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Background: There is no appropriate surveillance system at the moment for Cutaneous Leishmaniasis (CL) control. CL is a serious public health problem in countries surrounding the Mediterranean Basin – reliable figures are crucially missing. CL is not on the agenda of international donors, foundations or western pharmaceutical companies, because CL is not fatal and it is mostly endemic in developing countries that do not represent a profitable market. Nowadays, Global Health is an emerging scientific discipline that conceives the national prevention and control of diseases and strengthening of national health systems solely within an international context. CL is not endemic in Germany, but the disease in endemic countries affect military personnel, travellers and humanitarian aid workers. Modern phone communication technology is the mean to combat pressing health issues on the ground of case based evidence and to compile information in such a way as to design efficient public health policies and responses to tackle them.

Acknowledgment: The electronic case report form developed for eculeido is based on two clinical trials conducted by Waisenmedizin e.V. (WM e.V.) in Afghanistan.

Kabul کابل

Leishmaniasis Cases	Age/Sex		5-14		Over 14		Grand total
	0-4						
	F	M	F	M	F	M	
New cases	78	88	156	148	175	157	802
Follow up cases	103	129	236	165	214	115	962
Grand total	181	217	392	313	389	272	1764

Mazar-e Sharif مزار شریف

Leishmaniasis Cases	Age/Sex		5-14		Over 14		Grand total
	0-4						
	F	M	F	M	F	M	
New cases	18	8	25	14	48	37	150
Follow up cases	34	21	54	36	99	69	313
Grand total	52	29	79	50	147	106	463

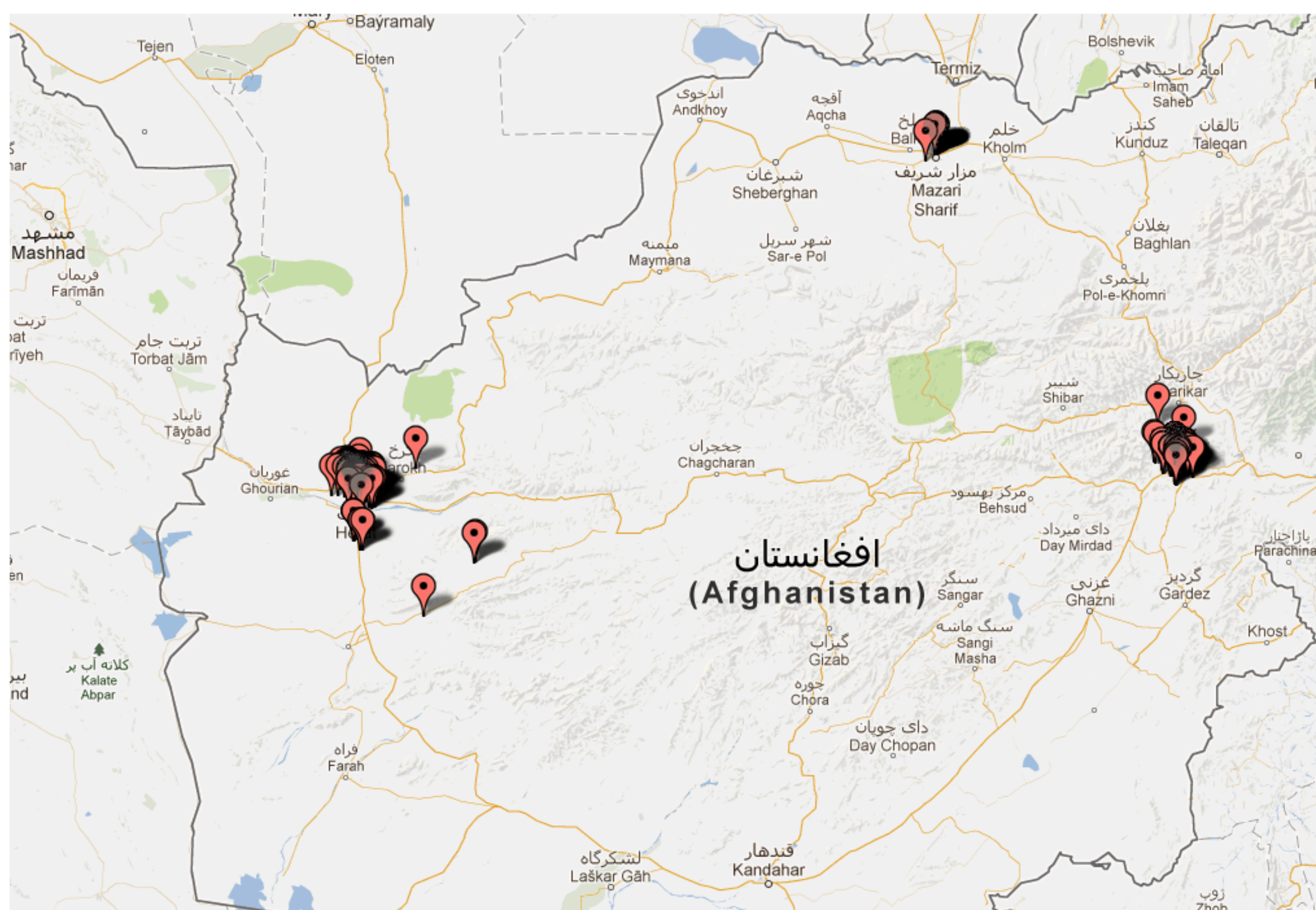
Herat هرات

Leishmaniasis Cases	Age/Sex		5-14		Over 14		Grand total
	0-4						
	F	M	F	M	F	M	
New cases	37	32	121	161	127	76	554
Follow up cases	277	206	837	1112	921	406	3759
Grand total	314	238	958	1273	1048	482	4313

New cases: Number of patient registrations (including first visit on same date)

Follow up cases: Number of visits after first registration

Table 1: Surveillance CL case statistics between Dec 2012 and Apr 2013



Picture 3: Geographic CL patient localisation in three selected cities



Picture 1: PID 45-85, Age 6, Female, 04-04-2013



Picture 2: PID 45-85, Age 6, Female, 01-05-2013

Goal: The elaboration of a smart phone based electronic documentation system (App) is a cost effective, innovative, sustainable technology for the development of a CL surveillance and information system. In fact, the present project aims at conducting a feasibility study on health technologies that are at the reach of every developing country worldwide to improve the control of CL in endemic countries. With the further development of the smart phone application that has been tested in Afghanistan in 2012, we build the ground for a more extended version adapted to the needs on site that will help to improve (1) CL clinical case management (2) CL public health management on a facility, regional and national level (3) and at developing a comprehensive CL management toolkit for worldwide translation on the basis of research results obtained in the field.

Results: Smartphone documentation of > 1.500 CL patients in three cities (Kabul, Herat & Mazar-e-Sharif) in Afghanistan during the trial period between Dec 2012 and April 2013.

Initiator & Sponsors

Waisenmedizin e.V.

