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Clinical and Epidemiological Aspects of Leprosy Cases Under 15 Years of Age, in the State of Rondônia in the Period 2011 to 2015

Carla Cristina dos Santos[1], Wanderlei Ruffato[2], Vagno Rodrigues de Lima[3], Rosilene Rufato[4], Marcuce Antonio Miranda dos Santos[5], Leonardo Severo da Luz Neto[6] and Helio Franklin Rodrigues de Almeida[7]

[1]Nurse. Master in Public Health. Doctorate in Public Health from the University of Business and Social Sciences – UCES. Email: carlacristinasantos@gmail.com
[2]Nurse. Specialist in Audit in Health System-Uniron. EMail: vandopvh@hotmail.com
[3]Graduated in Nursing by the Union of Higher Schools of Rondônia - UNIRON, Rondônia. EMail: vagnorodrigues@gmail.com
[4]Nurse. Specialist in Public Health at Centro Universitário São Lucas, Rondônia, Brazil. EMail: roseruffato@hotmail.com
[5]PHD in Regional Development and Environment, Bachelor of Nursin, Researcher at the Observatory the Violence, and Worker's Health OBSAT the Federal University of Rondônia, Brazil. Master in Health, Society and Endemic Diseases in the Amazon at the Federal University of Amazonas, Brazil, Professor of Faculdades Integradas Aparicio Carvalh o, Porto Velho, Rondonia, Brazil and Nurse of the City of Porto Velho, Rondônia, Brazil. Email: marcuce2017@gmail.com
[6]Master in Education - Autonomous University of Barcelona, Spain. Master in Psychology - University of São Paulo. Master in Religious Studies - Faculty of Theological Education Logos of São Paulo. Bachelor of Nusring. Professional Physical Education. Bachelor in Theology. Professor at the Federal University of Rondonia, Brazil - Department of Collective Health, Researcher at the GEITEC and GEISC of the Federal University of Rondonia, Brazil. Email: lluz@unir.br
[7]PhD in Physiology from the University of A Coruña, Spain Revalidation University of Brasília, Brazil, Master of Exercise Physiology - Federal University of Santa Maria, Brazil, Graduated in Physical Education – State University of Pará, Brazil. Professor of the Department of Collective Health, Researcher at the OBSATand Researcher of GEISCof the Federal University of Rondonia, Brazil.Email: helio@unir.br

***Abstract*— *The present study analyzed the clinical and epidemiological aspects of leprosy cases in children under 15 years of age, in the State of Rondônia, from January 1, 2011 to December 31, 2015. It is an epidemiological research of the type Cross - sectional retrospective cross - sectional study, based on quantitative data extracted from the Information System of Notifiable Diseases Database (SINAN) of the Health Surveillance Agency of the State of Rondônia (AGEVISA - RO). During the study period, Rondônia diagnosed 260 cases of leprosy in children under 15, corresponding to 6% of the total cases in the state. 72.30% were aged between 10 and 14 years. The prevalence was males with 54.6% of the cases. The year of greatest detection was 2013 with 68 cases. The most frequent operational classification was multibacillary with 51.15%. Residents in urban areas accounted for 75.38%. Of the 52 municipalities in Rondônia, 69.23% detected cases of leprosy in children under 15 years of age. The most prevalent clinical form was Dimorphic with 43.07%. In the neurological evaluation of the patient at the time of diagnosis, 86.92% had zero degrees of disability, 75.7% had no affected nerves at the time of diagnosis, 62.69% had Bacilloscopy, had a negative result, 39.41% entered Services by spontaneous demand. 86.15% were discharged for a cure, and 72.30% were discharged from service with a zero degree of disability. Despite its decrease, the coefficient of detection of leprosy in children under 15 years of age in Rondônia maintains a very high level of endemicity and demonstrates difficulty in controlling the disease by the health authorities.*

Keywords*— *Leprosy. Epidemiology. Children. Adolescentes.

I. INTRODUCTION

Leprosy is one of the oldest diseases of mankind, evidence of its origin is based on writings of different civilizations and lesions found in bones. The probable origin of the disease points to India, which, along with Africa, can be considered the cradle of leprosy (SANTOS, 2007). According to Gonçalves, Sampaio and Antunes (2008). Leprosy is identified, characterized and

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feared for its high deforming potential. [...] Peripheral nerve involvement is the main characteristic of the disease, which can lead to disability and disability, reducing their ability to work and limiting their social life, making them victims of stigma and prejudice (p.464). BRAZIL (2008) states that leprosy is a slowly evolving infectious-contagious disease, manifested mainly through dermatoneurological signs and symptoms: lesions on the skin and peripheral nerves, especially in the eyes, hands and feet. Leprosy is a slowly evolving infectious disease caused by Mycobacterium leprae, an obligate intracellular bacillus, which has affinity for the skin and peripheral nervous system, which can lead to deformities and disability, maintaining the stigma and prejudice of the disease. In 2009, sixteen countries in the world diagnosed a thousand or more cases of leprosy. Asia accounted for the highest detection rate of 9.39 cases / 100,000 inhabitants, followed by the Americas with 4.58 cases / 100,000 inhabitants, Brazil accounting for 93% of the cases reported in this continent, with 37,610 new cases . Brazil occupies the first place in the prevalence of leprosy and the second place in absolute number of cases in the world, behind only India. These data from 2009 still show a coefficient of detection in children under 15 years of 5.43 / 100 thousand inhabitants, parameters considered very high by the Ministry of Health (WHO, 2010). In the endemic countries, as in the case of Brazil, there are differences in prevalence among regions, states, microregions, and municipalities, concentrating on the places of greatest poverty. It is known that socioeconomic and cultural conditions have a great influence on the distribution and propagation of leprosy, presenting a close relation with the precarious conditions of housing, low educational level and also, with migratory movements that facilitate the diffusion of the disease (LANA, 2007).

The states of Mato Grosso, Maranhão and Tocantins presented a high prevalence coefficient (between 5 and 9.99 cases per 10 thousand inhabitants), while all states in the South, Minas Gerais, Rio de Janeiro and São Paulo regions, in the Southeast region, together with Rio Grande do Norte in the Northeast, reached the goal of eliminating leprosy as a public health problem (BRAZIL, 2010). In 2012, 33,303 new cases were diagnosed, 2,246 (7%) in children under 15 years of age. The general detection coefficient (17.2 / 100 thousand inhabitants) is considered high. According to the reference parameters of this indicator, the states of Rondônia, Mato Grosso, Tocantins, Pará and Maranhão were classified as hyperendemic, with more than 40 new cases per 100,000 inhabitants in 2011 (BRAZIL, 2012). Leprosy can affect all age groups, but the reduction of cases in children under 15 years of age is one of the priorities of the National Program for Leprosy Control (PNCH) of the Secretariat of Epidemiological Surveillance of the Ministry of Health, because when the disease manifests in children, indicates high endemicity, since it comes into early contact with the bacilliferous patient (PIRES, 2012). The persistence of high rates of endemicity of leprosy suggests that the children may be contacts of cases of leprosy not yet detected by the local / regional health systems. In conditions of high transmissibility and early exposure to the bacillus, the probability of illness increases, and thus, detection in this age group is taken as the epidemiological indicator of greater severity of the endemic (LANA, 2007). The disease is less frequent in children younger than 15 years; however in more endemic areas, early exposure, in home centers, increases the incidence of cases in this age group (BRASIL, 2009). According to Alencar et al (2008), one of the most important epidemiological indicators in terms of signaling the dynamics of recent transmission of leprosy is the occurrence of cases in children under 15 years of age. This indicator shows the existence of active human sources of infection. In view of the above epidemiological situation, some questions arise: Is leprosy endemic in Rondônia? Are cases under the age of 15 being diagnosed early? Is leprosy a slow-onset, infectious-contagious disease that can lead to dermatoneurological problems in children under 15? The detection of leprosy cases in children under 15 years of age in Rondônia maintains high levels of endemicity, with predominance of cases in the Dimorphic (Multibacillary) forms and with almost 10% of the cases diagnosed with important peripheral neurological deficits 13 (Grade I and Grade II) , points to deficiency in surveillance and control, which leads to the belief that there is a possible lack of effective health policies aimed at the early diagnosis of leprosy.

II. MATERIALS AND METHODS

The present is an epidemiological research of descriptive cross - sectional retrospective, with methods of bibliographic research, documentary, and database analysis with quantitative approach. The instruments used for the study were the bibliographical review of scientific, methodological articles and books. Secondly, data collection, consisting of Leprosy Notification Cards, extracted from the SINAN Data Bunch, of the Health Surveillance Agency of Rondônia (AGEVISA-RO) was performed. The study has a quantitative approach, since data and numbers expressed by percentages are used. According to GIL (2002), the quantitative method is characterized by the use of quantification in both

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information collection and statistical treatment (mean, standard deviation, percentage, etc.). It represents the intention of guaranteeing the accuracy of the results, avoiding distortions of analysis and interpretation, allowing a margin of safety regarding the findings.

The research was developed in the city of Porto Velho-RO, together with the State Coordination of Leprosy Control, of the Health Surveillance Agency of Rondônia (AGEVISA-RO), located in the Rio Madeira Palace, at Farqhuar Ave., 2986, Pedrinhas neighborhood , Porto Velho - RO. The Health Surveillance Agency of Rondônia (AGEVISA-RO) is a Public Unit of the State Executive Branch of Rondônia, which works on the surveillance of infectious and parasitic diseases and those prevalent in the Amazon region (eg Leprosy, Tuberculosis, Malaria, Dengue, Leishmaniasis, etc.), collecting information through notifications of cases of diseases of compulsory notification, by means of records made available to all Public and Private Units of the State Health Network, and subsequent typing, tabulation, analysis, interpretation of data , and the availability of bulletins and epidemiological reports to all professionals and managers of the State Public Health Network. The Agency also works with the acquisition, organization and distribution of pharmaceutical inputs for the treatment of infectious and parasitic diseases in the region, and organization of network "Immunization" throughout the State, as well as with the Am Vigilance biology (vector control).

The population studied is characterized by patients younger than 15 years of age, affected by leprosy in the State of Rondônia, and reported in the Notification Data Batch (SINAN) of the Health Surveillance Agency (AGEVISA-RO) in the period from 1 January 2011 to December 31, 2015.

For the development of the research were observed the provisions contained in Resolution 466/2012 of the National Health Council / Ministry of Health that determines procedures to be adopted on research involving human beings. In this Resolution 466, December 12, 2012, Section II, II-12 - research - formal and systematic process aimed at the production, advancement of knowledge and / or obtaining answers to problems through the use of scientific method, and subsection III, which deals with research involving human beings, must take into account ethical foundations, since the ethics of research implies: b) "Weighting between risks and benefits, both known and potential, individual or collective, committing to the maximum benefit and the minimum of damages and risks "; (c) "guarantee that foreseeable damage shall be avoided". As data collection in electronic databases (AGEVISA / SINAN), we request the exemption of the Term of Free and Informed Consent (TCLE) to the participants of the research. The research project was sent to the CEP - Research Ethics Committee of this institution for analysis, whose approval opinion was issued through approval protocol # 1,546,797. Only then were the data requested and collected. The authorization of the director of AGEVISA was requested. The work was developed in order to guarantee compliance with Resolution 466/2012, referring to research involving human beings, submitting to the Research Ethics Committee (CEP). It was guaranteed the anonymity and reliability of the information collected, and it was not possible to identify patients, because of later data collected and published.

The data analysis is one of the most important parts of the research, since they represent if the data collected may or may not bring with it the conclusion of the research objectives. In this study, the information was analyzed by having them extracted from the database of (SINAN), together with the bibliographic survey on the objectives of the study, in a quantitative way, that is, through the use of graphs, tables or tables in the program Microsoft Office Excel, world, 2007. For statistical analysis we used percentages, and comparisons by means of a descriptive analysis of the results with the relevant literature.

III. RESULTS AND DISCUSSION

Epidemiological characterization was performed based on leprosy monitoring and evaluation indicators for all years of the study. The selected indicators were those recommended by the Ministry of Health (Health Surveillance Secretariat), according to Ministerial Order No. 149 of 2016, for evaluation and monitoring of leprosy: detection in children under 15 years of age (indicates active transmission); new cases with grade 2 of physical disability (indicates late diagnosis); proportion of female and male cases; area of residence, neural involvement, bacilloscopy, mode of entry and exit of services, and proportion of multibacillary cases and clinical form (indicates endemic expansion).

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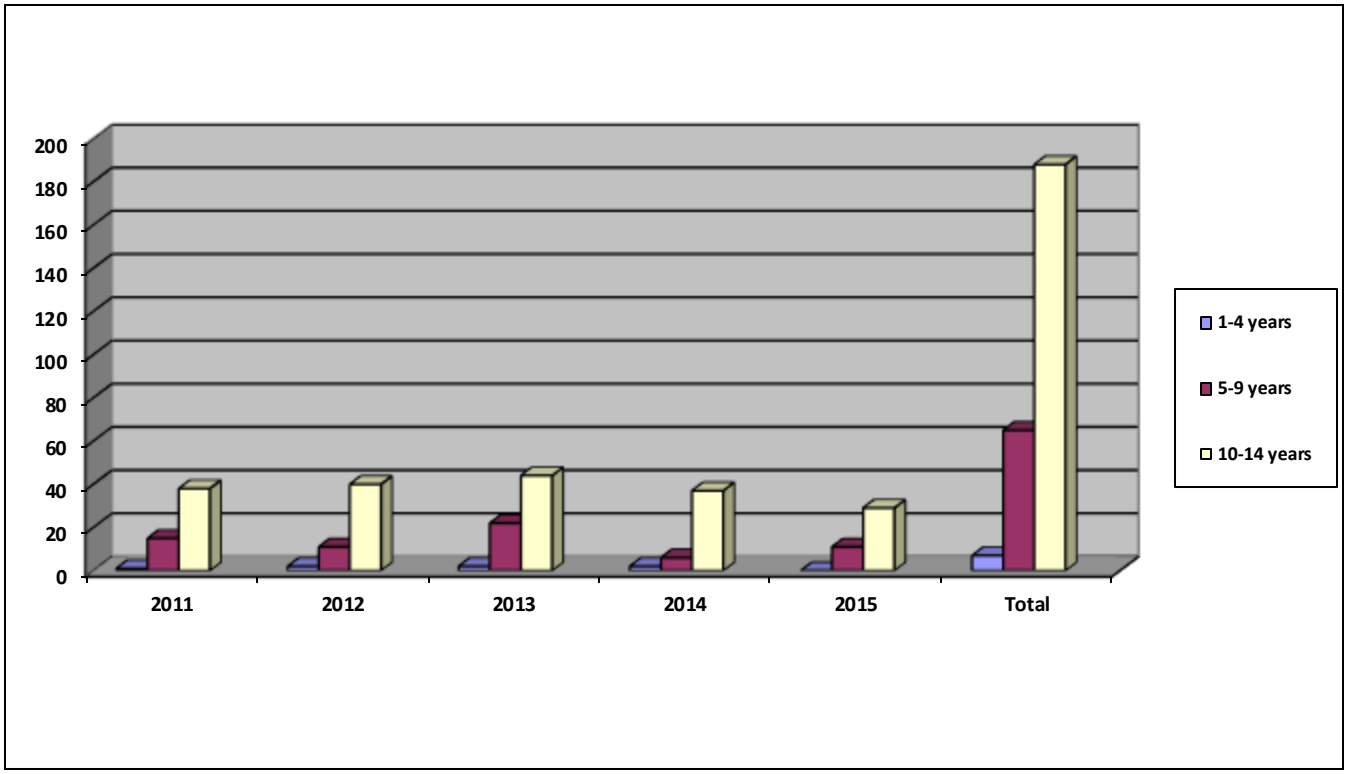
Chart 1 - Distribution of cases of leprosy, in children under 15, by age group according to Year of Notification



Source: SINAN – AGEVISA/RO, 2016.

During the study period, Rondônia registered 4,337 new cases of leprosy, 260 of which were in children under 15 years of age, making up 6% of the number of new cases. When analyzing figure 1, we can observe a higher incidence of leprosy cases in children under 15 years of age in the 10-14 age group, corresponding to 188 cases out of 260 detected in the period evaluated, with a percentage of 72.30%. In a study carried out in Manaus-AM on the Epidemiological profile of leprosy in children under 15 years of age, in 1998-2005, when evaluating 4,541 cases of leprosy in the period, it was evidenced that 474 cases (10.4%) were in the age group from zero to 14 years, and of these, 307 (64.76%) were in the age range of 10 to 14 years (IMBIRIBA et al, 2008). The data found corroborate with the scientific findings of the pathology, that the incubation period is long, that is, from the contagion until the appearance of the signs and symptoms of the disease, they last in average from 2 to 7 years, although cases have been identified in the aged from 1 to 4 years, and from 5 to 9 years, these appear in lower percentage, 2.69% and 25% respectively. A large number of leprosy cases in age groups under 15 show hyperendemicity in Rondônia, as well as a deficiency in surveillance and control of the disease, which suggests a possible lack of effective health policies aimed at the early diagnosis of leprosy.

Graph 2 shows the highest incidence of leprosy in children under 15 years of age in the male population, in a total of 142 cases out of the 260 detected in the study period, accounting for 54.6%. Palu et al., 2015, the same scenario was identified in his study on the epidemiological clinical profile of leprosy patients in the extreme west of Santa Catarina from 2004 to 2014, analyzing that of the 129 cases of leprosy reported, about 62% male. According to IMBIRIBA (2008), when evaluating the Epidemiological profile of leprosy in children under 15 years of age in Manaus-AM, leprosy in adults is more frequent in males and the risk of exposure is a determinant of this difference. Regarding the children, in the study it was observed a slightly higher percentage in males (50.2%). This is linked to the fact that they turn less frequently than women to primary care services and seek the health care system when the situation has worsened.

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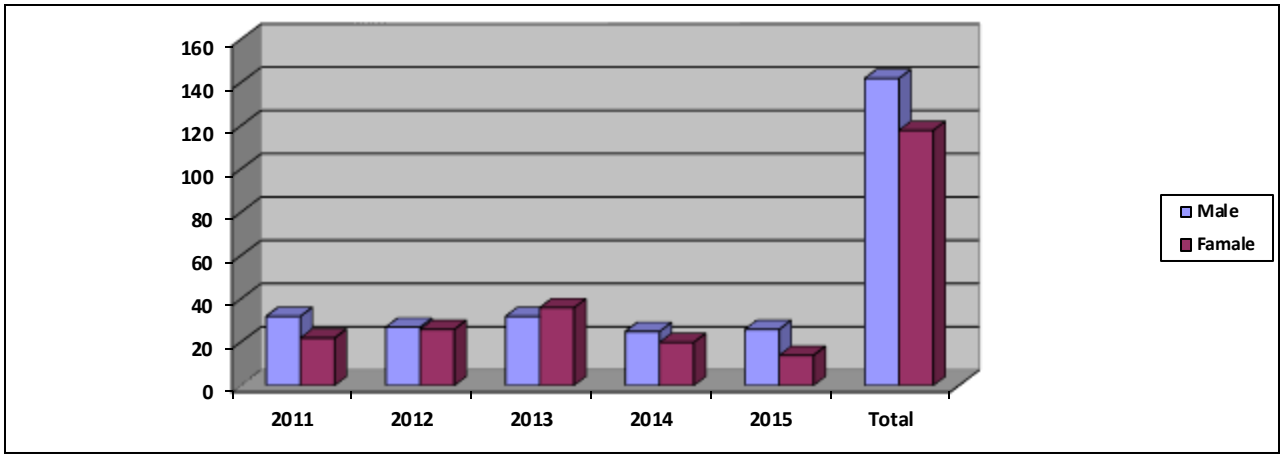
Graph 2 - Distribution of cases of leprosy in children under 15 years of age, by Sex according to Year of Notification

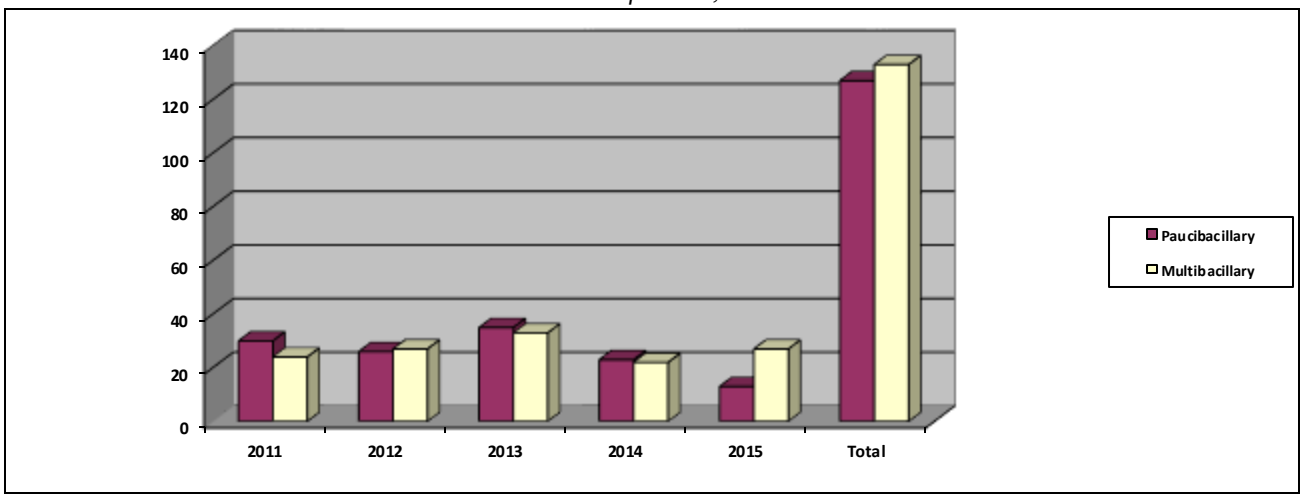


Source: SINAN – AGEVISA/RO, 2016

The analysis shows a higher incidence of leprosy cases in children younger than 15 years of age in 2013 compared to the other years, where 68 cases were identified, accounting for 26%. There is only a slight difference in the period from 2011 to 2012 of only 1 case. When comparing 2013 to subsequent years, there was a considerable reduction of 33% of cases between 2013 and 2014 (23 cases), and a reduction of 11% between 2014 and 2015 (5 cases). The study points to a national trend in reducing cases of leprosy. According to data from the Ministry of Health, in the period from 2006 to 2015, there was a 68% reduction in new cases of leprosy diagnosed in the country (BRAZIL, 2015).

There is a higher frequency of cases of leprosy in children under 15 years, in the multibacillary operational classification (51.15%) in the period studied. Only in the years 2011 and 2013 there were more paucibacillary cases. It was possible to observe only equivalence in the operational classification in the year 2014. The detection of cases classified as multibacillary, points to the late diagnosis of the disease, demonstrating deficiency in surveillance and control, which makes believe in a possible lack of effective health policies directed for the early diagnosis of leprosy. In a study conducted by Alencar et al (2008) to evaluate the epidemiological and operational aspects of leprosy in children under 15 years of age in Fortaleza-CE between 1995-2006, the paucibacillary form was the most frequent in all years, reaching 67% of the forms identified in 2006. Only in 2003 and 2007 was there an equivalence in this proportion, with a slight superiority in the number of cases of the multibacillary form. This scenario reflects the potentiality of disease with greater severity in the affected individuals. A similar result was found by Barbosa et al (2014), when evaluating the epidemiological and spatial characteristics of leprosy in the State of Maranhão, between 2001 and 2012, where it identified that 48.49% of the new cases were multibacillary forms.

Chart 3 - Distribution of leprosy cases in children under 15 years, by Operational Classification according to year of notification;



Source: SINAN – AGEVISA/RO, 2016

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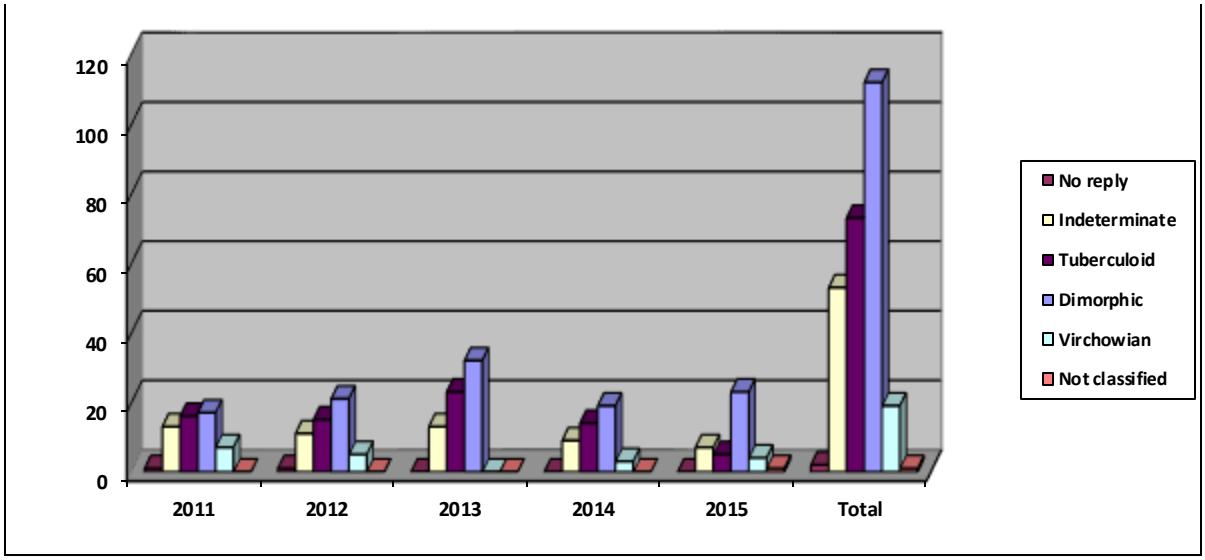
The predominance of cases of leprosy in children under 15 years of age in the urban area is identified, with 75.38% (196 cases). The rural area corresponds to 20% (52 cases) and the peri-urban area (0.76%) (2 cases). There is also an important fact that shows the non-registration by the person responsible for the notification in the area of residence, with 3.46% (9 cases) ignored / blank. Underreporting is often related to the lack of knowledge on the part of health professionals of the importance and procedures adopted by health surveillance systems. The occurrence of leprosy as well as other infecto-contagious diseases are usually present in urban conglomerates. Brazilian cities face serious problems regarding the lack of adequate housing, the provision of sanitation, the transportation system and other services, and even health care. A similar result was found by Miranzi et al (2010), when assessing the epidemiological profile of leprosy in a Brazilian municipality, in the period from 2000 to 2006, where 82.8% of the new cases of leprosy lived in the urban area. Data from the IBGE show that in the 1940s to 1960 the resident population by domicile zone in Brazil was more prevalent in rural areas. Since 1970 there is a significant demographic change for urban areas in Brazil, especially in medium and large cities (IBGE, 2001).

It should not be judged that migration to urban centers and the high rate of urbanization of the Brazilian population are the main causes of the spread of infectious-contagious diseases. Several factors are attributed to the maintenance or even increase of this type of disease in medium and large cities. Among them are the deficit of housing and infrastructure services, poor income distribution, high unemployment or underemployment rates, and of course, little investment in public health measures (Gomes, 2005).

There are occurrences of leprosy cases in children under 15 years of age in 36 municipalities (69.23%) of the 52 existing in the state of Rondônia. A higher occurrence of cases occurred in 6 municipalities (Ariquemes, Cacoal, Ji-Paraná, Porto Velho, Rolim de Moura and Vilhena), totaling 59.23% (154 cases). This fact can be justified because these cities are the most populated of Rondônia, having a better infrastructure in the health services, and serving according to the criteria of the State Agency of Health Surveillance (AGEVISA) as regional reference points for the diagnosis of leprosy in (GAB / MS 3,125 / 2010) (Ministry of Health) determines that only services with trained and experienced professionals can perform a diagnosis of leprosy in children under 15, due to the difficulty of age group.

An important fact to note is that in 16 municipalities (30.76%) of the 52 existing in Rondônia, there were no records of leprosy cases in children under 15 years of age in the study period. According to the Ministry of Health criteria, Rondônia is classified as a hyperendemic state, that is, it has a high detection coefficient (> 40 cases of leprosy per 100,000 inhabitants). The lack of notification of cases in these 16 municipalities may imply fragility in municipal health care services regarding health surveillance actions.

Graph 4 - Distribution of cases of leprosy, in children under 15, by Clinical Form according to year of notification



Source: SINAN – AGEVISA/RO, 2016.

In the analysis of graph 4, the occurrence of leprosy cases in children younger than 15 years of age, distributed in the clinical forms Dimorphic (43.07%), Tuberculoid (28.07%), Indeterminate (20,38), Virchowian and 1.15% unclassified or unfilled clinical form in the notification. Similar data were also found in Alencar's (2008) survey

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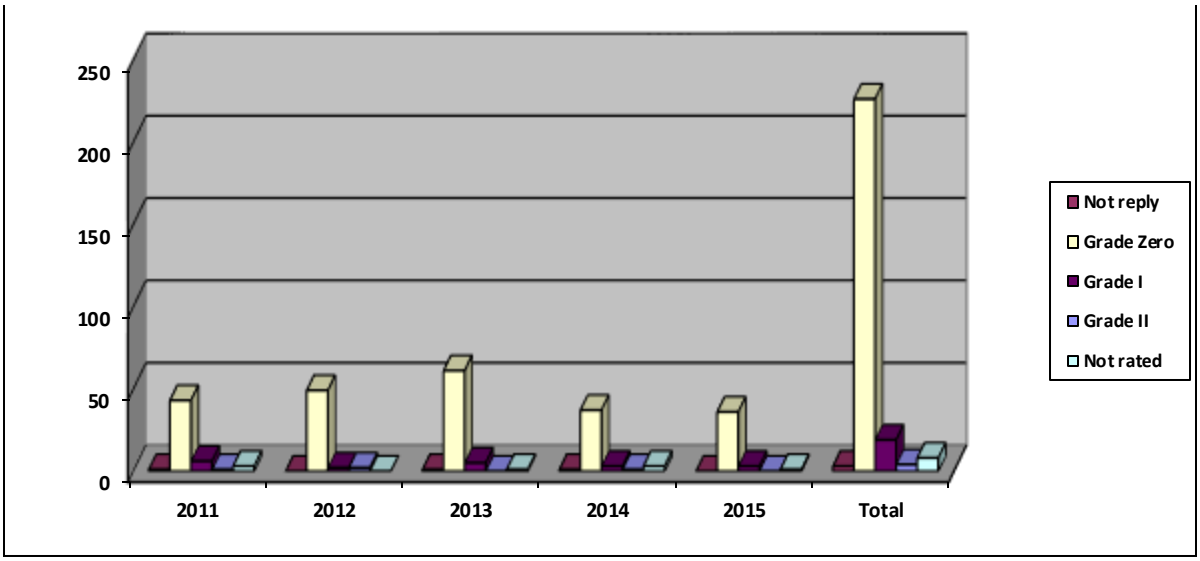
on the epidemiological and operational aspects of leprosy in Fortaleza-CE, (2008), where 35.2% of the cases were in clinical form Dimorphic. Lima et al. (2010) identified 7 (12.5%) cases of leprosy in children under 15 years of age in a study carried out in São Luiz-Maranhão on the epidemiological profile of patients with leprosy treated at the Health Center in 2007 -2008, showed predominance in Dimorphic (58.5%) and Virchowian (19.6%). A large number of cases of leprosy in the age groups of less than 15 years, especially in the Dimorphic forms, in Rondônia, indicate hyperendemicity in the State, besides a deficiency in surveillance and control of the disease, which causes a possible lack of implementation of effective health policies aimed at the early diagnosis of the disease.

Regarding the patient's entrance into the health services, the presence or not of physical disability at the time of diagnosis, it is identified that 86.92% of patients with Grade Zero (without neural involvement of the face, upper and lower limbs) , 7.30% of patients with Grade I (with decrease or loss of sensation in eyes, hands or feet), 1.53% with grade II (presence of visible deformities in the face, upper and lower limbs) and 4.23% unvalued and ignored / blank record. Imbiriba et al (2008) evaluated the Epidemiological Profile in children and adolescents, in the period 1998-2005, in Manaus-AM, that the degree of disability at the time of diagnosis was evaluated in 94.7% of the patients, resulting in proportion of 2.9% of cases with physical disabilities (Grade I and II) among the new cases detected in the period. A similar result was found by Romão et al (2013), when evaluating the epidemiological profile of leprosy in the municipality of Guarulhos-São Paulo, from 2004 to 2009, where 15.87% of the new leprosy cases presented Grade I and II of disabilities. Although in Rondônia there is a higher percentage of patients with Grade Zero (226 cases), it is noteworthy that 23 patients (19 with Grade I, and 4 with Degree II) entered the service with installed physical incapacity, evidencing a late diagnosis.

Graph 5 - Distribution of cases of leprosy, in children under 15 years, by Physical Impairment Assessment in the second diagnosis year of the notification.



Source: SINAN – AGEVISA/RO, 2016

In the analysis of the frequency of nerves affected by leprosy at the time of diagnosis, there is a higher percentage of patients without affected nerves in all years, making up 75.7% (197 patients) in the study period. It is also noted the occurrence of 19.61% (51 patients) with 1 to 3 affected nerves; 3.84% (10 patients) with 4 to 6 affected nerves, and 0.76% (2 patients) presenting 7 to 9 nerves affected by leprosy at the time of diagnosis. Neural involvement in leprosy is predominant in peripheral nerves with mixed functions (autonomic, sensory, and / or motor), being the facial, trigeminal and auricular nerves (in the face); radial, ulnar and medial (upper limbs), fibular and tibial (lower limbs), most affected by neural inflammatory processes (neuritis). Neurites are responsible for the installation of physical disabilities in leprosy and the development of physical deformities, maintaining stigma and prejudice in relation to the disease. Avanzi et al. (2016) reaffirm that the presence of disability at the time of diagnosis may indicate that it is being delayed, because they develop later, suggesting an ineffective control of leprosy, which when present in children younger than five years may be potentially incapacitating by the precocity of illness and the possibility of deformities.

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It is important to note that 24.23% (63 patients) presented more than 1 (one) peripheral nervous trunk affected at the time of diagnosis, and may evolve during the course of treatment with the development of neural complications in leprosy. The patient's entry into the health service with already affected nerves clearly indicates the late diagnosis, sometimes provided by the non-mobilization of the health teams for the sensitization and exposure of the signs and symptoms to the general population, not active search of cases in the community, and failures in health surveillance actions in Rondônia.

When analyzing the performance of Bacilloscopy at the time of diagnosis, a greater percentage of patients with negative bacilloscopy were identified in all the years, making up 62.69% (163 patients) in the study period. It also shows the occurrence of 16.92% (44 patients) with positive sputum smear microscopy; 12.69% (33 patients) with no sputum smear at the time of diagnosis, and 7.69% (20 patients) with Ignored / Blank data. Hinrichsen et al (2004) assessed the epidemiological aspects of leprosy in the city of Recife-Pernambuco in 2002, and found that smear microscopy was performed in 392 patients (86.2%), and of these, 155 (34.1%) presented positive values (positive smear microscopy). Brazil (2008) determines that smear microscopy in leprosy is a complementary examination at the time of diagnosis, and its realization in all clinical forms of leprosy is not mandatory, since the Paucibacillary (Indeterminate and Tuberculoid) forms of Bacilloscopy are always negative, and the Multibacillary forms may present negative or positive smear microscopy (Dimorphic), and always positive (Virchowian). The examination is invasive, and painful, and the performance in individuals under the age of 15 years can be extremely traumatic, bringing important psychological repercussions that can affect the acceptance of the disease, the treatment, the self-esteem of the child, and the relatives.

Regarding the detection of the New Case (241 patients), there is a higher prevalence of Contact Examination in 2011, by spontaneous demand in the years 2012 to 2014, and referral in 2015. In the total period, 39.41% were on spontaneous demand (95 patients), 32.36% were by contacts (78 patients), 26.14% were referred by other professionals (63 patients) and 1.24% were by collective examination (3 patients). In a study conducted by Melão et al (2011) to evaluate the epidemiological profile of leprosy patients in the extreme south of Santa Catarina, from 2001 to 2007, 61.1% of patients entered the service by medical referral, 13% by spontaneous demand, and 3.7% by contact examination. The spontaneous demand for services demonstrates that leprosy control actions, whether at primary health care (PHC) or referral services, are not as effective. In order to have an effective control of the disease, it is necessary to provide and prioritize the diagnosis by Examination of Collectivity (through health care efforts) and by Contact Examination. The Ministry of Health defines that the most probable source of infection is the intradomiciliar contact. Therefore, the contact examination is imperative in leprosy control actions.

When analyzing the mode of exit of the patient under 15 years of health services, a greater percentage of patients receiving Cure per year in all years, accounting for 86.15% (224 patients) in the period of the study, is perpetuated. Ferreira et al (2005) identified a similar result when performing an epidemiological study of leprosy in children under fifteen years of age in the city of Paracatu-MG (1994 to 2001), since of the 45 patients diagnosed and treated, 100% were discharged for cure. In a study conducted by Oliveira et al (2014) on the epidemiological profile of leprosy in Maricá, Rio de Janeiro, 87.5% of patients were discharged for cure. In our study, we also observed the occurrence of 4.61% (12 patients) with an out-of-shape outflow; 2.30% (6 patients) Transferred to another State; 1.92% (5 patients) Transferred to the same municipality; 1.92% (5 patients) Transferred to Another Municipality; 1.53% (4 patients) receiving discharge due to abandonment, and 1.53% (4 patients) due to diagnostic error.

When analyzing the assessment of physical incapacity at discharge, a higher percentage of patients with Grade Zero was observed in all years, accounting for 72.30% (188 patients) in the study period. Note also the occurrence of 20% (52 patients) with Ignorado / Blank record; 3.46% (9 patients) with Grade I impairment (decreased sensitivity of the cornea, hands and / or feet); 3.07% (8 patients) Not Rated; and 1.15% (3 patients) presenting Grade II (with visible physical deformity) at the time of hospital discharge. Imbiriba et al (2008) evaluated the degree of incapacities at discharge from the study on Epidemiological Profile in children and adolescents between 1998 and 2005, in Manaus-AM, identifying the disability assessment in 365 patients (82, 7%), and showed that eight children (2.2%) had grade I and 15 (4.1%) grade II disabilities.

IV. FINAL CONSIDERATIONS

The data of the study reflect a great fragility of development and integration of leprosy control actions in the public health network in Rondônia. The character of neglected disease (according to a new nomenclature attributed to infectious diseases by the Ministry of

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Health), leprosy is a real fact in Rondônia. During the study period, Rondônia diagnosed 260 cases of leprosy in children under 15, corresponding to 6% of the total cases in the state. 72.30% were aged between 10 and 14 years. The prevalence was males with 54.6% of the cases. The year of greatest detection was 2013 with 68 cases. The most frequent operational classification was multibacillary with 51.15%. Residents in urban areas accounted for 75.38%. Of the 52 municipalities in Rondônia, 69.23% detected cases of leprosy in children under 15 years of age. The most prevalent clinical form was Dimorphic with 43.07%. In the neurological evaluation of the patient at the time of diagnosis, 86.92% had zero degrees of disability, 75.7% had no affected nerves at the time of diagnosis, 62.69% had Bacilloscopy, had a negative result, 39.41% entered services by spontaneous demand. 86.15% were discharged for cure, and 72.30% were discharged from service with a zero disability grade. Despite its decrease, the coefficient of detection of leprosy in children under 15 years of age in Rondônia maintains a very high level of endemicity and demonstrates difficulty in controlling the disease by the health authorities. As demonstrated in the study, we emphasize that 78.84% of patients enter the service with advanced clinical forms (Tuberculoid, Dimorphic and Virchowian); 24.23% with some degree of neural involvement, and 16.92% with positive sputum smear microscopy (infectious sources of the disease). An expressive number of patients entering health services by spontaneous demand demonstrates that leprosy control actions, whether at primary health care (PHC) or referral services, are not as effective. Brazil, and even Rondônia, has an extensive territory, and despite having a single political health system in force throughout the country, it coexists with a significant cultural diversity. New studies should be encouraged, especially in the northern region of the country, where conditions of access to health are still difficult, and unfavorable socioeconomic conditions, may lead to an increase in cases of leprosy in children under 15 years, and consequently, neural disorders, which may evolve with important physical disabilities, maintaining stigma and prejudice in relation to the disease. Therefore, a strategy of sustained and adequate control of the local endemic situation, with planning and using all the tools available and adequate according to the known scientific evidence, is essential, that achieves activities of information, education and communication of great reach.

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