POPULAR KNOWLEDGE ABOUT THE USE OF PLANT *ANREDERA CORDIFOLIA* (FAT LEAF)

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ABSTRACT: This study investigates the knowledge and practices of residents in a city in the Northwest of Rio Grande do Sul, Brazil, regarding the use of the plant Anredera cordifolia in health care. The methodological procedures were exploratory/ descriptive, structured based on a qualitative research. The selection of research subjects occurred through the network of relationships. For data collection, we used semi-structured interviews and participant observation. To analyze the data, content analysis was used. The research results were divided in two groups: the origin of knowledge on the use of the plant Anredera cordifolia and popular knowledge about the use of the plant Anredera cordifolia. This study is relevant for the health sciences and the community, appointing the need for further research to prove the therapeutic efficacy of the plant or not.

DESCRIPTORS: Nursing. Medicinal plants. Anredera cordifolia. Family.

SABER POPULAR SOBRE A UTILIZAÇÃO DA PLANTA *ANREDERA CORDIFOLIA* (FOLHA GORDA)

RESUMO: Este estudo buscou conhecer os saberes e práticas de moradores de um município localizado na região Noroeste do Estado do Rio Grande do Sul, sobre a utilização da planta Anredera cordifolia, no cuidado à saúde. Os procedimentos metodológicos adotados foram do tipo exploratório e descritivo, estruturados a partir de uma pesquisa qualitativa. A seleção dos sujeitos da pesquisa ocorreu por meio da rede de relações. Para a coleta dos dados, utilizou-se de entrevista semiestruturada e observação participante. Para a sustentação dos dados foi utilizada a análise de conteúdo. Os resultados da pesquisa foram divididos em dois grupos: origem do saber sobre a utilização da planta Anredera cordifolia e conhecimento popular sobre a utilização da planta Anredera cordifolia. Acredita-se que o estudo tenha relevância para as ciências da saúde e para a comunidade, apontando a necessidade de novas pesquisas, a fim de comprovar ou não a eficácia terapêutica da planta.

DESCRITORES: Enfermagem. Plantas medicinais. Anredera cordifolia. Família.

CONOCIMIENTO POPULAR SOBRE EL USO DE LA PLANTA *ANREDERA CORDIFOLIA* (HOJA GORDA)

RESUMEN: El objetivo es identificar los conocimientos y prácticas de los residentes de un municipio situado en la región noroeste del estado de Rio Grande do Sul, sobre el uso de la planta Anredera cordifolia en el cuidado de la salud. Los procedimientos metodológicos adoptados son exploratorio y descriptivo, estructurados a partir de una investigación cualitativa. La selección de los sujetos de la investigación fue realizada por la red de relaciones. Para la recolección los datos se utilizaron entrevistas semi-estructuradas y observación como participante. La metodología utilizada para analizar los datos fue el análisis de contenido. Los resultados del análisis se dividieron em dos grupos: fuente de conocimiento sobre el uso de la planta Anredera cordifolia y conocimiento popular sobre el uso de la planta Anredera cordifolia. Se cree que el estudio tiene relevancia para la ciencia de la salud y para la comunidad, señalando la necesidad de más investigación para probar o refutar la eficacia de la planta.

DESCRIPTORES: Enfermería. Plantas medicinales. Anredera cordifolia. Familia.

INTRODUCTION

Care practices go back to the origins of civilization, when care did not belong to any craft or profession, but was particularly part of female activities, in order to guarantee the continuity of life and the family group, with human beings' knowledge on care practice as an intrinsic element of their culture.[1]

Starting with these secular practices, different complementary health care forms were gradually discovered, including the therapeutic properties of certain plants, used by primitive people and disseminated from generation to generation, as a part of popular culture.[2]

Thus, for a long time, the use of medicinal plants was the main therapeutic resource used to treat the health of people and their families. As a result of advances in health sciences, however, new ways of treating and curing diseases emerged. One of them is the use of industrialized drugs, which were gradually introduced into people's daily life through publicity campaigns that promised curing a wide range of diseases.[3]

On the opposite, despite the development of large pharmaceutical laboratories e synthetic drugs, plants continued as a complementary treatment form around the world. Their revaluation has been observed in recent decades.[2]

It is believed that this care, through plant use, favors human health, provided that users are familiar with their purpose, risks and benefits. Thus, popular and scientific knowledge on the use of medicinal plants needs to be complemented, which is fundamental for the sake of security and effectiveness as, although they are natural, plants are not free from toxic effects.[3]

It is important for health and mainly nursing professionals to participate in this area, with a view to the integration between scientific and popular knowledge, as complementary therapies have plenty to offer. They can contribute to health sciences and make people relatively autonomous to take care of their own wellbeing. In addition, the study of medicinal plants, based on their use in communities, can provide useful information for the elaboration of pharmacological studies.[5]

Acknowledging the importance of popular knowledge in health care and the population's increasing use of medicinal plants, as a complementary component of medication therapy, including the plant *Anredera cordifolia*, about which no scientific information was found in the consulted literature, in this research, the aim was to get to know the knowledge and practices of people in a city in the Northwest of Rio Grande do Sul, Brazil, about the use of the plant *Anredera cordifolia* (commonly known as the madeira-vine or *folha gorda* in Brazil) in health care.

METHOD

Exploratory/descriptive methodological procedures were adopted in this study, structured based on a qualitative research developed in the coverage area of a Family Health Strategy (FHS) in a small Northwestern city in the State of Rio Grande do Sul, Brazil.

Data for this research were collected through semistructured interviews and participant observation. An interview script was used, which the researcher himself elaborated and which consisted of two parts. The first contained closed questions on the interviewees' personal data, and the second consisted of nine open questions, elaborated to make the interviewee feel at ease when answering them.

To sort the observations, a script was used, containing four items to observe and write down in the field diary: the origin of the plant (purchased, own cultivation or donation); harvest, washing, storage and conservation; preparation form of the plant for use; and plant of planting: hedged, access by domestic animals, near septic fossae, open-air sewage, or near a breeding place. In that diary, observations were registered for each residence and meeting, as well as informal conversations with the interviewees.

It is highlighted that the interviewees were not only registered in the field diary, but also audio-recorded for later transcription and use of the data. Also, some of the planting sites of the plant were photographed, which were considered relevant for the study results.

Before applying the research instrument, two interviews were held (pilot test) with people from other communities. This pilot study served to check whether the questions in the script were appropriate for the research aim and to get an idea of the time spent.

It is also highlighted that, to start the interviews, a seedling of the plant *Anredera cordifolia*

(Figure 1) was shown to the participants, in order to observe whether they actually recognized it.

Figure 1 - Seedling of the plant *Anredera cordifolia*

It is highlighted that, during the elaboration of the research project, one plant was sent to a biologist for scientific identification, which was identified as the plant *Anredera cordifolia*, belonging to the *Basellaceae* family.

The research subjects were selected through the network of relationships. In this process, each informant refers the researcher to other members of his/her network with a view to subsequent investigations.[6]

Based on this conception, in May 2010, the city's Health Secretary and the nurse responsible for the FHS were contacted to present the study proposal. During the meeting, the proposal was accepted and consent was requested for its development.

After presenting and approving the research, the Health Secretary was asked to indicate one person in the community who used the plant *Anredera cordifolia* for health care purposes.

After that person had agreed to participate in the research, the first interview was held, followed by contact with the other informants, as shown in figure 2.

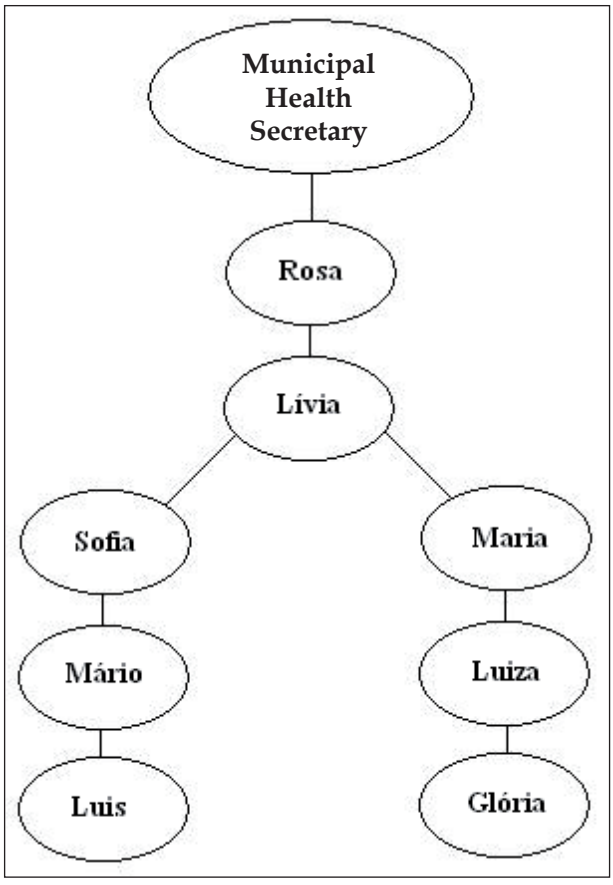

Figure 2 - Relationship network of interview participants

The interviews were held in July 2010, during the morning (from 08 till 11 a.m.) and afternoon shifts (from 02 till 06 p.m.).

The theoretical-methodological framework used to analyze and interpret the research data is content analysis, which consists in research techniques that permit validating inferences about data in a given context through scientific procedures.[7] Various content analysis modalities exist, and thematic analysis was chosen for this research, which involves three phases: 1) pre-analysis – which consists in the organization and choice of the documents for analysis; 2) exploration of the material – basically consists in a ranking operation to reach the text's core of meaning and; 3) treatment of the obtained results and interpretation – phase when the obtained information is highlighted.[7]

Thus, to develop each of the methodological phases, first, the researcher returned to the guiding question and research aim, so as to better systemize the initial research ideas. In addition, the material for analysis was subject to floating reading, that is, the researcher listened to each of the audio-recorded interviews to be impregnated with their contents.

After the listening, the interviews were fully transcribed in a document created in Microsoft Office Word 2003. Following on this first contact, the *corpus* was constituted, consisting of all interviews performed as, according to the rule of exhaustiveness, all documents should be joined, without leaving anything out. As for the representativeness rule, eight interviews were held, which was considered sufficient for the intended goals.

For data collection, in all interviews, the same script was used, with identical questions related to the same theme (*Anredera cordifolia* plant), guaranteeing a homogeneous research. Finally, the rule of pertinence was complied with, as the relevance of the interviews was checked in the documents for analysis.

After attending to each requirement and transcribing the interviews, the material was explored. In this phase, the researcher looked for words or significant expressions that emerged in the transcriptions, and therefore constituted and categorized the. Once the *corpus* had been constituted, the emerging categories were divided in two groups. The first was called the origin of knowledge on the use of the plant *Anredera cordifolia*; and the second popular knowledge about the use of the plant *Anredera cordifolia*. Then, each category was highlighted to analyze the collected information and construct the interpretations.

All participants signed the Informed Consent Term and, to guarantee privacy and anonymity, the names of all people involved in this research were replaced by fictitious names, chosen by the researcher.

This research complies with the regulatory guidelines for research involving human beings, as established in National Health Council Resolution 196/96.[16] Approval was obtained from the Research Ethics Committee at Universidade Federal de Santa Maria (UFSM), under number 23081.007755/2010-68 and CAAE 0093.0.243.000-10.

DATA ANALYSIS AND DISCUSSION

Characterization of research subjects

Eight subjects participated in this research, with six women and two men. This prevalence of the female gender is in line with the literature,[3] which states that this is due to the fact that women are the paramount caregivers, as they were culturally chosen to deliver family care.

As for the interviewees' age, ages ranged between 49 and 73 years, with three participants between 49 and 56 years of age and five over 60. This age profile favors research on the use of medicinal plants in human health care, as elderly people probably possess further knowledge on these complementary care practices, which were mostly gained over the years, from generation to generation, or constructed in their own life experience.[3]

Regarding education, six of the interviews did not finish primary education, one held an undergraduate degree and another a specialist degree. Although most interviewees reveal low instruction levels, all of them were able to read and write their own name.

With respect to ethnic origin, German origins prevailed (seven), followed by Italian (one). In this respect, in one of the residences, a manuscript about the city was found, elaborated by the first dwellers, reporting on the German ethnic origins of colonizers, followed by the Italian, which can justify this prevalence.

Origin of knowledge about the use of the plant *Anredera cordifolia*

Family tradition

When asking the interview participants: Do you know this plant? What is it called?, all eight participants confirmed that they knew it and used its popular name *folha gorda*. Half (four) of the interviewees also pronounced its name in German: *speck blatter*, like in the following statement: *I know it as folha gorda, in German we said speck blatter right, folha gorda, you know?* (Rosa).

This may be related to the fact that most of the interviewees (six) are of German origin, in line with literature findings[8] that German colonizers in Pirapó-RS know the plant *Anredera*

cordifolia as *speck blatter* (which means fat leaf, bacon leaf).

Regarding the question: from whom did you learn to use this plant?, all interviewees reported that their first contact was through their family, also mentioning that they got to know the plant when they were children. In addition, six interviewees appointed that their mother and/or grandmother possessed and transmitted this knowledge, as observed in the following statements: *I learned it from my mother and grandmother, when I was still a child* (Sofía); *I learned to use the plant from my mother, she used to say it was a plant used in the family, that it was tradition, from mother to child, at that time* (Luiza).

These manifestations reinforce the transmission form of this millennial knowledge, which is the use of medicinal plants for disease treatment, cure and prevention, underlining the importance of the female figure in care delivery and the transmission of their knowledge from generation to generation. These manifestations are in accordance with a study that affirms that "in the family, the woman plays an important role as the disseminator of culture to her offspring, and care figures among the tasks she assumes. As a result, this role is transmitted from generation to generation and perpetuated in the family domain."[9: 90]

During the field activities, the observations revealed how important it was for the interviewed subjects to remember the family relations, the affection and kindness of who taught them this complementary health care practice, which persists until today. This knowledge is stored in their memory, as evidenced in the following report: *my idea is good, if anyone tells me that some plant is good for something I record it, right, I keep it in my head* [memory], *that's how I learn* (Mário).

Thus, the memory is characterized as an important form of registration for the interviewees, and it is used to share knowledge and care practices. Thus, the importance of the family's role in informal care among its members is demonstrated, which can be recognized as the center of care functions.[10]

I have always had it at home

This category referred to how the plant was obtained, with most (seven) interviewees answering that they grew it at home, as observed in the following reports: [the plant is] *grown, I have always had it at home* (Sofía); *ever since we live here, we have this bush* [*folha gorda*], *we only cut it* [the plant], *because it grows a lot, like* (Glória).

In the same sense, only one of the eight interviewees affirmed he collected the plant at the neighbor's home when necessary: *there's a big bush* [*folha gorda*] *next door, at the neighbor's, right, so we take it there* (Mário).

The interviews and field observations revealed the subjects' preference and desire to grow the plant at their own home. The following cultivation forms were observed: near fences, or trees, around the house and in gardens, generally in dark and moist places, taking care to remain distant from the septic fossa, beyond the reach of domestic animals or any other type of contamination. At these residences, fences existed to avoid the entry of animals that could damage or contaminate the plantation. At those residences where the plantation was located in the garden, fertilization of the plant and other greens was also observed, as ashes from the wood stove and organic fertilization were used at all homes. Organic fertilization is considered as any product deriving from the decomposition of vegetable, animal, urban or industrial residues, with high levels of organic components.[11]

Among the interviewees, only two did not take proper care with the plantation site. At one of the residences, there were animals like dogs, cats and chicken across the yard and, at another house, the plantation was located near the road, permitting the access of animals, people and other forms of contamination, like dust.

Popular knowledge on the use of the plant *Anredera cordifolia*

Folha puxadeira

When asked about what part of the plant they used?, all interviewees referred to the leave, two of whom indicated that the stalk could also be used, as observed in the following statements: *the leaf, I only know about the leaf* (Maria); *it's the leave, the stalk is only crushed, right, if you crush it well* [stalk], *but the leave is more practical* (Mário).

When the interviewees were asked to describe how to use the plant, all subjects affirmed

they picked the leaves directly from the bush, immediately before using them. The majority (five) affirmed washing it with water, and then heating it on the hot stove and placing it directly on the injury site, where it is fixed with a cloth (compress). They also mentioned that the plant should be kept in place until the pain stops or the injury site does not produce any more secretion. It can be changed as many times as necessary, as observed in the following report: *we pick the leaves from the bush, wash them well with water, warm them on the wood stove, put them on the injury site and rub them with a cloth* [to fix them]*, then leave them on overnight and change the leaf, right, do it like that until it stops producing any more dirt* [secretion] *right* (Sofía).

Two interviewees indicated that they place the plant directly on the injury site, without warming it, as observed here: *you get it from the plant and wash it, put it on the wound, bind it up with some cloth around it and leave it there, then you change it as many times as you want, because it's good even to take the heat out of the wound, so we change it when necessary* (Luiz).

Thus, through the reports, it was observed that the plant is prepared in two distinct ways, which can be classified as follows: sap, in which the fresh plant is crushed, extracting the sap released from the solid part; or through compresses, using pieces of clean cloth, cotton or gauze, saturated in tea or warm or cold plant sap applications.[11] It is highlighted that, although part of the interviewees make topic use of the plant leaves for cutaneous injuries, no scientific data on this usage form were found in the consulted literature.

When asked about what they use the plant for, all interviewees indicated using it on injuries and infected wound, referring that they use it to "pull" this infectious process, which presupposes the "invasion of normally sterile tissue by a microorganism, causing a local inflammatory response",[12:142] as can be observed in the following reports: *I always used it at home, and I still do, when we have a big wound, with an infection. The leaf pulls all of the dirt, it's very good stuff* (Sofía); *we use it against infections in injuries, wounds, mainly to pull the infection* (Luiz).

Its use was also mentioned in cases of hangnail [nail bed fungus], boil, larvae, injuries caused by thorns, stakes, nails, stings from animals like spiders, dog bites, among other. All interviewees used the plant to "pull out secretion or infection", like in the following statement: *we use it as folha puxadeira, when someone gets hurt, we use it to pull out the dirt that is inside* (Luiza).

This finding is in line with a study that, in a survey of plants used for therapeutic purposes, found the use of *Anredera cordifolia* in cases of boils.[13]

Our everlasting medicine

When questioning participants about the therapeutic effects of the plant, all participants reported positive effects, affirming that they do not know about any kind of adverse reaction, as observed: *as far as I know, nobody has ever complained of this plant until today; it has great* [curative] *power* (Lívia); *I have just seen it* [the plant]*, always with very good indications* [by people] (Luiza).

When asked whether they had read something about the plant, all interviewees answered negatively, again affirming that they had gained their knowledge only in contact with relatives or other people: *no, I only know this from my parents, grandparents who taught us* (Sofía); *no, never, just through what they* [other people] *told me or because it grows in my garden* (Glória).

This discovery once again justifies the importance of recovering knowledge on the use of medicinal plants as, although it is an authentic therapeutic resources from popular knowledge, knowledge on its therapeutic properties and usage forms cannot only be based on commonsense knowledge, considering that, although the population indicates that the use of this plant does not cause any harm, but that side effects may occur.

Thus, popular information is considered valuable, but the importance of scientific studies is highlighted, with a view to proving this information or not and offering the population more security and effectiveness.[14] Besides the belief in the curative power of plants, this branch grew and gained sophistication, so that knowledge on the curative power should no longer be considered as tradition only, which is passed from parents to children, but also as science, which has been studied, improved and applied.[15]

FINAL CONSIDERATIONS

At the end of this research, it is verified that, today, the therapeutic use of the plant

Anredera cordifolia is a widespread practice in the study population and of great value in the interviewees' lives.

In addition, knowledge on the plant's curative power originated in the family context, transmitted across generations. The influence of the woman/mother figure is emphasized in the transmission of knowledge and stimulation to grow the plant, as well as the desire to continue this millennial health care practice through medicinal plants.

When comparing popular and scientific knowledge on the plant's curative power, it is observed that the population only possesses popular knowledge and is unfamiliar with any related scientific study. This evidence is a source of concern for health professionals, as it demonstrates that the population uses plants for therapeutic purposes without any guarantee of its security and effectiveness, only supported by the wisdom based on popular knowledge.

The importance of valuing the recovery of popular knowledge on complementary care practices is underlined, by health professionals in general and nurses in particular, with a view to permitting the crossing of popular and scientific knowledge, facilitating the client and community care process, valuing holistic care, encouraging self-care and strengthening the bond between the health service and users through the acknowledgement of people and families' real-life context.

Finally, it should be highlighted that no scientific information on the therapeutic use of the plant *Anredera cordifolia* was found in the consulted literature, which does not necessarily mean that there are no toxic effects or contraindications, but justifies the relevance of this study for population health and for the scientific context, as it provides support for the development of further research on medicinal plants, especially on the plant under analysis.

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