

### Leprosy: focusing on health education for projevem

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## RESEARCH

Hanseníase: enfocando a educação em saúde para o projoem

Leprosy: focusing on health education for projoem

Lepra: centrarse en la educación de la salud para projoem

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### ABSTRACT

**Objective:** To identify the knowledge of adolescents linked to the National Program for Youth Inclusion on leprosy, involving issues such as etiology, transmission, signs and symptoms and the search for treatment. **Method:** An exploratory and descriptive study. For data collection was used a questionnaire with closed questions about the disease before and after the educational action with 109 young men and women 13-17 years old. **Results:** Show of knowledge regarding the etiology, transmission, signs and symptoms, and acquired after the lecture. **Conclusion:** Health education enables the nursing staff to promote interactive and dynamic knowledge of the young. **Descriptors:** Health Education; leprosy; Nursing.

### RESUMO

**Objetivo:** Identificar o conhecimento dos adolescentes ligados ao Programa Nacional de Inclusão de Jovens, sobre a hanseníase, envolvendo temas como etiologia, transmissão, sinais e sintomas e a busca pelo tratamento. **Método:** Estudo exploratório e descritivo. Para a coleta de dados foi utilizado um questionário contendo questões fechadas sobre a hanseníase antes e após a ação educativa com 109 jovens de ambos os sexos de 13 a 17 anos de idade. **Resultados:** Mostram o desconhecimento quanto a etiologia, transmissão, sinais e sintomas, sendo adquirido após a palestra. **Conclusão:** A educação em saúde possibilita ao profissional de enfermagem a promover de forma interativa e dinâmica o conhecimento do jovem. **Descritores:** Educação em Saúde; Hanseníase; Enfermagem.

### RESUMEN

**Objetivo:** Identificar los conocimientos de los adolescentes vinculados al Programa Nacional de Inclusión de Jóvenes sobre la lepra, que implica cuestiones como la etiología, transmisión, signos y síntomas y la búsqueda de tratamiento. **Método:** Un estudio exploratorio y descriptivo. Para la recolección de datos se utilizó un cuestionario con preguntas cerradas sobre la enfermedad antes y después de la acción educativa con 109 hombres y mujeres jóvenes de 13-17 años de edad. **Resultados:** Show de conocimiento sobre la etiología, transmisión, signos y síntomas, y adquirida después de la conferencia. **Conclusión:** La educación en salud permite al personal de enfermería para promover el conocimiento interactivo y dinámico de los jóvenes. **Descriptor:** Educación para la Salud; La lepra; Enfermería.

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## INTRODUCTION

Considered infectocontagiosa disease, leprosy is caused by the bacteria *Mycobacterium leprae*. The disease manifests through signs and symptoms dermatoneurológicos, which can cause skin lesions and reduction of thermal sensitivity, painful and tactile, which makes high crippling potential.<sup>1</sup>

Over the years, the disease has become endemic to becoming a public health problem and of international interest. In an attempt to reduce, the World Health Organization (WHO) established the commitments being made by endemic countries, among them, Brazil.<sup>2</sup>

The first commitment - still in force - is 1991, which proposes to reduce the number of leprosy cases in the country to 1 in every 10 thousand inhabitants, with a deadline of the beginning of the XXI century. The second refers to the reduction of prevalence of leprosy in the period between 2011 and 2015, whose goal is the reduction of grade 2 disability by 35%.<sup>2-3</sup>

From this, Brazil adopted the leprosy elimination strategies for the years 2011 and 2012. In the latter, the prevalence rate of presented cases was 1,51 for every 10 thousand inhabitants - higher than the set at the World Assembly Health -, while the reduction of new cases with grade 2 disability was 3,6% per year between 2008 and 2012.<sup>3</sup>

Among the indicators of prevalence of leprosy in endemic regions, the occurrence in children under 15 years is also evident. The high vulnerability of early exposure and intense young man with the bacteria causes the development of the disease, and is an indicator of the extent of the transmission (bacteria) in society.<sup>4</sup> In Brazil, in the year 2009 have been detected 2.669 (7,1%) new cases of the disease in children under 15 years.<sup>5</sup>

The State of Rio Grande do Norte (RN) presented in the year 2012 incidence of 2,2% new cases of leprosy in children under 15 years of age. Compared with the States of Ceará and in Paraíba, neighbors geographically, the numbers are smaller, one that they have rates of 5,3% to 4,87%, respectively.<sup>5</sup>

In order to achieve the goals established by the WHO still in force, as well as reduce the number of cases in children under 15 years of age, the National Leprosy Control Program (NLCP), stresses the importance of the activities of health education as a strategic point in their identification and prevention of disabilities, especially if it is aimed at young people.<sup>3</sup>

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Directed to young people, the Social Assistance system, developed the National Youth inclusion Programme - Projovem. This program is the service and strengthening bond (SCFV), aimed at adolescents from 13 to 17 years, which aims to stimulate reflective and critical capacity of this age group, guiding them in the process of construction and reconstruction of their experiences through the development of activities that stimulate social coexistence and citizen participation.<sup>6</sup>

On the exposed, based on empirical research and in previous research with students between 13 and 24 years in which we have achieved success with the strategy used for

health education in the year 2011, as well as assuming that there is underreporting of new cases of leprosy in the state of Rio Grande do Norte (evidenced by the low index in relation to the surrounding States) the health education for young people to set up a strategy for the prevention and early detection of illness effectively and efficiently.

In order to direct the study, we start from the following question: what are the students' knowledge of Projovem in Parnamirim, on Christmas, the respect of leprosy? In order to answer such questions, in this sense, the objective of identifying the knowledge of teenagers linked to Projovem of Parnamirim about leprosy, involving topics such as etiology, transmission, signs, symptoms and seeking treatment.

## METHOD

The present study is exploratory descriptive type, quantitative in nature. Descriptive research does describe the characteristics of the researched reality, involving the use of standard techniques for data collection, in order to obtain new knowledge and information on the subject in study of approximate form, within a determined fact.<sup>7</sup>

The survey was conducted in the municipality of Parnamirim-RN, in the unity of Projovem in the Vale do Sol neighborhood, in September 2011. The criteria for selection of the drive was as informed by the technical staff responsible for the preparation and implementation of the activities in the project.

Target audience, we had young members Projovem the municipality, with a quantity of 560 people. The sample consisted of 109 adolescents from 13 to 17 years of both sexes.

The inclusion criteria used consists of: teenagers who agreed to participate voluntarily in the study, who were active in the program and that their legal guardians signed an informed consent, considered a fundamental methodological and ethical condition. Excluded students who were absent on the day of the lecture, which do not belong to the program and who refused to participate in the action.

In order to achieve the objective proposed by the study, the collection occurred through distinct phases. The first happened with the application of the questionnaire (pre-test), as a way to identify the students' prior knowledge about leprosy, further to health education, and ending with the re-application of the questionnaire (post-test), 15 days after the actions, whose purpose is to determine the effectiveness of health education on leprosy, contributing to the promotion of health.

The achievement of health education aimed to stimulate prior knowledge of young people with relevant information, through the use of the album tv series produced by the São Paulo Foundation against leprosy, which features simplified explanations about signs and symptoms, complications, transmission, prevention and treatment.

The instrument used in gathering data was a questionnaire with 10 questions closed about leprosy, compiled on the basis of the Ministry of health manuals, and obeying a sequential order: etiology, signs and symptoms, transmission, and the search for treatment.

The results obtained by the questionnaires were accounted for, organized and categorized in Microsoft Office Excel spreadsheet, followed by descriptive statistics and analysis presented in the form of tables.



The study was approved by the Research Ethics Committee of the Federal University of Rio Grande do Norte (UFRN) by means of the opinion n.º 204/2009.

By having the age of 18, Teenagers had the Consent and Informed (TCI) duly signed by their legal guardians.

## RESULTS

The participants were 105 adolescents of both sexes aged between 13 and 17 years old. When asked about the knowledge of leprosy, 51,37% of respondents said they had heard about the disease, rising to 90,82% after health education. However, among those who did not hear about the pathology, the variation was from 48,63% to 9,18%.

The aetiological aspect, the item "is a contagious infectious disease caused by bacteria" rose from 24,77% to 90,82%, and a significant reduction in the item "do not know" from 55,96% to 5,50%, the characterization as "a sexually transmitted disease" was 15,59% to 0,91%, and the reduction "a disease caused by carelessness of the person" 3,66% to 2,75%.

When related to leprosy transmission, there was an increase of knowledge in the transmission by the airways of 4,58% to 67,88%, and reduction of values when related to: sexual intercourse of 21,10% to 4,58%, about 4,58% supply to 2,75%, lack of hygiene of 3,66% to 7,33%, and the handshake 2,75% to 3,66%, and a significant reduction in the knowledge not of 62,38% to 10,09%, an increase of transmission when connected to the prejudice of 0,91% to 3,66%.

About the signs and symptoms of leprosy, there was increased on skin lesions and peripheral nerves of 17,43% to 82,56%, and reducing the signs of vomiting and diarrhea of 9,17% to 2,75%, high fever and cough of 8,25% to 3,66%, and severe pain of 4,58% to 5,50%, plus a considerable reduction in the item "I don't know" of 60,55% to 82,56%

When asked the appropriate conduct to be taken in the event of suspected leprosy, 57,79% reported knowing where to get help, among these, 84,12% reported that the proper place for help is some health service, while 7,93% informed school and 7,93% to church. 42,20% already reported not knowing the appropriate place to seek help.

After the educational action the search result changes positively on appropriate conduct in cases of suspected leprosy to 96,33% the number of young people who know the proper place to seek help in case of suspicion of the disease. This location, 94,28% of the participants associated the option in any health service, 3,80% to 1,90% in the Church and school, remaining only 3,66% of young people without knowing the suitable place to seek help in case of suspicion of the disease.

The question about the knowledge about the existence of cure for leprosy, there was increase in confirmation that the disease has a cure of 46,78% to 96,33%, as well as reduced as to not know of 49,54% to 1,83%, and that the disease has no cure of 3,66% to 1,38%.

After analysis of the results achieved with the activity of health education in leprosy for young gifts, through the pre-test there is a balance between knowledge and ignorance about the disease. However, after the actions occurred a significant change in the results, confirming the effectiveness of lectures about this disease, according to data represented in table 1.

Table 1: Comparison of the questionnaire in relation to leprosy in the pre-test and post-test. Parnamirim, RN, 2011

Questions	Pre-test	Post-test
Have you ever heard of leprosy?		
Yes	51,37%(56)	90,82%(99)
No	48,63%(53)	9,18%(10)
What is Leprosy?		
Is a infectious contagious disease caused by a bacterium	24,77%(27)	90,82%(99)
Is a sexually transmitted disease	15,59%(17)	0,91%(1)
Is a disease caused by carelessness of the person	3,66%(4)	2,75%(3)
I don't know	55,96%(61)	5,50%(6)
Leprosy is Transmitted:		
For Sexual Relations	21,10%(23)	4,58%(5)
For food	4,58%(5)	2,75%(3)
By prejudice	0,91%(1)	3,66%(4)
Through the respiratory tract	4,58%(5)	67,88%(74)
By poor hygiene	3,66%(4)	7,33%(8)
By handshake	2,75%(3)	3,66%(4)
I don't know	62,38%(68)	10,09%(11)
What leprosy on people?		
Vomiting and diarrhea	9,17%(10)	2,75%(3)
High fever and cough	8,25%(9)	3,66%(4)
Skin lesions and peripheral nerves	17,43%(19)	82,56%(90)
Severe Pain	4,58%(5)	5,50%(6)
I don't know	60,55%(66)	5,50%(6)
You know where to look for help in the event of suspected leprosy?		
Yes	57,79%(63)	96,33%(105)
No	42,20%(46)	3,66%(4)
If yes, what would be the most suitable site?		
Some Health Service	84,12%(53)	94,28%(99)
School	7,93%(5)	3,80%(4)
Church	7,93%(5)	1,90%(2)
Hansen's disease is curable?		
Yes	46,78%(51)	96,33%(105)
No	3,66%(4)	1,83%(2)
I don't know	49,54%(54)	1,83%(2)

## DISCUSSION

Despite the control policies adopted by Brazil, leprosy is still considered a public health problem because of its magnitude and its high power disabling. It reaches mostly the economically active age group, making the reduction when you have the ignorance about the disease.<sup>8</sup>

The ignorance of the young can cause the disease early, as reported in research conducted in the municipality of Juazeiro in Bahia, in the year 2012. In it, 55,6% of the research participants between the ages of 12 to 14 years were carriers of leprosy and the vast majority had no knowledge of the disease, thus causing change in your lifestyle.<sup>9</sup>

The issue of ignorance is characterized in this study, in which 51,37% (56) young people have heard about leprosy, however it was the ignorance of young as the etiology, transmission, signs and symptoms, thus causing a late diagnosis.

In this respect the health education, when understood by the target audience helps in the development of the diagnosis of the disease. Among the professionals responsible for the educational activity, the nursing professional, features as the main firing pin of educative actions in health promotion quest for being historically responsible for the production of the completeness of the care.<sup>10</sup>

Regarding the etiology of the disease, young people were unaware, featuring after health education, as an infectious contagious disease caused by a bacterium. The bacteria

which caused leprosy is called *Mycobacterium leprae*, which has high affinity for skin and peripheral nerves, affecting the human body.<sup>11</sup>

On the issue of disease transmission, after the health education there has been an increase in values for the correct answer, characterized by airway, the misconceptions are not from other studies, whose survey respondents associate the disease often sexual issues, heredity, lack of hygiene and blood transfusion. Few correlate with the respiratory system, passing the hit after health education.<sup>12</sup>

Hansen's disease is characterized by a variety of clinical manifestations, in accordance with the patient's immunity front of *Mycobacterium leprae*. In Brazil, the clinical form adopted by the Ministry of health makes reference to the classification of Madrid.<sup>9</sup>

However, the main common signs and symptoms of leprosy, are represented by the reduction in painful, thermal and tactile sensitivity, and can injure the skin, mucous membranes and nerves.<sup>13</sup>

In case of suspicion of Hansen's disease, the most suitable for the questions in the study was characterized by some health service, both in the pre as the post-test. If there is suspicion of disease, the search must be directed to a unit that provides out-patient service, specifically the primary and, in the most serious cases of the disease, in units of greater complexity, requiring an interdisciplinary approach of the health professional.<sup>11</sup>

In the survey, 49.54% of youth reported that they don't know if Hansen's disease is curable. The disease for years was regarded as something incurable and mutilating the cure came in 1981 with the success of multidrug therapy (MDT): combination of Dapsone, rifampicin and Clofazimine, after recommendation given by the who, thus creating the basis for the concept of elimination. However, the late diagnosis can leave scars on the individual.<sup>3</sup>

## CONCLUSION

After the completion of the study was that it enabled the construction of knowledge by the professional knowledge of every young, showing the same general principles of Hansen's disease, related to the topic of etiology, transmission, signs and symptoms and the search for treatment so facilitator, showing positive results in the questionnaire after the health education.

The nursing professional, during his academic career, becomes responsible for the stimulation of individual care, stimulate and encourage educational practices with a variety of audiences and topics of interest. In this study, we emphasize to the healthcare professional, specifically the nurse, the need to perform a leprosy education work with young people under 15 years, establishing the goals requested by the ONU, as well as complement the teenagers' knowledge, individual able to promote their own health and family.



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