

Clinical Profile of Leprosy cases Registered in a Hospital in Paraguay, 2013 to 2015

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Dear Editor

Despite the decrease in the number of patients diagnosed per year, leprosy or Hansen's disease is still a public health problem in several countries. There are still many endemic foci in countries such as Angola, Brazil, India, Madagascar, Mozambique, Nepal, Central African Republic, the Democratic Republic of the Congo and the United Republic of Tanzania (Schreuder et al 2016). India ranks first in the world with total number cases of the disease and is followed by Brazil.

Paraguay has problem of leprosy, because according to data from the Ministry of Health and Social Welfare (MSPyBS, for its acronym in Spanish), disease is still endemic in the territory, with prevalence rates of 2.27% (Department of Ñeembucú) to 0.34% (Misiones department), in the Caaguazú department. Where this hospital based study was carried out, the prevalence recorded was 0.78% (MSPyBS 2015) in the population.

Based on the above, it was proposed to study the clinical profile of leprosy cases registered in Hospital of Coronel Oviedo-Paraguay from January 2013 to December 2015. An observational, descriptive cross-sectional study was carried out, where clinical records of patients diagnosed with leprosy through a bacilloscopy registered in the National Leprosy Control Program (PNCL, for its acronym in Spanish) were reviewed at the Hospital District of Coronel Oviedo, Department of Caaguazú, (Paraguay), during the months of January to 2013 to December 2013. All the cases diagnosed in the District Hospital of Coronel Oviedo through the PNCL were included during the period of time. For the collection of the data an electronic form was designed in Microsoft Office Excel 2013 ©, where the variables of interest were registered.

During the study period, 110 cases were registered, of which 67.27% (76) were males, 92.73% (102) were older than 15 years. 39.09% (43) of the cases were recorded during 2013, 31.82% (35) during 2014 and 29.09% (32) during the year 2015.

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Regarding the clinical form of presentation 52.73% (58) was lepromatous, 27.27% (30) Borderline, 17.27% (19) a tuberculoid form and 2.73% (3) indeterminate. According to the degree of incapacity, 68.18% (75) had grade 0, 23.64% (26) grade 1 and 8.18% (9) grade 2 disability (Table 1), being the most frequent loss of sensitivity and ulcers in Foot, the Lucio phenomenon was present in 1 cases. 80% of the patients were multibacillary.

The characteristics of cases found in the study are similar to studies reported by Marín Pérez & Pilarte (2017) for Nicaragua, Polo Checa et al (2014) for Ecuador and Romero Cantillo et al

(2016) for Cuba. All these studies, like this present one, show the highest frequency in sex Male, and the lepromatous presentation constituting major proportion. Of the cases had grade 0 disability, where there are still no eye problems due to leprosy, no visual loss, no anesthesia; there is no deformity or visible lesion, which is attributable to an early diagnosis (Fischer et al 2014), however, there is a percentage with grade 2 disability, which despite being low carries an important social stigma (da Silva Viana et al 2017).

The World Health Organization (WHO) global strategy (2011 - 2015) advocated morbidity control, and Resolution CD49. R19 of the Directing Council of the Pan American Health Organization (PAHO) 2015, the elimination of leprosy as a public health problem has been an important priority, however, this objective to date still remains difficult (Ministerio da Salud 2015), this inability to meet the objectives is attributed main determinants; Such as schooling of patients, lifestyle, accessibility to health services, among others (Moreira Rios et al 2014).

In Paraguay, about 400 cases of leprosy per year are reported, which places it second among the countries in the region with the highest number of infected, after Brazil. In America, Paraguay is one of the countries with the highest number of cases, so the knowledge of the clinical profile is relevant for rapid and effective clinical diagnosis. Although the clinical profile cases Registered in a Hospital in Paraguay are very similar to many other studies, it is important to promote prevention and early detection, with a view to decrease in the sequelae it carries. 7.27% of cases reporting are child cases, means active transmission is continuing. 8.18% of cases having grade 2 disabilities also point to the need to improve early access to diagnosis and treatment. This picture also resembles countries like India, thus

Table 1 : Clinical Profile of Leprosy cases Registered in a Hospital in Paraguay, 2013 to 2015

	Number of cases	Percentage %
Age in years		
< 15 years	8	7.27
> 15 years	102	92.73
Gender		
Male	74	67.27
Female	36	32.73
Year of diagnosis		
2013	43	39.09
2014	35	31.82
2015	32	29.09
Clinical forms		
Borderline	30	27.27
Lepromatous	58	52.73
Tuberculoid	19	17.27
Indeterminate	3	2.73
Disability Grade		
Grade 0	75	68.18
Grade 1	26	23.64
Grade 2	9	8.18

lessons learnt from each other have trans country significance.

References

1. da Silva Viana L, de Aguiar MI, de Vasconcelos PF, de Aquino DC (2017). El aspecto físico y las repercusiones en la calidad de vida y autonomía de personas mayores afectadas por la lepra. *Enfermería Global*. **16**: 336-374.
2. Fischer J, Jaled M, Olivares L et al (2014). Lepra y discapacidad grado 2. Revisión de 10 años del Servicio de Dermatología del Hospital FJ Muñiz. *Dermatología Argentina*. **19**: 407-412.
3. Ministerio de Salud Pública y Bienestar Social (MSPyBS) (2015). Manual de Normas y Procedimientos, del Programa Nacional de Control de Lepra. Available in: http://www.paho.org/par/index.php?option=com_docman&view=download&alias=531-manual-de-normas-y-procedimientos-de-control-de-lepra-2015&category_slug=publicaciones-con-contrapartes&Itemid=253
4. Moreira Rios I, Moreno Diaz EN, Sotolongo Castillo A et al (2014). Enfoque de los factores de riesgo de la lepra con las determinantes sociales de la salud. *Rev Cubana Hig Epidemiol*. **52**: 4-14.
5. Pérez MM, Pilarte GP (2017). Prevalencia de la enfermedad de Hansen en el barrio Francisco rojas del municipio de Tipitapa. *Revista Universidad y Ciencia, UNAN-Managua*. **9**: 25-31.
6. Polo Checa AM, Sanmartín Plaza MM, Toro Manzanares XM (2014). Características clínicas de la enfermedad de hansen. diagnóstico del contagio a familiares estableciendo un cerco epidemiológico en la provincia de El Oro, julio 2012-junio 2013 (Bachelor's thesis).
7. Romero Cantillo R, Durán Rodríguez R, Rubio Méndez A (2016). Comportamiento de la enfermedad de Hansen en municipio Baracoa, Guantánamo. *Rev Inf Cient*. **95**: 8.
8. Schreuder PA, Noto S, Richardus JH (2016). Epidemiologic trends of leprosy for the 21st century. *Clinic Dermatol*. **34**: 24-31.

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