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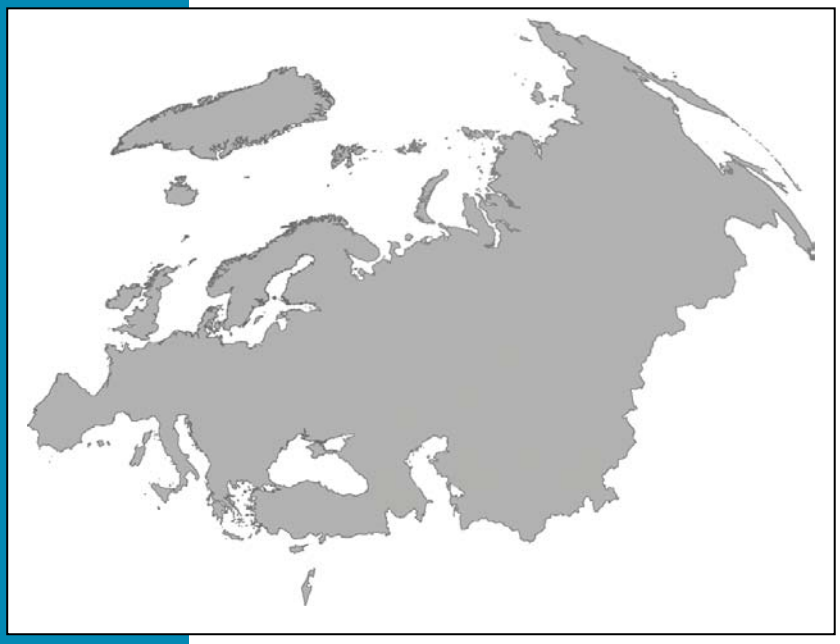

Strategic framework for leishmaniasis control in the WHO European Region 2014–2020

By: Mikhail Ejov
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ABSTRACT

Leishmaniasis is a neglected and poorly reported disease with an underestimated or undetermined burden in most countries of the WHO European Region. This strategic framework for leishmaniasis control was developed in close collaboration with all stakeholders in order to improve the surveillance, control and prevention of leishmaniasis. The framework outlines the regional goal and objectives to be achieved by 2020 together with the recommended strategic approaches and priority interventions, with special attention to programme management, case detection and management, disease surveillance, control of reservoir hosts, integrated vector control, environmental operational research, capacity-building, community participation and health education, cross-border cooperation, intersectoral collaboration, partnership action and monitoring and evaluation.

Keywords

CAPACITY BUILDING
COLLABORATION
INFECTIOUS DISEASE VECTORS
LEISHMANIASIS
PUBLIC HEALTH
SURVEILLANCE

ISBN 978 92 890 5016 6

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CONTENTS

Page

Acknowledgements iv
Abbreviations iv
Summary 1
Disease burden and current trends 1
WHO commitment and action 2
Regional goal, programme objectives and timetable 4
By the end of 2014 4
By the end of 2015 5
By the end of 2017 5
By the end of 2020 6
Strategic approaches and priority interventions 6
Programme management 6
Case detection and management 7
Disease surveillance 8
Control of reservoir hosts 9
Integrated vector control 9
Environmental management and personal protection 11
Epidemic preparedness and response 11
Operational research 11
Capacity-building 12
Community participation and health education 12
Cross-border cooperation 12
Intersectoral collaboration 13
Partnership action 13
Monitoring and evaluation 13
The way forward 14
References 15
Bibliography 16
Annex 1 WHO recommended case definition 17
Visceral leishmaniasis 17
Cutaneous leishmaniasis 17

Acknowledgements

WHO thanks all country representatives and experts who provided inputs to the strategic framework for leishmaniasis control through their participation in the WHO Meeting on Outlining a Strategic Framework on Leishmaniasis Control (Tbilisi, Georgia from 16–th to 18th of April 2013). Special thanks are extended to the following participants in that meeting for their valuable inputs:
Prof. Vladimir A Davidyants, Adviser, National Institute of Health, Ministry of Health, Armenia
Dr Luigi Gradoni, Research Director, Unit of Vector-Borne Diseases, International Health, MIPI Department, Istituto Superiore di Sanita, Italy
Dr Nora Kokaia, Director, Institute of Medical Parasitology and Tropical Medicine, Georgia
Dr Francisco Javier Moreno Nuncio, Instituto de Salud Carlos III, Centro National de Microbiologia, Servicio de Parasitologia, Spain
Prof. Evgenii Ponirovskii, Senior Researcher, Department of Medical Parasitology, Martsinovsky Institute of Medical Parasitology and Tropical Medicine, Russian Federation
Prof. Vladimir P Sergiev, Director, Martsinovsky Institute of Medical Parasitology and Tropical Medicine, Russian Federation.

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Abbreviations

CL	cutaneous leishmaniasis
ELISA	enzyme-linked immunosorbent assay
IRS	indoor residual spraying with insecticides
TDR	Special Programme for Research and Training in Tropical Diseases
VL	visceral leishmaniasis

Summary

Leishmaniasis is a neglected and poorly reported disease with an underestimated or undetermined burden in most countries of the WHO European Region. The regional incidence of visceral leishmaniasis (VL) and cutaneous leishmaniasis (CL) is estimated at less than 2% of the global burden of leishmaniasis according to the WHO recent estimate of leishmaniasis incidence.

Cases of VL, which is due to *L. infantum,* are reported in countries of western and south-eastern Europe, central Asia, south Caucasus and Turkey, with the overwhelming majority (nearly 75%) found in Albania, Georgia, Italy and Spain. Since the mid-1990s, the number of reported VL cases in children aged under five years has increased more than nine-fold to reach, in Georgia, more than 180 in 2007. In recent years, however, the number of adults with VL has been rising as co-infections with HIV before the scale-up of antiretroviral therapy. Human (and canine) leishmaniasis is a re-emerging problem in some parts of southern Europe, with a steady increase in VL prevalence.

Almost 80% of the total number of CL cases reported in the Region are in Israel, Turkey, Turkmenistan and Uzbekistan. Cases of anthroponotic CL, which is caused by *L. tropica,* have been reported from Azerbaijan, Greece, Israel, Turkey and Uzbekistan. The disease is endemic predominantly in densely populated settlements, where person-to-person transmission is maintained by *Ph. sergenti*. Cases of zoonotic CL caused by *L. major* have been registered in central Asia, the south Caucasus, Israel and Turkey, and the disease is prone to epidemics. Cases of CL caused by *L. infantum* have been reported in some south Caucasian, central Asian and European countries, with proved and suspected vectors the same as those for VL.

The desperate need for updated information on the extent of the problem of leishmaniasis in the Region has been highlighted by World Health Assembly resolution WHA60.13 and by the WHO Expert Committee Report on Control of Leishmaniasis. Such information is necessary to pave the way towards the development of adequate policies and strategies to deal with leishmaniasis at regional and country levels.

The framework given in this report outlines the regional goal and objectives to be achieved by 2020, and the recommended strategic approaches and priority interventions with special attention to: programme management, case detection and management, disease surveillance, control of reservoir hosts, integrated vector control, environmental management and personal protection, epidemic preparedness and response, operational research, capacity-building, community participation and health education, cross-border cooperation, intersectoral collaboration, partnership action, and monitoring and evaluation.

Disease burden and current trends

Leishmaniasis is a parasitic disease transmitted by the bite of blood-sucking sandflies that have previously fed on an infected reservoir host. There are two clinical forms of leishmaniasis: visceral leishmaniasis (VL) or *kala-azar*, the most severe and fatal in almost all cases if left untreated, and cutaneous leishmaniasis (CL) which has a tendency towards spontaneous resolution.

Leishmaniasis is endemic in over 98 countries with more than 350 million people at risk. It is estimated that 1.3 million new cases of leishmaniasis (0.3 million VL and 1.0 million CL) occur every year. As a neglected tropical disease, leishmaniasis shares the characteristics of a typical poverty-related disease, that is, a lack of recognition, political prioritization, visibility of its burden, national strategies for its control and accurate information on its extent and distribution. Although it is estimated to cause the ninth largest disease burden of all infectious diseases, leishmaniasis is largely ignored due to its complex epidemiology and ecology, the lack of easily applied tools for case management and the inadequacy of current incidence data.

Leishmaniasis is a neglected and poorly reported disease with an underestimated or undetermined burden in most countries of the WHO European Region. The regional incidence of VL and CL is estimated at less than 2% of the global burden of leishmaniasis, according to the recent WHO estimate of leishmaniasis incidence.

Cases of VL, which is due to *L. infantum,* are reported in countries of south-eastern and western Europe, central Asia, the south Caucasus and Turkey, with the overwhelming majority (nearly 75%) found in Albania, Georgia, Italy and Spain. The reservoir hosts include domestic dogs, foxes, gerbils and jackals. The main proven and suspected vectors for VL and CL due to *L. infantum* in the Region include *Ph. alexandri, Ph. kandelakii, Ph. balcanicus, Ph. turanicus, Ph. halepensis, Ph. syriacus, Ph. longiductus, Ph. perfiliewi, Ph. perniciosus, Ph. ariasi, Ph.tobbi, Ph. transcaucasicus and Ph. neglectus.* Since the mid-1990s the number of VL cases reported in children aged under five years has increased more than nine-fold reaching, in Georgia, more than 180 in 2007. In recent years, however, the number of adults with VL has been rising as co-infections with HIV before the scale-up of antiretroviral therapy. Human (and canine) leishmaniasis is a re-emerging problem in some parts of southern Europe, with a steady increase in VL prevalence.

Almost 80% of the total CL cases reported in the Region are in Israel, Turkey, Turkmenistan and Uzbekistan. Cases of anthroponotic CL, which is caused by *L. tropica*, have been reported from Azerbaijan, Greece, Israel, Turkey and Uzbekistan. The disease is endemic predominantly in densely populated settlements, where person-to-person transmission is maintained by *Ph. sergenti*. Cases of zoonotic CL caused by *L. major* have been registered in central Asia, the south Caucasus, Israel and Turkey, and the disease is prone to epidemics. *Ph. papatasi* is the principal vector. CL caused by *L. infantum* is reported in some south Caucasian, central Asian and European countries and the proven and suspected vectors are the same as those for VL.

WHO commitment and action

In May 2007, the Sixtieth World Health Assembly adopted resolution WHA60.13 on the control of leishmaniasis, urging Member States where leishmaniasis is a public health problem to: reinforce efforts to set up national control programmes; establish systems for surveillance, data collection and analysis; strengthen prevention and active detection and improve access to appropriate and affordable diagnosis and treatment of cases of both CL and VL; conduct epidemiological assessments of local situations and support studies on surveillance and control of leishmaniasis; promote the sustainability of leishmaniasis control; raise awareness and improve preventive practices at community level; and strengthen collaboration between countries that share common foci or disease threats. The resolution calls for WHO to take the lead in establishing effective control programmes in affected

countries and providing technical assistance on issues of direct relevance to leishmaniasis control. Based on the above-mentioned resolution, WHO convened the Expert Committee on Leishmaniasis in March 2010, which subsequently issued the first updated technical report on leishmaniasis in more than 20 years.

Resolution WHA60.13 and the WHO Expert Committee report highlighted the desperate need for updated information on the extent of the problem on leishmaniasis within the Region, which could pave the way for developing adequate policies and strategies to deal with leishmaniasis at regional and country levels.

In November 2009, a WHO intercountry meeting on leishmaniasis in the European Region, organized in close collaboration with WHO headquarters, was held in Istanbul, Turkey *(1)*. The objectives of the meeting were to:

- revisit the area-specific disease-related strategies focused on updating information on the impact of leishmaniasis in each country and review the status of activities and existing problems in controlling the disease in the Region;
- formulate the needs of and recommendations to each country or sub-region for increasing the alert for the disease and implementing appropriate control measures; and
- contribute to the preparation of leishmaniasis country profiles.

Representatives from Albania, Armenia, Azerbaijan, Croatia, France, Georgia, Greece, Israel, Italy, Kazakhstan, Kyrgyzstan, Portugal, the Russian Federation, Tajikistan, Turkey, Ukraine and Uzbekistan attended the Meeting together with WHO staff and international experts. The participants concluded that leishmaniasis was a highly neglected disease in most countries of the Region, and the lack of political commitment was a major drawback in developing an appropriate strategy on leishmaniasis control at regional, subregional and national levels. There was a lack of updated information on current local epidemiological situations, disease management and control, especially in the countries of central Asia and the south Caucasus. It was agreed that technical support from WHO was needed to address these problems.

In April 2013, a further WHO regional meeting was organized in collaboration with WHO headquarters in Tbilisi, Georgia on outlining a strategic framework on leishmaniasis control *(2)*. The specific objectives of this meeting were to: