**Delay in Visceral Leishmaniasis Reporting as an Obstacle to Timely Response Actions - Analysis of the VL Reporting System in Nepal**

Bottcher JP1

1Robert Koch-Institute, Centre for Biological Threats and Special Pathogens, Germany.

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**Background**

For the elimination of visceral leishmaniasis (VL) in the Indian subcontinent it is essential to evaluate and fully understand today’s actual burden of the disease in endemic countries such as Nepal and India. As India and Nepal just entered the “consolidation phase” of the VL elimination strategy, it is important to determine the current state of VL reporting, VL response and VL treatment to successfully continue the path taken. Recent data indicate that VL cases are still underreported in these countries, as there is no regular active case detection system in place at the community level. In addition, patients of both countries still face long delays when seeking treatment: A patient delay by not being able to seek health care despite feeling sick, a diagnosis delay when entering the health system and a treatment delay after receiving a diagnosis. Moreover, it is likely that information of passively detected VL cases does not reach the higher authorities of the VL reporting systems of both countries in a timely manner.

**Methods**

Cross-sectional study using different type of interviews (structured, semi-structured and in-depth). Study was conducted in 12 districts of Nepal and 9 districts of Bihar in the summer of 2012. To identify patient delay, diagnosis delay and treatment delay, 92 VL patients having experienced 103 VL episodes were interviewed in hospitals or at their home using a structured questionnaire. To identify VL reporting delay, 49 district health managers were interviewed at their work place using a semi-structured questionnaire. In-depth interviews were conducted with central level health managers of state and national authorities concerned with VL. On‑site collected VL reporting documents were evaluated. Data was analyzed using non-parametric tests of statistical significance.

**Results**

Diagnosis delay of Bihar was identified to be 3.6 times higher as compared to Nepal (90 compared to 25 days). This could be attributed to increased utilization of the private sector in Bihar. In Nepal, patient delay was identified to be 3.75 times higher than in Bihar (30 compared to 8 days). For both countries, treatment delay was found to be low (6 days in Bihar and 3 days in Nepal). VL reporting delay to central level health managers was identified to be 2.7 weeks for “Early Warning and Reporting System” (EWARS) sentinel reporting sites of Nepal, 4.0 weeks for “District Malaria Offices” (DMOs) of Bihar and 10.8 weeks for “District (Public) Health Offices” (D[P]HOs) of Nepal. Sentinel reporting was found to be established in Nepal but not in Bihar. In Nepal, 73% of health managers were found to use computers to file VL cases, whereas in Bihar only 16% are able to do so due to the unavailability of computers in DMO offices. District health managers of both countries do not use standardized reporting formats and mainly rely on paper-based reporting.

**Conclusions**

Private Service providers need to be trained to be able to refer patients immediately. VL patients need to be informed about VL symptoms and VL-related services and incentives offered by the public service providers. VL sentinel reporting and EWARS reporting sites should be established in DPHOs of VL endemic districts. Standardized reporting format with, electronic reporting system needs to be established.

**Keywords:** delay; Nepal; reporting system; response; treatment; visceral leishmaniasis.