

44 - MORBIDITY PROFILE FOR INFECTIOUS MEDICAL CONDITIONS AMONG CHILDREN FROM 0 TO 12 YEARS

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1 INTRODUCTION

The epidemiological profile of a population varies from space to space, since this is influenced by multiple factors, such as social, economic, environmental, historical, cultural, demographic, advancement of science, among others. In the late nineteenth to the twentieth century, a major public health problems that still remained were infectious diseases, such as cholera, yellow fever, smallpox, tuberculosis, which are responsible for high rates of infant mortality and low expectancy life of society. This circumstance evidenced mostly by poor sanitation, inadequate housing, unhealthy working conditions and low education level. (BUCHALLA et al. 2003).

It is noteworthy that there have been changes in society that led to significantly reverse the scenario before tax. Thus:

[...] During the twentieth century, the expansion of urban sanitation, the improvement in the conditions of nutrition, raising the level of education, development of new medical technologies and the expansion of service coverage allowed a significant improvement in the conditions of man's life (BUCHALLA et al. 2003, p.336).

So over the years there has been changes in the Brazilian population structure, so that:

[...] The epidemiological transition, characterized by the progressive evolution of a profile of high mortality from infectious diseases to one dominated by the other deaths from cardiovascular diseases, neoplasms, external causes and other chronic degenerative diseases considered (OMRAN, 1971 apud PRATA, 1992, p. 168).

But despite the change in the epidemiology, infectious diseases are still responsible for many hospitalizations and deaths around the world and still located in Brazil, the character of a developing country and the peculiarity of these diseases affect mainly the population of low economic. It is important to note that there still remains an excess of deaths from preventable diseases that primarily affect regions and disadvantaged social sectors of Brazilian society, people living primarily in northeastern space (SIMÕES; LEITE, 1994).

Putting ourselves in the reality of Mossoró, speaking in infectious diseases highlight the Regional Hospital Dr. Rafael Fernandes (HRF) which is a reference to infectious diseases in the town of Mossley and the entire region of western Rio Grande do Norte. It was through contact with the health service in graduation practices we observed a significant number of children admitted at the hospital with various infectious diseases.

Given this fact, we come to the following question: What were the main infectious contagious diseases which affected more frequently children 0-12 years who were admitted to the Hospital Regional Rafael Fernandes? The occurrence of these diseases show a relationship with age and economic status of families of these children?

Although not the diseases that cause most deaths in the country, infectious diseases still remain a challenge for public health. From this it is that we feel the need to know about these diseases and research in order to emphasize what were the most prominent.

The research is relevant as it allows the assessment of the epidemiological data of a population from a referral service. This, one possible explanation of the reality and encourages discussions to health promotion and prevention of infectious diseases actually searched.

The research turns to the infectious diseases, which is of fundamental importance both to identify the types of diseases that affect a given population, and for health professionals know of instances of these diseases in the regions where they attend. Knowing that they are related to diseases of immense size and great geographic distribution, we can highlight Tuberculosis and Leprosy as ancient disease, which to this day people die because they do not seek medical treatment, being all important to the work of professional education in health.

The paper aims to describe the guiding epidemiology of infectious diseases in the population from 0 to 12 years was admitted in 2009 and 2010 in the HRF Mossoró.

2 METHODOLOGY

It is a descriptive, retrospective, documentary and quantitative approach.

The research was based on the records of children aged 0 to 12 years admitted with infectious diseases in the HRF in the years 2009 and 2010, and 35 records were consulted in 2009 and 20 in 2010.

Inclusion criteria were: being aged 0-12 years, were hospitalized with infectious diseases in the years 2009/2010 and exclusion are records that are strong with erasures.

The field of research was the Pediatrics Hospital Rafael Fernandes located at street Prudente de Moraes, S / N, a neighborhood in the of Santo Antonio, Mossoró / RN. Because it is a referral hospital for infectious diseases, and is the second largest hospital in the state of Rio Grande do Norte to care for infectious diseases, with a daily with local and regional demand.

Procedures of data analysis these were tabulated using Excel 2007 and arranged in graphics. After describing the age and economic situation, we draw a profile of this population in discussion and to compare the frequency of occurrence per year.

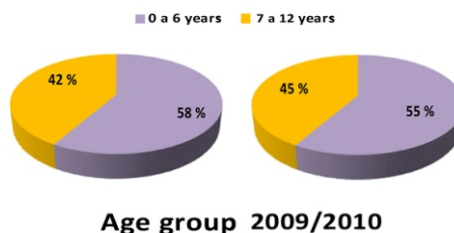
Data were collected after approval by the Ethics Committee in Research of the University with Potiguar Protocol 162/2010, CAAE: 0166.0.052.000-10.

3 DISCUSSION AND ANALYSIS OF DATA

One of the data collected was the age group of children affected by infectious diseases contagious, since the younger the child is more susceptible to infections and immune visor physiological immaturity.

It is also known that some children's behaviors foster the spread of these diseases, for example, that children put, on average, the hand or other object in the mouth once every three minutes, which facilitates the transmission of diseases. It is common that some infections are presented in the form of subclinical disease. Thus, many infections are transmitted before meeting the index case (NUNES et al. 2010).

Chart 1 - Age



Source: Medical records of the Hospital Dr. Rafael Fernandes.

In 2009, 58% of children between 0 and 6 years, 42% between 7 and 12 years. In 2010 55% of children between 0 and 6 years, 45% were between 7 and 12 years. The data show did not occur in a significant difference between the age groups of children admitted in the years compared. And while younger children were more affected by contagious infectious diseases.

Among the data collected, we mention the socio-economic situation as a factor of great importance when investigating contagious infectious diseases, since many of these disorders is directly related to socioeconomic indicators such as housing, sanitation, among others.

Chart 2 - Household Income.



Source: Medical records of the. Hospital Dr. Rafael Fernandes.

Regarding the economic situation of families of children affected by these diseases in 2009 is that 57% of households have incomes between 1 and 2 minimum wages, 6% of households have income above 2 minimum wages, and 37% of families do not have fixed income. In the year 2010 is that 60% of households have incomes between 1 and 2 minimum wages, 5% of families, more than two minimum wages, and 35% no fixed income.

The data show that in families with lower income children were more affected by contagious infectious diseases.

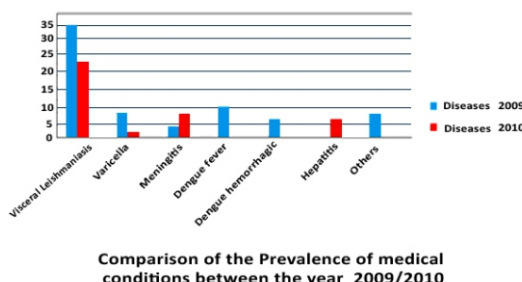
It is understood that infectious diseases are associated in some way to poverty, education and health and also the vertical transmission (transmission from mother to child during pregnancy) and that these elements contribute to the emergence of some types of infectious diseases such as tuberculosis, leprosy, visceral leishmaniasis, STDs, yellow fever, leptospirosis, hepatitis, polio, measles, rubella, mumps, tetanus, diphtheria, measles, HIV / AIDS, meningitis, influenza and others.

To achieve optimal health, the human good depends on socio-economic-cultural, such as food, adequate housing, education, a job that allows an income commensurate with their needs, transportation, recreation, clean environment freedom, access to housing and, above all, access to health services (CRUZ, 2005, p. 05).

Simões e Leite (1994) monitoring the effect of a set of variables on mortality in childhood, they conclude that the absence of adequate sanitation and quality of material used in housing continue to be important factors related to the survival of children in the country particularly in the Northeast that, as mentioned, is the region that still continues to have high proportion in mortality due to infectious diseases.

It is assumed that the lack of control some of these factors needed to have a healthy life can cause an imbalance in the body of both the adult and the child, providing a greater susceptibility of contracting an infectious disease. In the case of the infant in front of their fragility and incompleteness of their immunization schedule, it becomes easier to contract these diseases, since their immunological window is still open to some types of diseases.

Chart 3 - Pathology



Source: Medical records of the Hospital Dr. Rafael Fernandes.

The results show that the major infectious diseases in the HRF recorded in medical records of children aged 0 to 12 years for 2009 are 60% visceral leishmaniasis, the varicella 11%, meningitis 6% to 14% classic dengue, dengue hemorrhagic 8% other 11%. The results for 2010 show that 50% of visceral leishmaniasis, the Meningitis 20%, hepatitis 15%, and varicella 5%, as shown in chart 3.

According to Aguiar (2009) Visceral leishmaniasis in Brazil is similar to Europe, in the sense that children are the main victims, and the reservoir of infection is the domestic dog. This fact is related to the frequency and the child have contact with domestic dogs.

Based on the above data, it can be concluded that there was a considerable increase in cases of visceral leishmaniasis in 2009, as can be evidenced by the fact that there is a zoonoses control center in the city. The center was created only in 2010 and then came the intensification of the work of agents of endemic active search dogs that lived at home and were infected.

Strategies for prevention and control of visceral leishmaniasis include: appropriate care for the early diagnosis and treatment of patients; wandering dog population control, serology is recommended in cases of previous donations, dog euthanasia for all seropositive animals, among other activities (BRAZIL, 2008).

As for varicella, Aguiar (2009) says that this pathology is part of a group of diseases called (childhood diseases) as preferentially affects children, with the highest incidence between two and eight years. By the third or fourth month of life, children are protected by maternal antibodies (transmitted by the mother during pregnancy) if the mother had the disease previously.

According to the Ministry of Health, meningitis is more common in children from 1 month to 2 years old. The most important early symptoms of meningitis are fever, headache, stiff neck, sore throat and vomiting (BRAZIL, 2008).

Regarding dengue stress, according to the Ministry of Health, which by 2004 had virtually no record of the disease in children under 15 years in Brazil. Today, they represent 25% of cases across the country. In some cities like Rio de Janeiro, Manaus and Fortaleza, more than half of those infected are children (BRAZIL, 2008).

Both dengue fever and dengue hemorrhagic fever appeared, according to data collected only in 2009, which may be explained by the absence of data from the month (January, February, March, 2010), which led to an inaccuracy in this comparison, for, as we know, dengue is a disease that affects mainly the tropical and subtropical countries, epidemics occurring shortly after the rainy season and summer months of (December-March) because there is an accumulation of water in leaves, branches plant, waste, where the mosquito lays its eggs in stagnant water. In this sense Donalísio; Glasser (2002), explain that there is established a strong association between the incidence of dengue and the rainy seasons, high temperatures, altitudes and winds.

Varicella cases compared with 2010, the year 2009 shows superiority. According to Aguiar (2009) Clinical manifestations of varicella cases occurring in nurseries are more intense than those occurring in the index case where the mortality rate is higher when compared with children who do not frequent such establishments. Thus, the occurrence of this pathology is linked to educational level, since in 2009 we studied 24 children who, in 2010 we had 11 children studied, in other words, a larger number of children attending kindergartens and schools therefore increase the chances to develop varicella.

Cases of meningitis were better than in 2010. According to Aguiar (2009) shows a predominance meningitis in temperate climates and occurs most frequently in the wintertime, being more prevalent in early childhood. Thus, we can compare the increase of the year 2010, the fact that this year the winter had become more intense in the town of Mossoró as compared to that station occurred in 2009.

Another relevant factor to this increase is that in 2010 had 3 children in the age group 0 to 6 years, by the year 2009 we had only one child within this age group thus relate this increase in 2010 the number of children placed in infancy (phase from birth to six years of age).

As the records were not characterized the types of hepatitis, can not make a cause / year of this disease, we can only highlight the occurrence of the same only in the year 2010.

The definition of others can relate the prevalence of AIDS, tuberculosis and other infectious diseases that is constantly on the list of these pathologies in the current health services, but we can not affirm this assumption, because the records were not made clear in the definitions these pathologies, which somehow may have masked a tort, thus delaying treatment.

This way, in individuals under 12 years, while increasing the occurrence of AIDS through sexual exposure, it is observed that the vast majority of cases diagnosed in 2005 resulted from vertical transmission, in other words, from mother to child during pregnancy / childbirth (BRAZIL, 2008).

With regard to tuberculosis and his involvement on children, it is known that tuberculosis is prevalent in childhood linked to two potential risk factors, the first is the failure of BCG vaccination coverage in our country and the second is related to the conditions socio economic and some families living in these poor living conditions, without proper treatment for waste, sewage and drinking water (BRAZIL, 2008).

By analyzing this data comparatively, we can not reliably the information on this comparison, since the records for the months of January, February and March 2010 were not available in the hospital sector, for reasons unknown.

In this context, this research showed real numbers shown by a graphological reading of a reality consistent with studies published by some literary scholars on infectious diseases.

4 CONCLUDING REMARKS

The data allowed us to realize that the epidemiology of infectious contagious diseases in the pediatric population was similar in the years 2009 and 2010. According to the data we noticed that the children of lower and age, aged between 0 and 6 years, and whose families had incomes between 1 and 2 minimum wages, were the most affected by infectious diseases contagious. This, data show the relationship between low income and the occurrence of contagious infectious diseases.

Among the diseases distinguished by a higher incidence of visceral leishmaniasis with 60% in 2009 and 50% in 2010, the varicella with 11% in 2009 and 5% in 2010 and 6% with meningitis in 2009 and 20% in 2010.

It was found that in 2009 there was an increase in cases of dengue fever, epidemics occurring shortly after the rainy season, as well as in summer. The increase can be explained by the fact that with the rains, the water accumulation occurs in leaves, flower pots, tires, branches of plants, bottles and garbage, where the mosquito lays its eggs in stagnant water and therefore having their proliferation, invading urban areas and causing outbreaks and reaching the majority of the population. It is emphasized that the disease can be prevented with the cooperation of the population through environmental hygiene measures.

This, as contagious infectious diseases continues to victimize the population it is necessary to intensify the training of health professionals to guide the public about their health and disease prevention. Taking action and developing programs designed to bring care closer to the citizen. By this it is necessary that governments provide appropriate care professionals to

recycle themselves, specialize and therefore offer a better job.

It is worth noting that although with all the advancement of science and technology in the health sector to combat the infectious diseases still constitutes a major challenge.

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MORBIDITY PROFILE FOR INFECTIOUS MEDICAL CONDITIONS AMONG CHILDREN FROM 0 TO 12 YEARS

The objective of this research was to describe the epidemiology of infectious diseases in the population from 0 to 12 years, admitted in 2009 and 2010 Hospital Dr. Rafael Fernandes, in Mossoró / RN. It is a descriptive, documental, retrospective and quantitative approach was based on the records of children aged 0 to 12 years admitted with infectious diseases in the HRF in the years 2009 and 2010. Data were analyzed using Excel 2007 and arranged in graphics. Data were collected after approval by the Ethics Committee in Research of the University with Potiguar Protocol 162/2010, CAAE: 0166.0.052.000-10. In 2009, 58% of children aged between 0 and 6 years, 42% between 7 and 12 years. In 2010, 55% of children between 0 and 6 years, 45% were between 7 and 12 years. Regarding the economic situation of families of children affected by these diseases in 2009 is that 57% of households have incomes between 1 and 2 minimum wages, 6% income above 2 minimum wages, and 37% have no fixed income. In the year 2010 is that 60% of households have incomes between 1 and 2 minimum wages, 5% of households, more than two minimum wages, and 35% no fixed income. The main infectious diseases recorded in the HRF, for 2009 are 60% visceral leishmaniasis; chickenpox 11% 6% meningitis, 14% classic dengue, dengue hemorrhagic 8%, others 11%. The results for 2010 show that 50% of visceral leishmaniasis, meningitis 20%, hepatitis 15%, 5% and chickenpox. The data allowed us to realize that even with all the advancement of science and technology in the health sector to combat the infectious diseases still constitutes a major challenge.

KEYWORDS: Infectious Diseases; Child; Morbidity

PROFIL DE MORBIDITE POUR LES MALADIES INFECTIEUSES CONDITIONS MÉDICALES CHEZ LES ENFANTS DE 0 A 12 ANS

L'objectif de cette recherche était de décrire l'épidémiologie des maladies infectieuses dans la population de 0 à 12 ans, admis en 2009 et 2010 Hôpital Dr. Rafael Fernandes, en Mossoró / RN. Il s'agit d'un descriptif, l'approche documentaire, rétrospective et quantitative a été basée sur les enregistrements d'enfants âgés de 0 à 12 ans admis avec les maladies infectieuses dans le HRF dans les années 2009 et 2010. Les données ont été analysées en utilisant Excel 2007 et disposés dans des graphiques. Les données ont été recueillies après l'approbation par le Comité d'éthique en recherche de l'Université d'Potiguar Protocole 162/2010, CAAE: 0166.0.052.000-10. En 2009, 58% des enfants âgés entre 0 et 6 ans, 42% entre 7 et 12 ans. En 2010, 55% des enfants entre 0 et 6 ans, 45% étaient âgés entre 7 et 12 ans. Concernant la situation économique des familles des enfants touchés par ces maladies en 2009 est que 57% des ménages ont des revenus entre 1 et 2 salaires minimum, le revenu de 6% au-dessus de deux salaires minimum, et 37% n'ont pas de revenu fixe. En l'an 2010 est que 60% des ménages ont des revenus entre 1 et 2 le salaire minimum, 5% des ménages, plus de deux salaires minimum, 35% et sans revenu fixe. Les principales maladies infectieuses enregistrées dans le HRF, pour l'année 2009 sont de 60% la leishmaniose viscérale; varicelle méningites 11% 6%, 14% la dengue classique, la dengue hémorragique 8%, autres 11%. Les résultats pour 2010 montrent que 50% de la leishmaniose viscérale, la méningite à 20%, l'hépatite 15%, 5% et la varicelle. Les données nous ont permis de réaliser que même avec tous les progrès de la science et la technologie dans le secteur de la santé pour lutter contre les maladies infectieuses constitue encore un défi majeur.

MOTS-CLÉS: Maladies infectieuses; Enfant; Morbidité

MORBILIDAD PERFIL DE INFECCIOSAS CONDICIONES MÉDICAS DE LOS NIÑOS DE 0 A 12 AÑOS

El objetivo de esta investigación fue describir la epidemiología de las enfermedades infecciosas en la población de 0 a 12 años, admitió en 2009 y 2010 el Hospital Dr. Rafael Fernandes, en Mossoró / RN. Se trata de un enfoque descriptivo, documental, retrospectivo y cuantitativo se basó en los registros de los niños y niñas de 0 a 12 años ingresados por enfermedades infecciosas en la HRF en los años 2009 y 2010. Los datos fueron analizados utilizando Excel 2007 y se disponen en los gráficos. Los datos fueron recolectados después de la aprobación por el Comité de Ética en Investigación de la Universidad Potiguar Protocolo 162/2010, CAAE: 0166.0.052.000-10. En 2009, el 58% de los niños de entre 0 y 6 años, el 42% entre 7 y 12 años. En 2010, el 55% de los niños entre 0 y 6 años, 45% tenían entre 7 y 12 años. En cuanto a la situación económica de las familias de los niños afectados por estas enfermedades en 2009 es que el 57% de los hogares con ingresos entre 1 y 2 salarios mínimos, el 6% de ingresos por encima de 2 salarios mínimos, y el 37% no tiene ingresos fijos. En el año 2010 es que el 60% de los hogares con ingresos entre 1 y 2 salarios mínimos, el 5% de los hogares, más de dos salarios mínimos, y el 35% no tiene ingresos fijos. Las principales enfermedades infecciosas registradas en el HRF, para el año 2009 son un 60% la leishmaniasis visceral, la varicela el 11% de meningitis 6%, un 14% el dengue clásico, dengue hemorrágico, 8%, otros 11%. Los resultados para 2010 muestran que el 50% de la leishmaniasis visceral, la meningitis 20%, 15% de la hepatitis, el 5% y la varicela. Los datos nos ha permitido darnos cuenta de que incluso con todos los avances de la ciencia y la tecnología en el sector de la salud para combatir las enfermedades infecciosas sigue siendo un gran desafío.

PALABRAS CLAVE: Enfermedades Infecciosas; Niño; Morbilidad

PERFIL DE MORBIDADE POR PATOLOGIAS INFECTO-CONTAGIOSAS ENTRE CRIANÇAS DE 0 A 12 ANOS

O objetivo da pesquisa foi descrever o comportamento epidemiológico das doenças infecto-contagiosas na população de 0 a 12 anos, internadas no ano de 2009 e 2010 no Hospital Doutor Rafael Fernandes, em Mossoró/RN. Trata-se de uma pesquisa descritiva, documental, retrospectiva e de abordagem quantitativa, teve como base o prontuário de crianças de 0 a 12 anos internadas com doenças infecto-contagiosas no HRF nos anos de 2009 e 2010. Os dados foram analisados utilizando o Excel 2007 e dispostos em gráficos. Os dados foram coletados após a aprovação pelo comitê de Ética em Pesquisa da Universidade Potiguar com protocolo nº 162/2010, CAAE: 0166.0.052.000-10. No ano de 2009, 58% das crianças, tinham entre 0 e 6 anos; 42% entre 7 e 12 anos. No ano de 2010, 55% das crianças tinham entre 0 e 6 anos; 45% tinham entre 7 e 12 anos. No que tange a situação econômica das famílias das crianças acometidas por essas patologias, em 2009 tem-se que 57% das famílias tem renda entre 1 e 2 salários mínimos, 6% renda superior a 2 salários mínimos, e 37% não tem renda fixa. No ano de 2010 tem-se que 60% das famílias tem renda entre 1 e 2 salários mínimos, 5% das famílias, mais de 2 salários mínimos, e 35% sem renda fixa. As principais patologias infecto-contagiosas registradas no HRF, referentes a 2009 são a leishmaniose visceral 60%; a varicela 11%; a meningite 6%; a dengue clássica 14%; dengue hemorrágica 8%; outros 11%. Os resultados referentes a 2010 mostram que a leishmaniose visceral 50%; a meningite 20%; as hepatites 15%; e a varicela 5%. Os dados permitiram perceber que embora com todo o avanço da ciência e tecnologia na área da saúde o combate as patologias infecciosas ainda se constitui como um grande desafio.

PALAVRAS-CHAVE: Doenças Infecto-Contagiosa; Criança; Morbidade