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TDR-WHO expert meeting

on

“Cost-effective VL case detection and vector control for the support of the VL elimination initiative on *the Indian Sub-continent*”

Katholische Akademie, Wintererstr. 1, Freiburg, Germany

23 – 25 November 2015

BACKGROUND

Kala-azar or Visceral Leishmaniasis (VL) is one of the most important Neglected Tropical Diseases (NTDs) particularly on the Indian Subcontinent. It is transmitted by a small mosquito (“sand fly”) and affects the poorest of the poor in India, Bangladesh and Nepal, where approximately 186 million people in 109 districts in the three countries are at risk of getting the disease. If untreated the case fatality is around 30%.

The three countries signed in 2005 a Memorandum of Understanding to eliminate the disease until 2015, which means to reduce the disease burden from actually around 200 to 300 cases per 100.000 people to less than 10. Elimination seems to be a realistic goal as the disease is geographically limited to the area between the 3 countries, there are no animal reservoirs, it is transmitted only by one vector species (*Phlebotomus argentipes*) and there are new rapid diagnostic tests (rK39) and new drugs (Miltefosine and Ambisome) available.

The most important elements in the elimination strategy are:

- Early case detection
- Complete treatment
- Vector control (reduction of the VL transmitting sand fly mosquitoes to low levels)

Since 2005, TDR has coordinated and financed implementation research as well as clinical trials in support of the VL elimination initiative. Scientific publications, SOPs, policy briefs, M&E handbooks and other documents have been developed and largely adopted by the national authorities and shaped RTAG recommendations and policies.

Nepal – after having reached in most endemic districts the elimination target- is now in the consolidation/maintenance phase. In Bangladesh a number of districts are still in the attack phase of the elimination initiative while others are approaching or have reached the elimination goal. India is in a similar epidemiological situation as Bangladesh (although the extension of VL endemic areas is much larger) but is now the main recipient of different sources of external funds (i.e. World Bank, DFID, BMGF, GCC and others) which will enable the authorities to progress well towards VL elimination. With this progress towards the elimination goal more efficient and effective methods of active case detection and vector management are required which respond to the changing epidemiological profile in the countries.

In previous expert meetings conducted in Freiburg, Germany and Oxford, UK in 2012, 2013 and 2014, national programme managers of the three countries met with researchers and WHO / TDR / SEARO staff to discuss additional tools and strategies needed for speeding up the VL elimination process and in preparation of maintenance phase. Various research recommendations were made and these will be discussed in the forthcoming VL expert meeting on **“Cost-effective interventions to support the consolidation and maintenance phase of the VL elimination initiative on the Indian Sub-continent”**.

OVERALL OBJECTIVE (AIM) AND SPECIFIC OBJECTIVES OF THE MEETING

Aim:

To support the VL elimination strategy particularly during its consolidation and maintenance phase in Bangladesh and Nepal by determining cost-effective and sustainable intervention strategies which combine active case detection of VL/PKDL and other fever diseases with vector control at community level.

Objectives

1. To take notice of advances of the VL elimination on the Indian sub-continent
2. To review recent research finding and interim results on VL vector control, case detection and treatment strategies including their prospects for the national control programmes
3. To discuss options for integrated prevention and control of communicable diseases including VL
4. To identify priority research needs and explore funding opportunities in support of the elimination initiative during the consolidation and maintenance phase.

Structure of the workshop: See agenda below

List of participants: See list of participants below



Draft Agenda

| DAY 1 | Item | Chair: Pradeep Das |
|---|---|---|
| 9:00 - 9:30 | Welcome, Presentation of participants Opening: Purpose of the meeting | Piero Olliaro, hosts |
| Advances on the VL elimination programme and an update on the various programmes supporting the VL elimination initiative | | |
| 09:30 - 9:50 | Bangladesh | AKM Shamsuzzaman A. F. M. Akhtar Hossain |
| 09:50 - 10:10 | Nepal | Baburam Marasini |
| 10:10 - 10:30 | India | Pradeep Das |
| 10:30 - 11:00 | Coffee Break | |
| 11:00 - 11:30 | Conclusions of the recent RTAG meeting and priority research questions | Pradeep Das, Dinesh Mondal |
| 11:30- 12:00 | Summary of findings of the TDR research programme to support the VL elimination initiative (case detection, treatment strategies, vector control) | Megha R. Banjara, Mamun Huda, R. Chowdhury |
| 12:00 - 12:30 | Current study on VL information system, case detection and vector management: Design and preliminary results (Bangladesh) | Dinesh Mondal |
| 12:30 – 13:00 | Current study on VL information system, case detection and vector management: Design and preliminary results (Nepal) | Megha R. Banjara |
| 13:00 - 14:00 | Lunch break | |
| 14:00 - 14:45 | Multiple testing for pathogens: the field laboratory. Report on the training in Bangladesh. | Ahmed Abd El Wahed |
| 14.45 – 15.10 | Vector resistance in Nepal and Bangladesh: Preliminary results | Murari Das |
| 15.10 – 15.30 | Markers for disease progression and relapse | G. Matlashewski; D. Mondal |
| 15:30 - 16:00 | Coffee break | |
| 16:00 - 17:00 | Measuring and documenting the achievements of the VL elimination initiative | Byron Arana, Axel Kroeger |
| 19:00 | <i>Joint Dinner</i> | |
| Day 2 | Item | |

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|---------------|---|-----------------------------|
| 9.00 - 10:30 | <i>Group work (Bangladesh group and Nepal group):</i> Priority research needs during the consolidation and maintenance phase related to: VL surveillance; early detection of new cases and outbreaks; management of asymptomatic/PKDL cases as potential sources of infection; cost-effective vector management | Country teams et al. |
| 10:30 - 11:00 | Coffee Break | |
| 11:00 - 13:00 | <ul style="list-style-type: none"> Group work (continued) | Country teams et al. |
| 13:00 - 14:00 | Lunch break | |
| 14:00 - 15:30 | Panel discussion on group work results | Chair: Piero Olliaro |
| 15:30 – 16:00 | Coffee break | |
| 16:00 - 17:00 | Recommendations for priority research | |
| | | |
| 19:00 | <i>Joint dinner</i> | |

| Day 3 | Item | Chair: Greg Matlashewski |
|---------------|--|---------------------------------|
| 9.00 – 10.30 | VL transmission dynamics and continued sources of infection during the post-VL elimination phase (maintenance phase) : preparation of a VL stakeholder meeting in Kathmandu (2016) | P. Olliaro, A.Kroeger, B. Arana |
| 10:30 - 11:00 | Coffee Break | |
| 11:00 - 11:30 | Summary of recommendations, next steps | |
| 11:30 - 12:00 | Closing session | Chair, Hosts, organizers, TDR |
| 12:00 - 13:00 | Lunch Break | |
| | End of Meeting | |

List of Participants

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