Hanseníase na atenção básica: saberes e práticas dos profissionais da Estratégia Saúde da Família

Leprosy in primary care: knowledge and practices of professionals in the Family Health Strategy

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RESUMO
O objetivo deste estudo é descrever a capacitação de profissionais de saúde na avaliação dermatoneurológica e do grau de incapacidade física em hanseníase, realizada em um posto de Saúde. Trata-se de uma Pesquisa-ação desenvolvida de maio a agosto de 2019 com médicos, enfermeiros e fisioterapeuta da atenção básica. Foi utilizado para coleta de dados questionário autoaplicado, através da plataforma Google Forms, gravação audiovisual e registro em diário de campo durante as oficinas teóricas e práticas. O processo interpretativo deu-se através da análise de conteúdo. Inicialmente, foi realizado o diagnóstico situacional, no qual os profissionais relataram insegurança e deficiência tanto no conhecimento como na habilidade para o atendimento ao paciente com hanseníase. Além disso, não participaram de capacitações acerca do tema. Foram realizadas oficinas para desenvolver competências necessárias. A avaliação das oficinas mostrou uma melhoria do conhecimento e das práticas de cuidado aos usuários durante o estudo. É importante o incentivo às capacitações periódicas dos profissionais de saúde da atenção básica. Além disso, incluir na prática o monitoramento sistemático dos casos novos, busca ativa de casos suspeitos e dos contatos da pessoa com hanseníase. Para que se interrompa a cadeia de transmissão, faz-se necessária a adoção dessas práticas a fim de controlar os casos de hanseníase.


ABSTRACT
The aim of this study is to describe the training of health professionals in the dermatoneurological assessment and the degree of physical disability in leprosy performed at a health center. This is an action research developed from may to August 2019 with doctors, nurses and physical therapists in primary care. A self-administered questionnaire was used for data collection, through the google forms platform, audiovisual recording and field diary recording during the theoretical and practical workshops. The interpretive process took place through content analysis. Initially, the situational diagnosis was carried out, where professionals reported insecurity and deficiency in both knowledge and ability to care for patients with leprosy. In addition, they did not participate in training on the subject. Workshops were held to develop necessary skills. The evaluation of the workshops showed an improvement in knowledge and care practices for users during the study. It is important to encourage periodic training of primary care health professionals. Include in practice the systematic monitoring of new cases, active search for suspected cases and contacts of the person with leprosy. In order to interrupt the chain of transmission, it is necessary to adopt these practices in order to control leprosy cases.

INTRODUCTION

Leprosy is an ancient infectious, transmissible and chronic disease with high disabling power, persisting as a public health problem. It has a slow and progressive evolution, and can cause deformities and irreversible physical disabilities. Physical disabilities are directly related to the quality of access to diagnosis, as well as the follow-up of the patient throughout treatment and after discharge due to cure. It brings with it a history of fear, stigma, prejudice, family and social segregation, increasing its psychological burden$^{1-4}$.

The diagnosis of leprosy occurs basically through clinical and epidemiology, through the general anamnesis of the patient, with dermatoneurological evaluation with the purpose of identifying lesions or areas of skin with changes in sensitivity and/or involvement of peripheral nerves, with sensory, motor and/or autonomic alterations$^{5-7}$. It should be noted that the leprosy reaction can occur before, during and after leprosy treatment, being more common in MB leprosy, however it can occur in PB$^{5,6,8,10,11}$.

In Primary Care, the operational classification of leprosy cases, with which the MDT treatment regimen is defined, is based on the number of skin lesions, according to the following criteria: paucibacillary (PB) – cases with up to five skin lesions; multibacillary (MB) – cases with more than five skin lesions$^{5-9}$.

Bacilloscopy, when available, if positive, classifies the case as MB. However, if the result is negative, it does not exclude the clinical diagnosis of leprosy nor does it necessarily make it classified as PB. It will depend on the neural impairment; the extent of the lesion$^{5-7}$.

After diagnosis, the degree of physical disability is assessed in order to define whether or not there is neural impairment of any part of the body that may be affected by Mycobacterium leprae. It is noteworthy that this evaluation should take place during the 3-month PB treatment and at the end of the treatment. And in the case of MB, at 3, 6, 9 months and at discharge. As well as during any patient complaint about numbness or pain$^{5,7,9}$.

The notification of the case of leprosy is mandatory, as well as the correct completion of the data. The data contained in the notification form will provide support for epidemiological surveillance at all levels of care$^{5}$.

According to the World Health Organization, a late diagnosis for leprosy is considered to be a health service that has reported new multibacillary cases, registration of children, in addition to the presence of visible disability in the assessment of Grade-2 Disability (G2I), which to be acceptable should be 1 in 1,000,000 inhabitants, as it means that there are untreated patients spreading the disease in the community$^{12}$.

Leprosy still persists as a public health problem. Data from the World Health Organization (WHO), in 2019, point to 120 countries, accounting for 210,671 new cases of the disease. In
Brazil, in the same year, 26,875 new cases were detected, which represents 12.9 cases per 100,000 inhabitants\textsuperscript{13}. There are areas with high endemicity, especially in the poorest areas, such as the Midwest, North and Northeast of Brazil\textsuperscript{14,15}. In relation to the world, Brazil is in 2nd place in the number of new cases detected, with 17,979 notifications in the year 2020\textsuperscript{16}.

In Fortaleza, in 2020/2021, the detection coefficient was 12.8/11.2 per 100,000 cases, respectively, also characterizing high endemicity\textsuperscript{13}.

It should be noted that this sharp reduction in new leprosy cases in 2020 may be correlated with the COVID-19 pandemic, as it limited access to care, as well as the low notifications of new leprosy cases\textsuperscript{16}.

There are several factors that lead to the occurrence of late diagnosis, such as fear, stigma, prejudice, awareness and lack of knowledge of the disease by the patient and the community, leading them not to seek the service or to seek it only in an advanced stage of the disease, with \textsuperscript{G2I}\textsuperscript{12,17,18}. As well as the diagnosis that is often not performed, the model of organization of services, the lack of tests to detect infection or disease, the lack of active search for patients and the reception of the person who seeks care is inadequate, as shown by some studies\textsuperscript{17-21}.

Although there has been expansion, improvement in Primary Care and training of professionals, the search for index patients and contacts still leaves something to be desired, and early diagnosis does not occur. There are several factors that cause this inadequate flow, such as excessive demand, professionals who are unprepared to care for leprosy, staff turnover, and lack of knowledge about the disease, among other causes\textsuperscript{22-24}.

In Fortaleza, the setting of this study, the flow of care for leprosy patients begins in Primary Care, the gateway to the health system. Diagnosis and treatment, leprosy reactions and some more complex cases are referred to the dermatological referral service, which was strategic for the decentralization of actions aimed at the care of leprosy patients.

In order to build this flow, there was a need to train the professionals of the Family Health Strategy (FHS) teams. After the training carried out by the National Reference Center for Sanitary Dermatology Dona Libânia, in 2007 and 2008, which until this period concentrated the services, the detection of new cases in health centers between 2007 and 2017 more than doubled\textsuperscript{25}. However, it is worth mentioning that after this period there were no new training or updates, neither for veteran professionals nor for novices.

In this sense, it is important to encourage moments of permanent health education both in formal spaces and in the work process itself. To this end, financial and personnel investments are needed to promote teaching and learning moments for health center workers in order to improve the quality-of-care provided\textsuperscript{22,26} to leprosy users in an early detection approach\textsuperscript{12,17,27}.

One of the aspects to be discussed in the training of care for leprosy patients goes beyond access to diagnosis, as the activities of dermatoneuromological assessment and the degree of
physical disability should be carried out, as well as guidance on disability prevention, self-care and recognition of leprosy reaction\textsuperscript{27}. In relation to the patient, knowledge about leprosy should also be provided, with regard to signs and symptoms, sequelae and transmission, but also to all the stigma that still exists about the disease, as it is a right that he has: access to health and information\textsuperscript{4,23,26,28}.

Conducting studies that take into account the local dimensions, factors that interfere in the patient's difficulty of access to the service, and analyzing them with a view to impacting leprosy control and the well-being of families located in the territories assumed by family health teams has been a constant search, but not satisfactorily due to the excessive demand and little investment in this area.

Based on the above, the objective of this study is to describe the training of physicians, nurses and physiotherapists in dermatoneurological assessment and the degree of physical disability in leprosy in a health center.

**MATERIALS AND METHODS**

This is a qualitative research, using action research\textsuperscript{29}, carried out from May to August 2019. This study included all primary health care professionals from a health center in Fortaleza-CE, among them: Physicians (3), nurses (4), physiotherapists from the Expanded Primary Care Center (1), Community Health Agents (26), Dentists (3), oral health attendants (3) and nursing technicians (5). This article is an excerpt of the workshops held with doctors, nurses and physiotherapists as part of the research.

The study was carried out in an area with a low Human Development Index (HDI)\textsuperscript{30}, classified as medium density for leprosy\textsuperscript{13}. It is located in the Regional Health Coordination V of Fortaleza, Ceará, Brazil.

After approval by the ethics committee and all principles obeyed, meetings were held with all professionals, in which a mini-presentation was prepared about the research process and the epidemiological data of the health center about leprosy, in order to sensitize the professionals.

After acceptance to participate in the study with the free and informed consent form, the self-administered questionnaire was sent through the Google Forms platform, with the following axes: personal and professional aspects, knowledge about the functioning of the unit, knowledge about leprosy management, diagnosis, assessment of physical disability, leprosy reaction, active search for cases, evaluation of contacts and, also, on health education for the population. With the feedback of the questionnaires, the data analysis took place, resulting in a situational diagnosis of the participants about leprosy for the organization of subsequent meetings, through theoretical and practical workshops. And it can be seen that: Most of the participants have been
working at the health center for less than five years, the setting of the study. Three professionals
have been in the service for more than 14 years and have been trained in leprosy with a workload
of forty hours for more than ten years.

In the analysis of the questionnaires, the nurses reported that they feel insecure and have
little knowledge about the patient’s follow-up, both to make the diagnosis and to assess the
degree of physical and dermatoneurological disability. One of the doctors and one of the nurses
reported that they did not participate in the leprosy diagnosis process. And as for the active
search, few perform it during routine care.

With regard to leprosy reaction, only a MED professional feels safe in doing the treatment
and follow-up. In addition, most of them did not know when this reaction could occur.

The study by Ribeiro et al31 on the view of nurses in Primary Care highlights the relevance
of knowledge about the leprosy reaction and adverse effects caused by the drugs used in the
treatment, so that they can be agile in their decision-making and avoid treatment abandonment,
highlighting the importance of ensuring the bond and trust between the FHS and the population.

In the application of the questionnaire, weaknesses in the follow-up of leprosy cases were
found, from the active search to the process of diagnosis, follow-up, dermatoneurological and
physical disability evaluations. Regarding the evaluation of contacts, there is divergence in
courts, demonstrating the need for pedagogical and clinical intervention.

In the evaluation of the contacts, it was noticed that there were limitations in the service
and in the professionals for this action. There is no organization of what should be evaluated
during the contact service, the returns and the follow-up time of this surveillance. This is an
important aspect of this first meeting so that the contacts can return for 5 years for
dermatoneurological evaluation or return in the event of a suspicious lesion, with the purpose of
early detection.

The analysis of the questionnaires also pointed out the need for updating in leprosy on
signs, symptoms, encouragement of active search, as well as dermatoneurological assessment
and the degree of physical disability, which is essential for the care of people affected by leprosy.
To this end, workshops were organized, the first with a mini-exhibition and discussion to carry out
the action plan and schedule workshops for practice.

It was a way found to identify the problems together with the participants and, based on
the implication in this process, to develop responses capable of subsidizing the design and
development of actions with the capacity to interfere and qualify the practice of the workers
involved in the care of the population living and living with leprosy32.

For the production of the workshops, the manuals and guides of the Ministry of Health and
the WHO on leprosy were used, which provide guidance on leprosy control actions; Audiovisual
recordings and photos, field diary and evaluation of the material produced were used for
recording, which were later analyzed through the content analysis technique, considered a qualitative technique that aims to interpret the material acquired\textsuperscript{32,33}.

According to Bardin\textsuperscript{33}, this technique has three phases: pre-analysis; the exploitation of the material; the treatment of results, inference, and interpretation. For the treatment of the results and final interpretation, the categorization of the data obtained was chosen.

This article is part of the dissertation entitled Leprosy: “Current challenges to improve service at the ESF”, carried out from May to August 2019, after approval by the Research Ethics Committee of the State University of Ceará – UECE (opinion no. 3,353 .424; CAAE no. 08282919.6.0000.5534).

RESULTS AND DISCUSSIONS

Development of the Workshops

The workshops were expository and practical. For the mini-exhibition, the slides consisted of guiding questions that fostered reflection on leprosy and the work process of these health professionals, namely:

a) Reflection – What is the meaning of leprosy? What is my role as an FHS professional in the care of people affected by leprosy? To have a broader view of the leprosy patient.

b) About leprosy – What is leprosy? transmission mode? How to suspect leprosy?; Clinical features and forms, with images; dermatoneurological evaluation, clinical diagnosis; Why do disabilities and deformities happen? Prevention and treatment of disabilities, when should we perform neurological evaluation? What is the importance of disability prevention assessment? What is required to assess the degree of disability? And presentation of the patient's therapeutic itineraries.

After the mini-presentation, the guiding question was asked so that they could reflect on their practices: How can I, as an FHS professional, contribute to the active search and early diagnosis of leprosy, reducing the burden of the disease? They were given cards to put their suggestions and later talk about what was written. Once again, the problem of busy schedules and high demand was discussed by the group as an aggravating factor for the care of patients diagnosed with leprosy. Since he needs returns and adequate time for his follow-up. In the case of physical disability assessment, an average time of 30 minutes is required, aiming at the quality of care.

Among the participants' suggestions, the following stand out:
Request an active search for the community health agent (CHA); Active search during consultation/reception; Weekly vacancy available for examination of spots; Agree on a joint doctor/nurse action (MED1).

At this point, the demand to be evaluated on the day of the vacancy availability was discussed; because MED1 said that, if there is an overload of demand, there would have to be more vacancies. However, there was a consensus that patients with leprosy stains can wait one or two weeks to be evaluated. What cannot happen is that the CHA finds a spot and the patient is not evaluated by the doctor or nurse, or waits a year, or when he manages to schedule an appointment. Thus, the group suggested that the flow would be from the CHA to the nurse, who would then evaluate and, if necessary, schedule or talk to the doctor. In addition, other actions that should exist in team meetings were strengthened at this time. Namely:

- Intensify contact evaluation;
- Conduct searches in health actions;
- Information on routines to groups and at the health center (always as an alert);
- Offer vacancies in the agenda for the evaluation of suspects by the ACS (N2).

N2 reinforced that the referral should be the suspicious spot, so that the CHA does not refer all types of stains. During this discussion, the professionals were informed that, concomitantly with this workshop, the CHAs began to use the instrument of active search for suspicious spots, as a guide of the clinical characteristics for leprosy. Instrument produced by the author during the research.

It is also important to highlight the importance of interprofessional collaboration in the care of leprosy users to ensure the quality of care provided and also to enhance their therapeutic itinerary, with Primary Care being a privileged setting for the exercise of these interprofessional practices. In the report of one of the professionals, the following were mentioned: "the intensification of the evaluation of contacts, incorporation and prioritization in the agendas, space for care and active search for patients and contacts", a strategy considered essential for the scholars Brazil, WHO, Lima et al, Lobato et al, Moura et al, since the area is endemic and, therefore, efficient for the early detection of leprosy cases.

Availability of schedule/Evaluation; Active search: encouragement to CHAs and during consultations (N1).

Encourage CHAs to assess signs and symptoms to pass on to nurses; Patients with spots, be sure to undergo clinical evaluation and request tests if the symptoms are indicative of leprosy; Forward, if you find a confirmation soon to the doctor for referrals (N3).

Regarding the exams, N3 mentioned the importance of the correct interpretation of sputum smear microscopy and the issue addressed in the mini-exposition was raised, which should always be remembered that sputum smear microscopy can be negative, but does not rule out...
leprosy, but clinical evaluation, as it is sovereign.

Active search in the office, evaluating all patients in our daily lives. And the suspects by our nursing service in the area, scheduling a return on a day to be arranged, according to availability in the agenda (MED2).

In this context, the incentive to active search, the evaluation of the patient with suspicious spots on a date to be arranged, and the organization of the agenda were noticeable. With this, the action plan was outlined, Table 1.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Resources Needed</th>
<th>Responsible for the activity</th>
<th>Date</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct active search for suspected cases of leprosy</td>
<td>Patient care</td>
<td>Nurse, Doctors, Physiotherapist</td>
<td>From 05-25 de Jul-2019</td>
<td>Forward to the dates July 12, 19 and 26, 2019. August for the team</td>
</tr>
<tr>
<td>Adapt the medical record to reality</td>
<td>Adaptation of the medical record</td>
<td>Researcher</td>
<td>From 05-10 Jul-2019</td>
<td>According to local needs</td>
</tr>
<tr>
<td>Prepare the contact evaluation form</td>
<td>Preparation of the contact evaluation form</td>
<td>Researcher</td>
<td>From 05-10 Jul-2019</td>
<td>Using what the literature recommends for contact evaluation.</td>
</tr>
<tr>
<td>Provide material for the practice of assessments</td>
<td>Material: -Assessment of the degree of simplified physical disability (BRASIL, 2019); Leprosy Quick Guide; -Contact evaluation form; Chart; -Colorful pens.</td>
<td>Researcher</td>
<td>De 05 to 10 de Jul-2019</td>
<td>Delivered on the day of the practical workshop (by team color) for use in the practices and after the research.</td>
</tr>
<tr>
<td>Practising dermatoneurologic assessment</td>
<td>-Patient with suspicious spot -Contact of a patient diagnosed with leprosy</td>
<td>Nurse, Doctors, Physiotherapist, Researcher</td>
<td>Days 12, 19 and 26 Jul-2019</td>
<td>Scheduling of contacts agreed with the CHWs to carry out searches and referrals.</td>
</tr>
<tr>
<td>Perform assessment of the degree of physical disability</td>
<td>-Patient undergoing treatment or who has undergone treatment for leprosy</td>
<td>Nurse, Doctors, Physiotherapist, Researcher</td>
<td>Days 12, 19 and 26 Jul-2019</td>
<td>Prior appointment with the CHWs.</td>
</tr>
</tbody>
</table>

Source: prepared by the author

The practical workshop was attended by users referred by the CHAs (patients who had undergone treatment, adult and child contacts, as well as suspected cases of leprosy).

This was a unique moment of sharing knowledge and practices with the participants. It was possible to use the contact evaluation form, making it efficient and practical for this function. With
the contacts, guidance was provided regarding the signs and symptoms of leprosy; that they should return annually for 5 years. He highlighted the importance of the evaluation of contact, which is precisely the look, the observation of the entire skin, looking for changes in coloration, loss or rarefaction of hair and the presence of spots, in addition to the evaluation of peripheral nerves.

The interviewees interacted, and all professionals were involved. In the evaluation, they considered a unique moment, since the demand for leprosy per team is low and the lack of practice in daily life makes them forget what should be done, how to evaluate and what to do. This moment was seen as necessary, the involvement of the entire team, providing moments of interprofessional practice.

The encouragement of interprofessional communication within the FHS, incorporating both higher education professionals and technical workers, especially the CHA, is essential for the care of people with leprosy.

During the research process, one case of leprosy was identified with misdiagnosis and treatment abandonment. In the searches carried out by the CHAs of the leprosy contacts, the patient and his wife were referred by the CHA. During his evaluation, it was found that his treatment was inadequate and that treatment was abandoned. The patient underwent paucibacillary treatment – 4 doses, and was a probable multibacillary case – dimorphic. There was intervention and referral to the Reference Center, since the team was without a doctor.

One week later, in the evaluation of the CHA group, it was reported that she had gone to the referral center and that her appointment was scheduled for the following week. Still related to this case, the patient commented that at the beginning of the treatment, due to the consultations and the diagnosis, he lost his job, causing him financial and psychological distress.

The delay in the diagnosis of leprosy can be caused by both the patient and the health service, as suggested by Henry's study. For the patient's delay in seeking the diagnosis, they considered seeking the service for fear of being leprosy and being isolated by the community. This case was ten times higher than those who did not fear isolation. Just under half of the sample believed their symptoms were not serious.

In relation to the health system, they found a delay in diagnosis from the patient's first consultation with a delay of up to ten years. Regarding the misdiagnosis, it was three times higher than the patients who received the correct diagnosis or did not receive the diagnosis in the first consultation. And in this study, patients with insensitive lesions had a 55% faster diagnosis than those who did not.

Among the children evaluated, there was a ten-year-old contact of a patient (multibacillary father) who lives in the interior of the state and who was undergoing treatment, but who had not yet been evaluated and was on vacation, also captured by the CHA.
The evaluation of the changes in the practices took place during the workshops and meetings. A final evaluation was necessary with the use of cards so that they could post what they learned from the workshops. And from the statements, it is possible to observe the achievement of positive results for learning:

- Improvement in evaluating the suspected patient, did not know how to perform the evaluation tests. Availability in the agenda to evaluate a suspected patient (N1).
- Improved ability to palpate nerve trunks; increased awareness of active search; epidemiology update and follow-up (N2).
- There is better patient care, because I have more confidence about the subject. I am aware of the number of confirmed cases in my area in the last ten years and can have a better assessment of new cases, such as examining contacts and guiding CHWs to actively search the area (N4).
- After the meetings, there was a matrix support on the subject and I had the opportunity to deepen the knowledge and practices with case identification (MED1).
- All knowledge is valid, all revision is not lost. [...] I was very grateful for his sharing of the experiences and knowledge on the subject. What you’ve been through has re-sharpened the need for active search (MED2).

There is a need to implement these moments of permanent health education (PHE) in order to improve the quality of care provided through the transformation of professional practices. It is important that these EPS emphasize clinical classification, differential diagnoses, diagnosis in children, leprosy reactions, and prevention of disabilities, considering a sufficient workload for the content to be significantly apprehended.

Therefore, managers need to guarantee financial subsidies for the acquisition of materials, adequate infrastructure and logistics to carry out training to also assist in health promotion and disease prevention actions.

It was observed during the development of the action research that the practical part was of fundamental importance for the modification of conducts, with improvement of practice, expansion of knowledge and a differentiated look at leprosy cases, as well as their contacts.

**FINAL CONSIDERATIONS**

The action research was valuable in the execution of this study, since it enabled the interaction between the researcher and the researched, the exchange of knowledge and experiences, based on the sharing of knowledge and modification of some practices, especially the dermatoneurological assessment and the degree of physical disability; a differentiated look at the active search and reorganization of the agenda for the care of suspected cases.
The integration of professionals in this research was relevant for the articulation of care as a multidisciplinary team, as it was possible to organize the action plan so that they could contribute during and after the research as a team that is part of the diagnosis and active search process.

It was identified that the involvement of all professionals is necessary in the discussion of cases. The articulation between the different health professionals inserted in Primary Care is capable of enhancing the care provided to users with leprosy.

Action research, by itself, was not enough to meet the needs of the participants, but it was able to materialize an important demand of the professionals of this health center. Thus, the importance of continuing education for local managers was evident, instigating the realization of theoretical and practical courses for professionals.

The process of continuing education should occur to improve the practices of health professionals, aiming at quality care. In leprosy, this training should be theoretical and practical, involving all primary care professionals, as it enriches knowledge, exchanges of knowledge and practices, and actions that are so necessary for the care of these patients.

With these participants, it was perceived the need to develop an instrument for monitoring, follow-up and evaluation of contacts with significant data from this population.

There are many challenges faced by the FHS in a population that depends almost entirely on the SUS (UHS). One of them, for example, is the population enrolled in addition to the capacity of care and resolution by the team. Thus, the entire context in which the health team is inserted constitutes continuous challenges of action to provide an adequate and dignified service to the community in which it is inserted.

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