

# The use of personal protective equipment by nurses during consultations with leprosy patients

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**Abstract**— *Leprosy is caused by Mycobacterium leprae, which has tropism through peripheral nerves. Although there are leprosy control programs implemented in Brazil with effective treatments and specific health policies the country was unable to stabilize epidemiological indicators and nurses are part of a collective process of this work. The objective of this work is to identify the use of Personal Protective Equipment by the professional during consultations with leprosy patients. This is a descriptive exploratory research with qualitative approach, field research, carried out in the Family-FHS Health Strategy of the Guanabara neighborhood in the municipality of Ananindeua/Pará. Data Analysis was used. The best way to understand this process is to verify the strategies exercised in the FHS being the best scenario for the professional to develop health actions. It is observed that fhs nurses are a professional who always needs to seek knowledge, because at all times he finds several situations related to the education and training of professionals under his supervision.*

**Keywords**— *Leprosy, Treatment, Nursing.*

## I. INTRODUCTION

One of humanity's oldest evils is Hansen's leprosy or disease, which is also known as Leprosy, Lazarus Evil and Morféia. An infectious disease is considered, which presents chronic evolution, being granulomatous and mutilating in nature, and may also be curable (if diagnosed early and treated properly), or not (VIDERES, 2010).

Leprosy has as an etiological agent *Mycobacterium leprae*, or Hansen's bacillus, which has affinity for peripheral nerves, especially Schwann cells. Mainly affecting shallow nerves of the skin and peripheral nerve trunks (located in the neck, face, middle third of the arm, below the elbow and knees), in addition, can affect the eyes and internal organs (liver, mucous membranes, bones, testicles and spleen) (BRAZIL, 2017).

Transmission occurs through the upper airways by daily contact with patients not treated with lepromatosa leprosy and active borderline. Daily contact between healthy and infected relatives increases the risk of developing the disease by 3.5 times compared to the general population. Extradomiciliary contacts (neighbors, school, work) with daily interactions with multibacillary patients also increase the risk of contracting the disease. After infection, the incubation period is long and variable, and clinical manifestations occur on average 2 to 10 years later. (Marciano, et al, 2018).

The Family Health Strategy (FHS) treats health promotion and disease prevention practices, but a fundamental issue here when talking about the resolution of the population's most common problems prioritizes several specific areas of as a control of hypertension and diabetes, tuberculosis control, prevention of cervical cancer, and others. Based on these points, we can highlight leprosy control, a disease that has increasingly been configured as a public health problem and a challenge for health professionals and managers due to its high prevalence and the negative impact it causes in health of the population. (RODRIGUES, et al., 2015).

Although there are leprosy control programs implemented in Brazil with effective treatments and specific health policies the country has failed to stabilize epidemiological indicators and are still among endemic countries. It is then necessary to review the actions currently carried out to plan effective changes to disease control (BRASIL, 2009).

In the Family Health Strategy (FHS), nurses are part of a collective work process, acting directly in leprosy control actions whether individually with the carrier, family or community; professionals work in disease prevention, search and diagnosis of cases, treatment and follow-up of patients, prevention and treatment of disabilities, management of control activities, system of registration and epidemiological surveillance and research (Son, et. al, 2010).

Therefore, the objective of this work was to identify the use of Personal Protective Equipment by the professional during consultations with leprosy patients.

## II. METHODOLOGY

This study is characterized as a descriptive exploratory research with qualitative approach, field research, conducted in the Family-FHS Health Strategy of the Guanabara neighborhood in the municipality of

Ananindeua/Pará, in this place three strategies work and works a multidisciplinary team.

The sampling consisted of three FHS nurse professionals working in consultation with leprosy patients. The participants were instructed and informed about the research and were only included after reading, approving and signing the Free and Informed Consent Form.

In the data collection, a research instrument composed of seven categories with open questions was used, to which for this work, only three categories were used, whose appeal was elaborated by the authors of the research.

A visit was made to the basic health unit of Guanabara in Ananindeua, where the family health strategy of the Guanabara neighborhood also operates, to schedule the days and times to conduct the research with the three nurses that make up the FHS team at the time there was an opportunity for interaction between the probable researchers and the researchers favoring the opening of both parties, and thus creating a link of mutual trust. At the time the project was presented to the research participants with the intention of clarifying the purpose, objectives and relevance of the study in question, to the professional and scientific environment, and trying to sensitize them of the importance of participation and volunteering in said research.

The participants were instructed in relation to the guarantee of anonymity through the pseudonymous codification used for each member of the study, being named as nurse1, nurse2 and nurse3, thus preserving the identity of the respondents. Later, we attended on the days and times scheduled to collect data through delivery of the interview script for nurse1 and 2 in the morning shift and to nurse3 in the afternoon shift, with an average time of 20 minutes for the return of the script, without harming your work routine.

Nurse professionals, who work in leprosy nursing consultations with a minimum time of 6 months, of both sexes and who agreed to participate in the Research after reading and signing the TCLE were included.

Thematic Analysis was adopted in order to examine the meaning of the information of the declarants (or meaning nuclei), contextualizing them. According to Minayo (2012), the pre-analysis stage, study of the content or coding and treatment of the results obtained/interpretation are processed.

This research was submitted to the evaluation of the Ethics Committee on Research with Human Beings of

the Paulista University and approved under CAAE No. 22928819.1.0000.5512, Approval Opinion No. 3.677.044.

This research poses low risks in relation to the exposure of participants. In case of embarrassment when answering the questions, withdrawal in the research through being working hours. The benefit is given as a subsidy for nursing professionals and future professionals to better understand the importance of consultation with leprosy patients, in addition to clarifying information to the community to demystify the prejudice that is still with the disease that may have cure. Not least, make the study available for future research in the college library.

### III. RESULTS AND DISCUSSIONS

#### 1 IDENTIFICATIONS OF THE PROFILE OF RESEARCH INSTRUMENTS

Table 1 shows the identification of the profile of research instruments in relation to Age, Gender, Time of Service in the Place, Specialty and Master's degree.

Table 1- Identification of the Profile of research classes in relation to Age, Gender, Service Time, Specialty and Master's, year 2019

NURSE	AGE	SEX	SERVICE TIME	SPECIALIZATION	MASTERS
NURSE 1	47	F	13 Years	Intensive Care, Epidemiology and Higher Education Unit	No
NURSE2	56	F	28 Years	Public Health, Gynecology and Obstetrics	No
NURSE 3	50	F	8 Years	Public Health	No

Source: Authors of the research, 2019.

We sought to construct a comparison of the data obtained with the theoretical framework used in the research, with the purpose of basing in scientific evidence the answers obtained in order to achieve the objectives proposed for the beginning of the research.

#### 2 CATEGORIES ANALYZED

The application of the script with semi-structured questions the nurses offered us subsidies for more accurate analysis and comparison. After the analysis of the acquired data, 7 (seven) categories emerged, described below:

##### Category 1 - professional performance in consultations for the treatment of leprosy

It is clear that the nurse's actions provide guidance that pass the promotion and prevention of diseases making the patient aware of their health condition

Three nurses participated in the study, obeying the inclusion criteria. The age group of the interviewees is between 47 and 56 years, with a mean age of 51 years, it is observed that 100% (the total of 03) are female; in relation to the length of service in the Health Institution, an average of 16.3 years was obtained.

Regarding the specialty, it is perceived that of this total: 66.66% (2 in total) are specialist in Public Health; 33.33% (1 in total) in gynecology and obstetrics and 33.33% (1 in total) specialist in intensive care unit, specialist in epidemiology and specialist in Education for higher education. None of the professionals interviewed have the degree of master's degree, the interviewees are enumerated and arranged from 1 to 3 and identified as nurse (referring to the nurses who participated in the interview) in the table below.

favoring them to participate more seriously in consultations.

Below we highlight the statements of each nurse:

*"Through the systematization of nursing care, where nursing processes (data collection, nursing diagnosis and nursing evaluation)" (Nurse 1).*

*"Clarification on the disease, treatment and prejudice that still exists" (Nurse 2).*

*"The measures of promotion people with leprosy follow the same as the general population, with special attention the conditions of housing, sanitation, leisure, food and work and others" (Nurse 3).*

Also on this issue according to Vinicius (2016), the professional in the midst of the attributions conceived by the State and Federal Council of Nursing, administers, educates and offers assistance, which aim to strengthen the bond in the search to contribute to the improvement of

the quality of health and life of the individual in the family environment.

### Category 2 - training for professionals

It is observed that fhs nurses are a professional who always needs to seek knowledge, because at all times he finds several situations related to the education and training of professionals under his supervision.

It is clear that for Porto (2007), the level of information of the professionals who make up the FHS on general and specific aspects of leprosy must be satisfactory, so that there is excellence of services and quality in care.

We highlight the speech of each nurse:

*“YES, 1<sup>o</sup> semester of 2018” (Nurse 1).*

*“YES, there 6 Years” (Nurse 2).*

*“YES, about 5 years ago” (Nurse 3).*

With regard to what was presented, it is necessary to train health teams in order to eliminate the disease, in order to diagnose and treat cases early, guide contacts and direct the population in search of health services (LANA et al., 2008).

According to Paschoal et al (2006), it is of fundamental importance for the professional belonging to a nursing team to reflect on the education process within a health unit, because it should understand and understand the practices, the essence of work in the face of users, the performance in the face of an exercise and the reasons for this realization; it is up to the professional to understand all these devices for a complete and correct performance of activities, seeking a full effectiveness and professional competence.

### Category 3 - use of ppe during consultation

It is of paramount importance the use of personal protective equipment not only by the nurse, but by the entire professional team of the unit, it is always necessary to organize all the materials that will be necessary to use in the procedures. It was noticed that the PPE most used by the professionals in the consultation are the glove and the coat. In addition, they assumed that they do not often use PPE as a mask and goggles.

The answers of each nurse are described below.

*“When we have we use yes, the N95 mask and procedure gloves” (Nurse 1).*

*“Sometimes gloves” (Nurse 2).*

*“Yes, gloves” (Nurse 3).*

Regarding what was displayed according to Melo (2014), the most important thing is adherence to use

together with proactive attitudes on the part of each professional in order to comply with accident prevention measures and seeking the protection of the patient, of co-workers and of himself. For this, it is necessary that trust in the work routine, its internalization and mastery of the technique do not trivialize the risks existing in health work.

## IV. CONCLUSION

It is concluded that professionals have sufficient notions about the treatment and control of the disease. The best way to understand this process is to verify the strategies exercised in the FHS being the best scenario for the professional to develop health actions. Nurses' actions contribute preventing incidence, controlling the disease through tests, evaluation of signs and symptoms and mainly treatment guidance for the patient and his family with comprehensive and humanized care.

It was also observed the relevance of the patient in being well received and never discriminated soon it is necessary to have a satisfactorily trained team encouraging the client to the treatment offered.

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