five years
III 1. Case holding	Cohort analysis of treatment outcome

5.4 Data Collection

Qualitative and quantitative data from sampled MDT centres, beneficiaries, health providers and programme officers were collected by the following methods:

- Retrospective data were collected by reviewing records and registers including reports maintained at the MDT centres, DPDHS offices and Anti-leprosy Campaign (Central Clinic , Colombo) using checklist/schedule contained in the WHO guideline 2000.
- Cohort analysis from individual patient forms maintained at MDT centres.
- Discussion/interview with patients, service providers, community members and health administrators at all levels.

6. IMPLEMENTATION

- (1) Preliminary orientation about health care delivery system and planning, meeting with National Programme Manager on 25 July 2005.
- (2) Discussion, planning and selection of areas to be visited, orientation of monitors on objectives and methodology of data collection using schedule/formats on 25 July 2005. A total of five monitors were involved in the exercise.
- (3) Briefing Director-General of Health Services and WHO Representative to Sri Lanka, accompanied by National Programme Manager on 26 July 2005.
- (4) Actual data collection in the field from 26 July 2005 to 2 August 2005.
- (5) Field supervision by STP and STC from 26 July 2005 to 2 August 2005, jointly with National Programme Manager.
- (6) Data compilation and analysis from 3 August 2005 to 4 August 2005
- (7) Debriefing WHO Representative to Sri Lanka and Director, Medical Supplies Division on 4 August 2005.
- (8) Draft report preparation on 5 August 2005 and debriefing Deputy Director-General of Public Health Services.

Finalization of draft report and submission to WHO Representative to Sri Lanka and the National Programme Manager on 5 August 2005.

7. SUMMARY FINDINGS: RESULTS AND OBSERVATIONS

Group I: Elimination Indicators

7.1 Case Finding Activities

1.1 Proportion of new cases with disability grade-2	6%
1.2 Average delay in diagnosis	13 months
1.3 Proportion of children among new cases	11%
1.4 Proportion of MB cases among new cases	45%
1.5 Proportion of female among new cases	43%

Disability grade-2 among newly detected cases is fairly high at 6%. The average delay in diagnosis is also quite high. Child detection rate indicates transmission, if quality of diagnosis is accurate. After 10 years of achieving elimination, more MB cases are expected to be detected, because, in low endemic situations after elimination is reached, MB proportion increases in view of longer incubation period of MB leprosy. Female cases are within acceptable limits.

7.2 Prevalence

(1) Prevalence Rate

Reported prevalence	0.68/10,000 (2004)				
Prevalence after applying standard definition	0.68/10,000 (2004)				
Prevalence trend over the last 5 years per 10,000 population	0.54	0.91	0.77	0.69	0.68

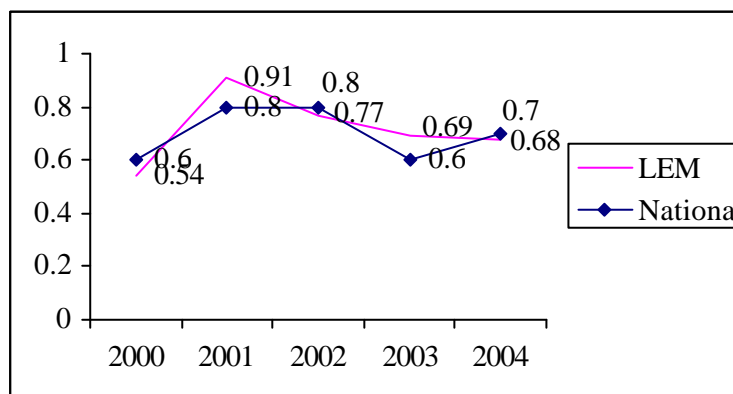
Prevalence, with the exception of 2001 (year of integration) for the last three years seems to be static. Since 2001 was the first year of integration, the general health care providers may have given benefit of doubt to certain suspects and registered them as leprosy cases. Delayed release from treatment (RFT) and recycling of cases may also have contributed to the prevalence.

(2) Prevalence Trend

Comparison of prevalence trend (per 10 000 population) during the last 5 years between national and LEM exercise areas are shown below:

Coverage	2000	2001	2002	2003	2004
National	0.6	0.8	0.8	0.6	0.7
LEM areas	0.54	0.91	0.77	0.69	0.68

Graph 1: Prevalence trend - national and LEM



There is a visible difference between the LEM and national prevalence, which may be due to operational factors, such as over-diagnosis and over-treatment.

7.3 Detection

(1) Detection Rate

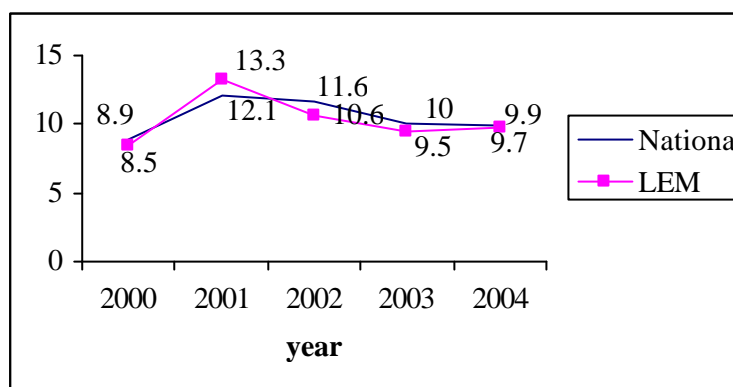
	2000	2001	2002	2003	2004
Detection trend over the last 5 years per 100,000 population	8.54	13.34	10.62	9.53	9.66
3.2 MB detection % 2004	44.73%				
3.3 Child detection % 2004	10.99%				

(2) Detection Trend

Comparison of detection trends (per 100,000 population) during the last 5 years between national and LEM exercise areas are shown below:

Coverage	2000	2001	2002	2003	2004
National	8.9	12.1	11.6	10	9.9
LEM areas	8.5	13.3	10.6	9.5	9.7

Graph 2: Detection trend - national and LEM



The difference between the LEM and national detection rate is not significant, except for 2001 and 2002, for the same reason, that is, being the initial stage of integration, benefit of doubt may have been given to certain suspects. But the situation is improving since 2003.

Group II: Integration of MDT Services with General Health Services

1. Proportion of existing health facilities providing MDT	100%			
Proportion of health facilities having stocks of MDT	100%			
Proportion of health facilities reporting individual patient forms during the last 5 years	19.04%			
2. Accessibility to MDT				
2.1 Average distance to collect monthly doses of MDT	15 km			
2.2 Estimated cost for travelling for patients to get MDT	Rupees 25			
2.3 Flexibility in delivering MDT				
<ul style="list-style-type: none"> • Open days/month • A-MDT • Can manage reactions • Can manage disabilities • Integrated into general health services • Steroid stocks • Steroids use 	26 days	100%	80%	80%
3. Availability of MDT patient months	MBA 0.5	MBC 3	PBA 3	PBC 2

Group III: Quality of MDT Services

1. Proportion of patients treated with MDT	100%			
2. Case holding	MB		PB	
2.1) Cure rate *	85%		100%	
2.2) Defaulter rate	12%		NIL	
2.3) Proportion of patients continuing treatment after having completed fixed duration of MDT	3.33%		Nil	
3. Quality of MDT Drugs	MBA	MBC	PBA	PBC
	S	S	S	NS

S = Satisfactory NS = Not satisfactory

* Complete records were available in three health institutions only.

In one health institution, four pauci-bacillary child blister packs were found to have expired in March 2004, due to non-availability of eligible patients.

Table 1: MDT centres and reporting centres during the last 4 years

District	Total MDT centres	Reporting centres	% Reported
1. Colombo	36	8	22.22
2. Gampaha	80	15	18.75
3. Puttalam	49	13	26.53
4. Kurunegala	89	11	12.36
5. Kandy	76	10	13.16
6. Polonnaruwa	23	10	43.48
7. Hambantota	29	17	58.62
8. Matara	33	5	15.15
Total	415	79	19.04%

About 81% of health facilities having trained manpower and adequate MDT supply are not having cases to report for the last four years. A decision is needed to reduce the number of MDT centres to a manageable limit, for improved patient care and drug management.

Table 2: Disability Grade 2, < 15 years, MB cases, Female cases among new cases detected during 2004 in the two Teaching Hospitals

Hospital	Total new cases	Gr.2 among new	<15 yrs among new	MB among new	Female among new
Colombo South Teaching Hospital	229	16 (6.99%)	40 (17.47%)	96 (41.92%)	114 (49.78%)
Entomb Base Hospital	65	0	16 (24.61%)	23 (35.38%)	NA
Total	294	16 (5.44%)	56 (19.05%)	119 (40.47%)	114 (49.78%)

**Table 3: Disability Grade 2, < 15 years, MB cases,
Female cases among new cases detected during 2004 in the 6 districts**

District	Total new cases	Gr.2 among new	<15 yrs among new	MB among new	Female among new
Gampaha	249	16	30	96	114
Puttalam	57	0	11	22	25
Kandy	47	3	2	16	15
Kurunegala	137	9	8	81	56
Hambantota	72	3	7	33	NA
Matara	102	6	15	49	NA
Total	664	37(5.57%)	73(10.99%)	297(44.73%)	210(42.86%)

The new case detection rate in 2004 of surveyed areas is in conformity with data provided from central level.

8. SALIENT FINDINGS AND CONCLUSIONS

- As per the present government policy, MDT services are provided at all health facilities, since 2001 (year of integration). However, since integration, only 19% of the health centres have leprosy cases to report.
- The geographical MDT coverage is satisfactory but diluted by supply of MDT to all health institutions which makes it difficult to calculate important indicators, such as, treatment outcome and maintain a minimum stock of MDT at certain level.
- Indicators, such as disability grade-2 rate 6%, female rate 43% among newly detected cases and an average delay in diagnosis (13 months) are fairly high, but are better compared to other countries in the Region.
- Child detection rate (11%), indicates transmission is continuing in the community, provided quality of diagnosis is good.
- Majority of the cases are reported voluntarily which is the most cost-effective method. Among cases examined by LEM monitors, there was no over-diagnosis but recycled cases (20-25%) were found in some health institutions.
- The initiative taken by certain teaching hospitals, general hospitals and base hospitals to admit leprosy cases in the dermatology ward is helping to reduce stigma, which may be continued.
- Health care providers are well versed in the clinical aspect of the disease.
- Community awareness about the basic facts of the disease is satisfactory but due to perceived social stigma, some patients prefer to take treatment from a distant MDT centre.
- Sri Lanka achieved elimination at national level at the end of 1995. The reported prevalence shows a downward trend over time. Though <1/10,000 at national level, the prevalence rate has fluctuated from 0.6 in 2000 to 0.8 in 2001 and 2002, 0.6 in 2003 and again 0.7 in 2004. The annual new case detection rate per 100 000 population has also fluctuated from 8.9 in 2000 to 12.1 in 2001, 11.6 in 2002, 10.0 in 2003 and 9.9 in 2004. The child rate and disability rate at national level remain more or less static. But the observation made in the field is that in certain areas, there are backlog cases in the community to be detected through focused LEC (Leprosy Elimination Campaign) and skin clinics.

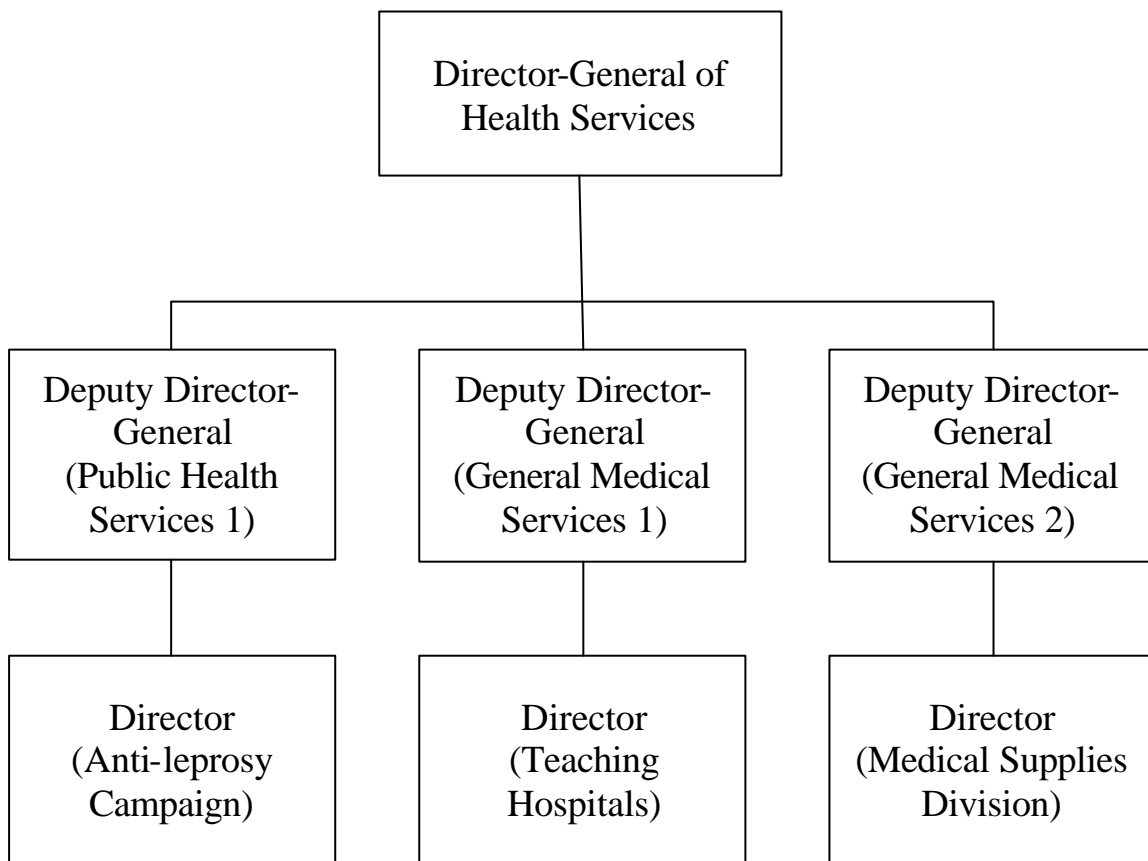
9. RECOMMENDATIONS

- Special focus and attention should be directed to districts which are yet to achieve elimination. This should include regular supervision and periodic review of leprosy activities and programme indicators at district level through monthly/quarterly review meetings in Gampaha, Colombo, Hambantota, Polonnaruwa, Batticaloa and Ampara/Kalmunai.
- Integration of leprosy activities with the general health services has been completed in 2001. It needs to be further strengthened by providing on-the-job training to field workers with special emphasis on cohort analysis for treatment outcome.
- Refresher training of district level specialized leprosy staff for continuous strong technical backup.
- It is commendable that most teaching hospitals, general hospitals and base hospitals are providing MDT services and admitting cases with complications. Collaboration with dermatologists and orthopaedic surgeons will improve quality and increase coverage of the service.
- Since only 19% of the health facilities are reporting cases, the Ministry of Healthcare, Nutrition and Uva Wellassa Development may reconsider the existing policy of distribution of MDT to all health facilities. It may consider reducing the number of MDT centres and supply MDT to only those health facilities that have reported cases in the last five years.
- Improved collaboration between the Deputy Provincial Director of Health Services and Medical Officer of Health Facilities is recommended as many of the MOH offices are detecting and treating cases and gained the confidence of the community.
- In order to sustain/improve community awareness, print and electronic media may continue to be used for regular dissemination of basic facts on leprosy, curability and availability of free services.

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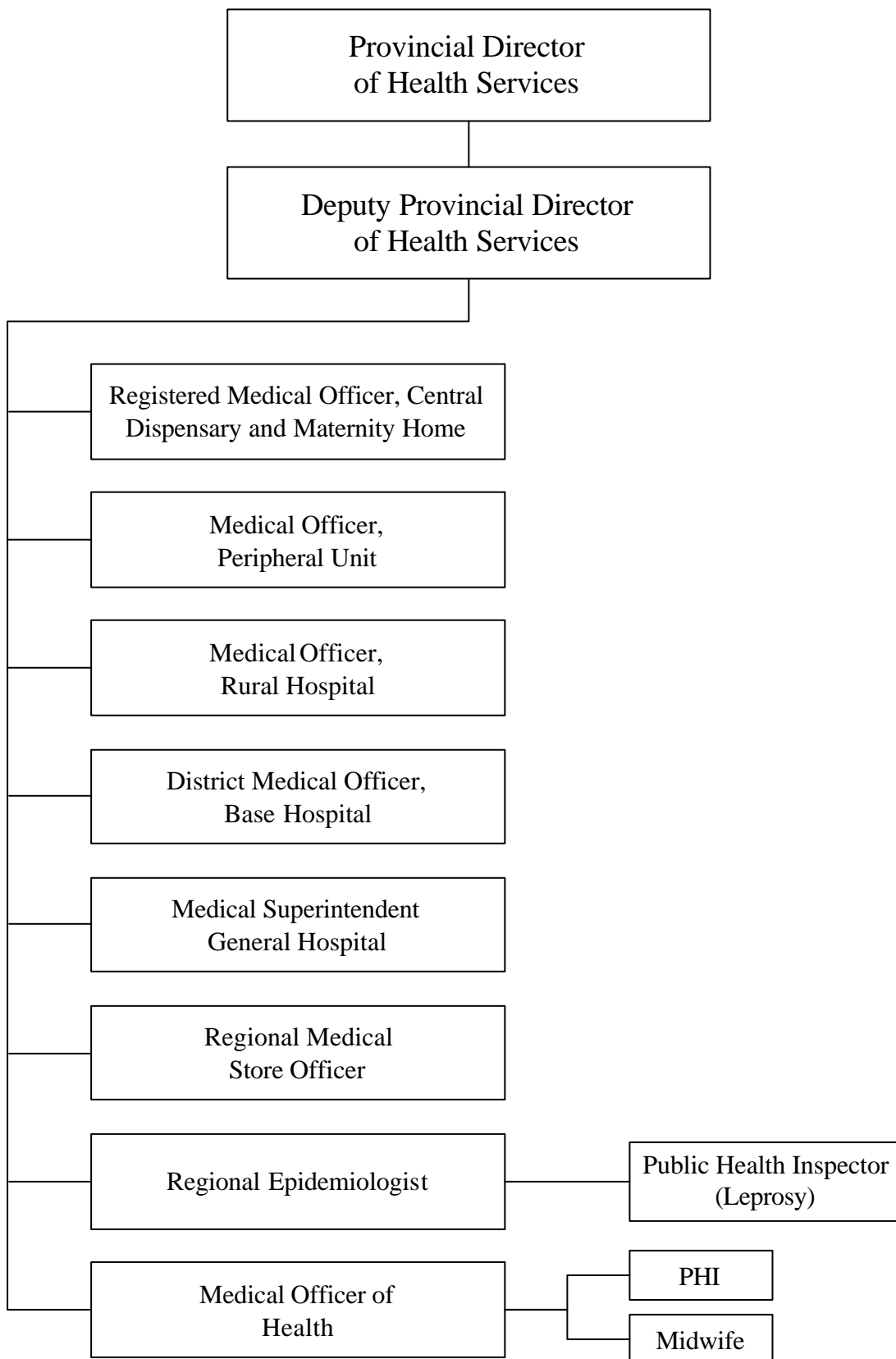
- (1) WHO guidelines for monitors:
Leprosy Elimination Monitoring 2000
- (2) Leprosy Elimination Country Report 2003-2004
Presented at Inter-country Meeting of National Programme Managers, 6-8 January 2005,
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- (3) Census Report, Sri Lanka 2001
- (4) Epidemiology assessment of Leprosy in Sri Lanka- 2001-2004 (post-integration period)
- (5) Leprosy elimination monitoring, Thailand 2004, Dr Jalal Uddin Ahmed STC
LEP/WHO/SEARO
- (6) Health and demographic survey, Sri Lanka 2001

Annex 1
ORGANIZATION CHART OF THE
DEPARTMENT OF HEALTH SERVICES



- There are a total of 15 Deputy Directors- General, one Chief Accountant and one Chief Internal Auditor.
- This organogram only shows incumbent officers, related to leprosy elimination activities.

Annex 2
ORGANIZATION CHART OF PROVINCIAL HEALTH SERVICES



Annex 3

GLOSSARY OF COMMON TERMS

Leprosy case: A case of leprosy is a person presenting clinical signs of leprosy who has yet to complete a full course of treatment.

New case of leprosy: A leprosy patient who has never taken MDT drugs in the past.

Leprosy defaulter: A patient who has not collected treatment for 12 consecutive months is a defaulter and should be removed from prevalence.

Cure: A patient who has completed a full course of fixed duration MDT (6 doses PB and 12 doses MB) is cured.

Fixed duration of treatment: Six doses (pulses) of MDT for PB and 12 doses (pulses) of MDT for MB.

Released from treatment: A cured (completed treatment) is released from treatment (RFT).

Multi-bacillary case: Six or more skin lesions, with loss of sensation.

Pauci-bacillary case: Up to five skin lesions with loss of sensation.

MB cohort for present survey: MB cases started MDT between January 2003 and December 2003.

PB cohort for present survey: PB cases started MDT between October 2003 and September 2004.

Disability Grade II: Visible deformity or damage of hand and/or foot; or person cannot count fingers at distance of six feet, lagophthalmos, iridocyclities and corneal opacity.

Prevalence rate: Number of registered cases of leprosy per 10,000 population, at a given point of time.

Prevalence rate after applying standard definition: Prevalence rate as calculated after applying the standard definition of a new case, defaulter and cured case of leprosy.

MDT blister pack for MB: Contains Rifampicin, Dapsone and Clofazimine.

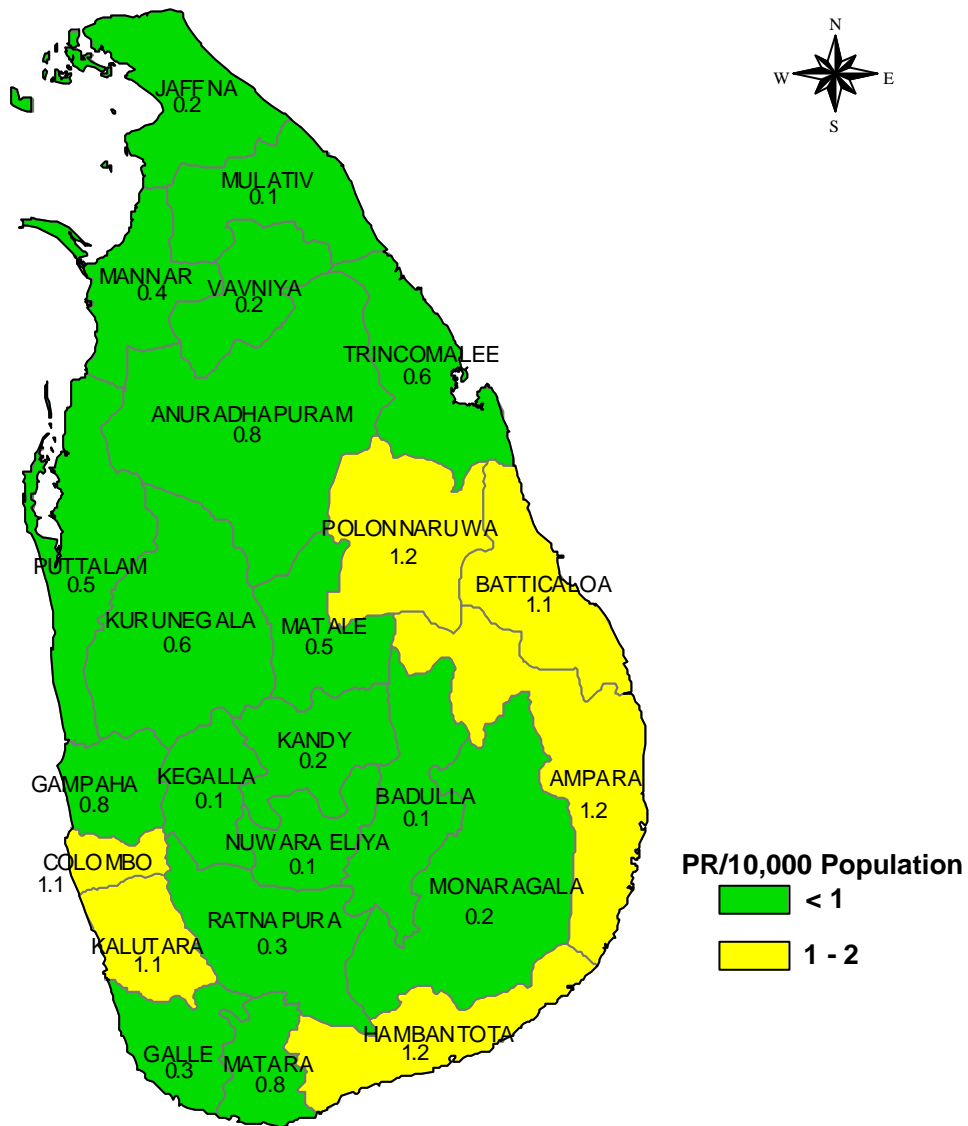
MDT blister pack for PB: Contains Rifampicin and Dapsone.

Unacceptable blister pack: MDT which is torn, discolored, damaged or expired.

Accompanied MDT: Giving full course of MDT pack(s) to patient in advance anticipating his/her inability to collect subsequent doses regularly due to various reasons (stigma, employment, distance, difficult terrain, relocation/migration, etc.)

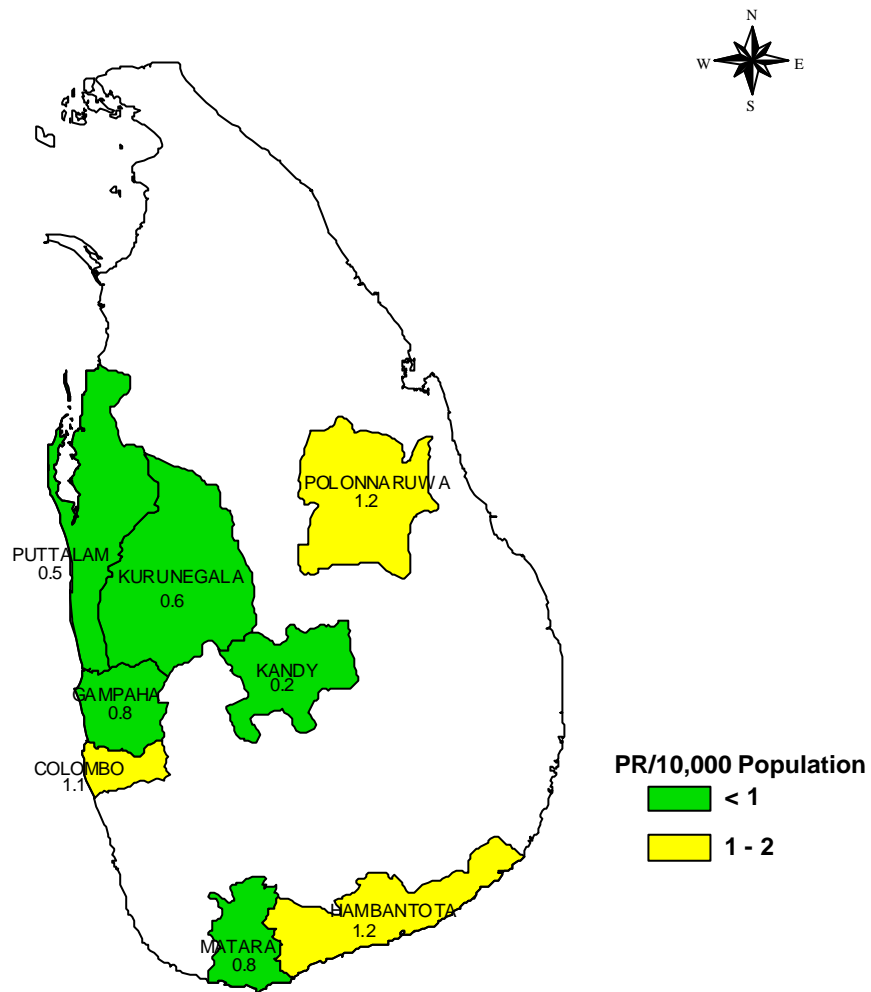
Annex 4

SRI LANKA, DISTRICT-WISE LEPROSY PREVALENCE RATE PER 10 000 POPULATION, 2004



Annex 5

MAP OF SRI LANKA SHOWING PREVALENCE OF DISTRICTS SELECTED FOR LEM



Annex 6

FIELD VISIT BY STP AND STC

- 24.07.05 Arrival at Colombo
- 25.07.05 ➤ Visit to WHO Sri Lanka Office and discussion with WHO staff
 ➤ Visit to Leprosy Clinic attached to National Hospital, Colombo and discussion with Dr. Sunil Settinayake, Director, Anti Leprosy Campaign, Ministry of Health
 ➤ Orientation of monitors on objectives and methodology of data collection for LEM exercise
- 26.07.05 ➤ Briefing Dr. H.A.P. Kahandaliyanage, Director General of Health Services and Dr. Agostino Borra, WR to Sri Lanka
 ➤ Visit to Deputy Provincial Director of Health Services (DPDHS), Colombo District, Dr. L.B.H. Denuwaraj, Mr. S. Wijerathne, Public Health Inspector (Leprosy) Colombo District
 ➤ Visit to Colombo South Teaching Hospital
- 27.07.05 ➤ Visit to Gampaha District, Western Province
 ➤ Visit to Negombo Base Hospital
 ➤ Visit to Puttalam District, North Western Province
- 28.07.05 ➤ Visit Kegalle General Hospital and its Dermatology Clinic
 ➤ Visit to Kurunegala District, North Western Province
- 29.07.05 ➤ Visit to Kandy District Central Province
- 30.07.05 ➤ Visit to Polonnaruwa District, Central Nothern Province, DPDHS Office
 ➤ Visit to Polonnaruwa General Hospital
 ➤ Visit to Medirigiriya, Base Hospital
 ➤ Visit MOH Office, Medirigiriya and review Individual Patient Forms with PHI
- 30.07.05 ➤ Visit to Peripheral Unit, Galamuna
 ➤ Visit to Rural Hospital, B.O.P. 400
 ➤ Visit to Ms. P.G.P. Menike, Midwife, Health Post and interview with 3 leprosy patients, one Buddhist monk and one villager.
- 31.07.05 ➤ Sunday (Holiday)
- 01.08.05 ➤ Visit to Peripheral Unit, Suriyawewa, Hambantota District, Southern Province
 ➤ Visit to Base Hospital, Hambantota
- 02.08.05 ➤ Visit to DPDHS, Matara District
 ➤ Visit to Matara, General Hospital
 ➤ Visit to District Hospital - Akuressa

Annex 7**LIST OF PERSONS CONTACTED**

- (1) Dr. H.A.P. Kahandaliyanage, Director General of Health Services
- (2) Dr. H.N. Fernando, Deputy Director General of Public Health Services
- (3) Dr. Agostino Borra, WHO Representative to Sri Lanka
- (4) Dr. Sunil Settinayake, Director, Anti Leprosy Campaign, Ministry of Health
- (5) Dr. Hemantha Beneragama, Director, Medical supplies Division
- (6) Dr. Pushpa Ranjan Wijesinghe, Epidemiologist, Anti Leprosy Campaign, Head Quarter, Colombo
- (7) Dr. P. N. Palihakkara, Medical Officer, In-Charge, Leprosy Clinic, National Hospital, Colombo
- (8) Dr. L.B.H. Denuwaraj, Deputy Provincial Director of Health Services (DPDHS) Colombo District
- (9) Dr. Linton Padmasiri, DPDHS, Gampaha District
- (10) Dr. Mallawarachchi, Regional Epidemiologist, Gampaha
- (11) Dr. R.M. Ratnayake, DPDHS, Puttalam District
- (12) Dr. Fernando, Regional Epidemiologist, Puttalam
- (13) Dr. Shyma Senaratne, Regional Epidemiologist, Kurunegala District
- (14) Dr. Senarath Dayananda, Acting Regional Epidemiologist, Kandy District
- (15) Dr. S.A.H. Liyanage, DPDHS, Hambantota District
- (16) Dr. Saman de Silva, Acting DPDHS, Matara District
- (17) Dr. S.C. Wickramasinghe, Medical Superintendent, Negombo Base Hospital
- (18) Dr. Savindra Gamage, Medical Superintendent, Kegalle General Hospital
- (19) Dr. Yuraj Perera, Medical Officer, OPD, Polonnaruwa General Hospital
- (20) Dr. R.M.T.N. Randunu, Medirigiriya Base Hospital
- (21) Dr. U.P. Ariyawansa, Medical Superintendent, Hambantota Base Hospital
- (22) Dr. K.I. Padmathilaka, Director, Matara General Hospital,
- (23) Dr. P.H. Chandrawansa, Consultant Dermatologist, Matara General Hospital
- (24) Dr. C.A. Dahanayaka, Registered Medical Officer, District Hospital, Akuess
- (25) Mr. S. Wijerathne, Public Health Inspector (Leprosy) Colombo
- (26) Mr. Joe Perea, PHI (Leprosy)Gampaha
- (27) Mr. A.V. Punyadasa, PHI (Leprosy) Puttalam
- (28) Mr. T.K. Chandrapala, PHI (Leprosy) Kurunegala
- (29) Mr. J.A.S.N.U. Jayasinghe Arachchi, PHI (Leprosy) Kandy
- (30) Mr. D.N. Dhanaweera, PHI (Leprosy), Polonnaruwa
- (31) Mr. D. Wickramarathne, PHI (Leprosy) Hambantota
- (32) Mr. Ariyasiri David, PHI (Leprosy) Matara
- (33) Mr. Sudath Dammika, PHI, Sewagama
- (34) Ms. P.G.P. Menike, Midwife, Polonnaruwa