

# TP 169 Syphilis in the Mbya-Guaraní Population of Misiones (Argentina): Evidence Proves the Need to Design and Implement a Scheduled Intervention

Fernando Jorge Bornay-Linares, MD, PhD<sup>1</sup>, William R. Pedrozo, MSc<sup>2</sup>, Fabián Galarza, MSc<sup>2</sup>, Rosa C. Piragine, MD<sup>2</sup>, Sandra Roginski, MSc<sup>2</sup>, Graciela Malvasi, MD<sup>2</sup>, Enrique J. Deschutter, PhD<sup>3</sup> and Adele S. Benzaken, MD, PhD<sup>2</sup>,  
<sup>1</sup>Faculty of Pharmacy, Universidad Miguel Hernández de Elche, Alicante, Spain, <sup>2</sup>Ministerio de Salud Pública, Misiones, Argentina, <sup>3</sup>Universidad Nacional de Misiones, Argentina, <sup>4</sup>AIDS Department, Fundação Alfredo da Matta, Manaus, Brazil

In May 2012, the indigenous population of the ethnicity Mbya-Guaraní was included for the first time in the School Health Program (Ministry of Health) in the province of Misiones Argentina. Due to the lack of data about syphilis in this population, we decided to study the presence of *Treponema pallidum* infection among the program participants and their communities.



**Methods:** Between May 2012 through August 2013, 652 indigenous people (52,3 % women) living in 19 villages were studied. Age ranges were, from 0 to 10 years (n=250); from 11 to 20 years (n=333), from 21 to 40 years (n=50), more than 41 years (n=19). The presence of anti-*T. pallidum* antibodies in blood serum samples, were screened by a non treponemal test (VDRL) Positive samples were then confirmed using a treponemal test (TPHA).

**Results:** Antitreponemal specific antibodies were detected in 5.98 % (39 cases) of the population tested. The distribution of cases was highly variable among the communities and 8 (42%) with no cases reported. Fifty-three point eight percent of the cases were male. Age distribution was: from 0 to 10 years (4 cases), two cases of congenital syphilis diagnosed in the hospital at the time of birth and two children 7 years old, which had not previously been diagnosed; from 11 to 20 years (22 cases), from 21 to 40 years (11 cases), and > 40 years (2 cases).

**Figure.-** The map show the location of the communities studied in the province.

**Table.-** Number of people tested in each community (T: total, W-p: women-women positive, M-p men-men positive, P: total positive cases).

	T	W-p	M-p	P		T	W-p	M-p	P
1	135	69-1	66-1	2	11	2		2-1	1
2	56	32	24		12	29	12-2	17-4	6
3	9	4	5		13	14	11	311	
4	25	7-5	18-4	9	14	73	47	26	
5	3	2	1		15	71	37-1	34-6	7
6	12	6	6		16	8	1-1	7	1
7	45	24	21-1	1	17	17	5-2	12-1	3
8	77	35-4	42-1	5	18	6	4-2	2-1	3
9	14	9	5		19	20	14	6	
10	36	20	16-1	1					

**Conclusions:** This study has shown a high prevalence of syphilis in some indigenous communities in the province of Misiones (Argentina). The idiosyncrasy and high mobility of the Mbya-Guaraní population, based on a semi-nomadic lifestyle, makes necessary to design a comprehensive program of intervention, for the detection, clinical assessment, treatment, control and prevention of this re-emerging and under-diagnosed disease.

