FOLK INFORMANTS ON MEDICINAL PLANTS AND THE POPULARS PRACTICES OF HEALTH CARE

INFORMANTES FOLK EM PLANTAS MEDICINAIS E AS PRÁTICAS POPULARES DE CUIDADO À SAÚDE

INFORMANTES FOLK EN PLANTAS MEDICINALES Y LAS PRÁCTICAS POPULARES DE CUIDADO DE LA SALUD

Manuelle Arias Piriz, Marcos Klering Mesquita, Teila Ceolin, Marjoriê da Costa Mendieta, Rita Maria Heck

ABSTRACT

Objectives: to identify the folk informants and characterize the therapeutic practices in health care through medicinal plants. Method: this is a qualitative, descriptive, and exploratory study. The subjects were 3 female farmers indicated as great connoisseurs of medicinal plants in a rural community in a town in the South Brazilian region. Data collection took place in July and August 2011, by using a semi-structured interview (recorded), systematically observing and photographing medicinal plants, preparing a genogram and an eco-map of families, and georeferencing the interviews' location. The study was approved by the Research Ethics Committee of the School of Medicine of Universidade Federal Pelotas, under the Opinion 072/2007. Results: the women interviewed showed a great knowledge on the theme, citing 116 medicinal plants used in health care, and this knowledge was mainly acquired in the family environment. Conclusion: information reinforces the need that the nurse works from the integral care perspective, respecting the differences and the social context of people.

RESUMO

Objetivos: identificar os informantes folk e caracterizar as práticas terapêuticas no cuidado à saúde por meio de plantas medicinais. Método: trata-se de estudo qualitativo, descritivo e exploratório. Os sujeitos foram 3 agricultoras indicadas como grandes conhecedoras de plantas medicinais em uma comunidade rural de um município da região Sul do Brasil. A coleta de dados ocorreu em julho e agosto de 2011, com utilização de entrevista semiestruturada (gravada), observação sistemática e fotografias das plantas medicinais, elaboração de genograma e ecomapa das famílias e o georreferenciamento dos locais das entrevistas. O estudo foi aprovado pelo Comitê de Ética em Pesquisa da Faculdade de Medicina da Universidade Federal de Pelotas, sob o Parecer n. 072/2007. Resultados: as entrevistadas apresentaram grande conhecimento sobre o tema, citando 116 plantas medicinais utilizadas no cuidado à saúde, e esse saber foi adquirido, principalmente, no ambiente familiar. Conclusão: as informações reforçam a necessidade de o enfermeiro trabalhar sob a perspectiva do cuidado integral, respeitando as diferenças e o contexto social das pessoas.

RESUMEN

Objetivos: identificar a los informantes folk y caracterizar las prácticas terapéuticas en la atención a la salud por medio de plantas medicinales. Método: es un estudio cualitativo, descriptivo y exploratorio. Los sujetos fueron 3 agricultoras indicadas como grandes conocedoras de plantas medicinales en una comunidad rural en una ciudad de la región Sur de Brasil. La recogida de datos se llevó a cabo en julio y agosto de 2011, con utilización de entrevista semi-estructurada (grabada), observación sistemática y fotografía de plantas medicinales, preparación de genograma y eco-mapa de las familias y georreferenciación de los locales de las entrevistas. El estudio fue aprobado por el Comité de Ética en Investigación de la Facultad de Medicina de la Universidad Federal de Pelotas, bajo la Opinión 072/2007. Resultados: las encuestadas presentaron un gran conocimiento acerca del tema, citando 116 plantas medicinales utilizadas en la atención a la salud, y ese conocimiento fue adquirido, principalmente, en el ambiente familiar. Conclusion: las informaciones refuerzan la necesidad de que el enfermero trabaje desde la perspectiva de la atención integral, respetando las diferencias y el contexto social de las personas.
INTRODUCTION

Over the centuries, products of plant origin constituted the basis for treating various diseases, either in a traditional way, due to knowledge on the properties of a certain plant, which is passed from generation to generation, or by using plant species as a source of active molecules.\(^1\)

From this perspective, taking into account the different cultural practices allows the health professional to understand the way how individuals think and act in face of their health problems, facilitating the communication between them and enabling a consistent care which favors health promotion and the creation of policies and programs aimed at the actual needs of these populations.\(^2\)

The health care system may be divided into three sectors: professional, folk, and popular. The professional comprises the curative professions, legally acknowledged and following the biomedical model of health care. In the folk, we find curative professionals not acknowledged by law who use medicinal plants, manipulations, exercises, shamanism. In the popular, people from the family circle, friends, and neighbors use common sense, emotional support, and religious practices.\(^3\)

The health status of a given population reflects the structural and symbolic factors which express the social awareness of the health and disease process.\(^4\) Thus, after the implementation of the Family Health Strategy, in Brazil, the health professionals started acting in order to address not only the individual and her/his disease, but to think of a care which aims to promote the entire family and community’s health, mainly through prevention of diseases.\(^5\)

Nursing as a profession of care, need to aim its practices in order to offer a more humanized and integral care to the health system users, understanding that the popular care practices have a transcultural characteristic, going through various cultures. Thus, ethnobotanical studies on medicinal plants used by communities may ground pharmacological, phytochemicals, and agronomic studies, promoting a significant saving of time and money. This way, it is possible to plan the research according to empirical knowledge, consecrated by continued use, which needs to be tested according to scientific criteria.\(^6\) Another perspective is that folk informants who are specialized in medicinal plants should be regarded as playing a role in the health care system, so that there is a getting closer between popular knowledge and the nursing practice.

In this context, Brazil seeks to establish guidelines in the area of medicinal plants and public health, such as the approval, in 2006, of the National Policy of Integrative and Complementary Practices in the Unified Health System (SUS), as well as the National Policy of Medicinal Plants and Phytotherapeutic Agents. The latter plays an essential role in the public health care, environmental, and economic and social development policies as a key element to implement actions able to promote improvements in the population’s quality of life.\(^7\)

Thus, this research is justified by the need to intensify studies on the use of medicinal plants by communities and include nursing into this context, taking into account the legal and safe precepts of use and the importance of nurses in counseling on the proper use of these therapies, based on scientific studies which prove the efficacy of the compounds used and on public policies which permeate the complementary practices. The use of medicinal plants should be recognized and appreciated in primary health care as a key therapeutic practice, rather than assigning it to popular and family knowledge, excluded from the health care services.\(^8\)

The objectives of this study are:

- To identify the folk informants specialized in medicinal plants.
- To characterize the therapeutic practices used in health care through the medicinal plants.

METHOD

This is a qualitative, exploratory, and descriptive study\(^9,10\) which is part of the research project “Bioactive plants for human use by farming families with an ecological basis from the southern region of the state of Rio Grande do Sul, Brazil”, focusing on medicinal plants used in human health care by people who are specialized on this subject, in rural communities. The research has been carried out since 2007 by the School of Nursing of Universidade Federal de Pelotas and Embrapa Temperate Climate.

The study was conducted at the subjects’ homes, in a rural district of the town of Pelotas, in the South Brazilian region. The rural community is located 31.5 kilometers far from the urban area and it is characterized by having a mostly elderly population, where a large part of families earn their income from
the production of tobacco (*Nicotiana tabacum*). The reference when it comes to health problems is the team of the Family Health Strategy (FHS).

The subjects were farmers, indicated by the FHS team and by users from groups of the Registration Program of Hypertensive and Diabetic Patients (HiperDia) of the Basic Health Unit (BHU), because they have great knowledge on medicinal plants. It is worth stressing that the professionals at this FHS unit are quite integrated to the context of medicinal plants, seeking the implementation of a Medicinal Garden in the BHU.

Through the indication, we prepared a list with the names, addresses, and phone numbers of subjects and, then, we contacted them by phone. The research instruments for data collection were a semi-structured interview (recorded), systematic observation, and the construction of the genogram and eco-map of families.11

Regarding the medicinal plants, we resorted to *in situ* photographic record. In case of doubt with regard to the plant’s name, with permission by the farmer’s family, we collected branches at their reproductive phase for preparation of voucher specimens, which were used for botanical identification. The locations of interviews and the plants cited were georeferenced by means of GPS (Global Positioning System). Data collection took place in July and August 2011.

We complied with all ethical and legal precepts of nursing research, as well as the Resolution 196/96, from the National Health Council of the Ministry of Health, which publishes guidelines on research involving human beings.12

The study subjects signed the free and informed consent term and the project was approved by the Research Ethics Committee of the School of Medicine of Universidade Federal Pelotas (UFPel), under the Opinion 072/2007.

### RESULTS

The study subjects were 3 female farmers, who are characterized in Figure 1.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Age (years)</th>
<th>Descent</th>
<th>Education level</th>
<th>Religion</th>
<th>Activities carried out on property</th>
<th>Length of time working with plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>H. S. B.</td>
<td>79</td>
<td>German</td>
<td>Complete Primary School</td>
<td>Lutheran</td>
<td>Planting, milk and cheese production, taking care of animals. Producing milk, small granola bars, pumpkin bread, sweet potato, juices, candies, canned products, and taking care of animals. Planting for “Cooperativa Sul Ecologica”.</td>
<td>12 years</td>
</tr>
<tr>
<td>I. P. U.</td>
<td>56</td>
<td>German</td>
<td>Complete Primary School</td>
<td>Lutheran</td>
<td>Producing milk, small granola bars, pumpkin bread, sweet potato, juices, candies, canned products, and taking care of animals. Planting for “Cooperativa Sul Ecologica”.</td>
<td>20 years</td>
</tr>
<tr>
<td>F. R.</td>
<td>82</td>
<td>Brazilian</td>
<td>Literate</td>
<td>Evangelical</td>
<td>Planting, taking care of the vegetable-garden.</td>
<td>60 years</td>
</tr>
</tbody>
</table>

Figure 1. Characterization of the subjects analyzed in this study. Pelotas, Rio Grande do Sul, Brazil, 2011.

In this research, all informants were women and they were indicated as great connoisseurs of medicinal plants. The 3 farmers have worked with medicinal plants for a long time, something which provides them with a vast knowledge. When asked on the way how they learned to use medicinal plants, the family was indicated as the main information source.

The women analyzed are very influential people in the community, they know how to expose their ideas in a particular way, denoting a higher knowledge than the other farmers in the region with regard to medicinal plants.

We also notice the influence of using books and courses in the learning of these women, as described in the following speeches:

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In books, meetings, courses. I’ll show you my entire range of certificates that I have. (H. S. B.)

Yes, in the books [...]. So, I’ve already attended several courses, went to meetings, we’ve already gained a certificate on medicinal plants. (I. P. U.)

In this study, 116 medicinal plants were cited, totaling 144 ethnobotanical items. As for the way how to prepare, the infusion of leaves predominated. Most species is obtained in the vegetable-garden and in the yard at the subjects’ home. Figure 2 displays the 8 medicinal plants most cited by the farmers.
When reporting on the way how they identify medicinal plants, the farmers answered:

**By the smell, the leaf, and the flower. (H. S. B.)**

I pick it and I got to see beneath the sheets, over, to see if it is the same thing, if it has the rib they say. It has to be, because it has the “chinchilo” with “erva-de-bugre”, they are similar and the first is toxic. (I. P. U.)

These speeches reinforce the respondents’ attention when identifying medicinal plants, observing and trying to identify them morphologically.

As for the transmission of knowledge on medicinal plants currently, two farmers stated that it has not happened, however, one of them indicated to share her knowledge with relatives.

It became clear that the transfer of knowledge takes place more effectively in the community in which the farmers are included, through groups, community radio, and other spaces, as we read in the speeches below:

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### Table: 8 medicinal plants most cited by the study subjects. Pelotas, Rio Grande do Sul, Brazil, 2011.

<table>
<thead>
<tr>
<th>Popular name</th>
<th>Scientific name</th>
<th>Indication</th>
<th>Part used</th>
<th>Preparation mode</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosemary</td>
<td><em>Rosmarinus officinalis</em></td>
<td>Used to improve memory and circulation.</td>
<td>Branches</td>
<td>Tea or prepared in wine (1 L of wine, 1 cup of honey, 1 handful of rosemary. Wash and dry the rosemary, pass on the grain alcohol. Mix and drink for 1 night).</td>
<td>1 chalice in the morning and 1 at night.</td>
</tr>
<tr>
<td>Common rue</td>
<td><em>Ruta graveolens</em></td>
<td>Indicated to treat gastritis, bronchitis, cough, rhinitis, and eye problems. It cures earache.</td>
<td>Leaves</td>
<td>Tea. Leave on alcohol. For treating varicose veins, make the “flood foot” - put it into a deep can, water with tea from the plant at a 40°C temperature and put the feet in, up to the knee. For swelling, fry the leaves with lard and exposed them to the action of smoke.</td>
<td>For gastritis, 2 to 3 leaves in a glass with milk; drink it for 7 days.</td>
</tr>
<tr>
<td>Sedum</td>
<td><em>Crassulaceae</em></td>
<td>For blood cleansing, treating worms and bloated belly in children.</td>
<td>Leaves</td>
<td>Blend a handful of leaves with 1 cup of water. Tea.</td>
<td>3 times a day.</td>
</tr>
<tr>
<td>Fennel</td>
<td><em>Foeniculum vulgare</em></td>
<td>As an antibiotic agent to treat infections, tears (infection) in the eyes of newborn infants. For kidney problems.</td>
<td>Leaves</td>
<td>Syrup, candy, tea. Prepare the syrup with honey, put it all together (guaco and honey).</td>
<td>1 tablespoon in a cup with water.</td>
</tr>
<tr>
<td>Guaco</td>
<td><em>Mikania</em></td>
<td>Used as a sedative and to treat cough.</td>
<td>Leaves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cobbler’s pegs</td>
<td><em>Bidens pilosa</em></td>
<td>To treat measles and “thrush” (Candida sp.) in children.</td>
<td>Leaves</td>
<td>Tea at night.</td>
<td>1 spoon to 1 cup.</td>
</tr>
<tr>
<td>Sambucus</td>
<td><em>Sambucus australis</em></td>
<td>To treat measles and “thrush” (Candida sp.) in children.</td>
<td>Leaves</td>
<td>Tea at night.</td>
<td>1 spoon to 1 cup.</td>
</tr>
<tr>
<td>Psyllium</td>
<td><em>Plantago</em></td>
<td>Used as an antibiotic agent to treat infections, throat problems, and intestinal problems.</td>
<td>Seed/leaves</td>
<td>Tea</td>
<td>1 spoon to 1 cup or chew the leave.</td>
</tr>
</tbody>
</table>

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**Figure 2.** The 8 medicinal plants most cited by the study subjects. Pelotas, Rio Grande do Sul, Brazil, 2011.
Now, from time to time, Dr. F., when he has someone with shingles, then, he refers to me, because he knows that they have nothing to do about it. But the health (services) are not that supportive to us, indeed, because there’s big money coming from multinational companies, and they do not want to lose it. (H. S. B.)

[…] Because people do not believe, and people involved with Medicine, many of them are completely against, and they try to brainwash the student (undergraduate Medicine student) and this is passed on from one to another. Because the medicinal plant, as far as I can recall, has always been used. Why not today? Because of the multinational companies […] (H. S. B.)

These speeches show the understanding of these women on the reason for lack of encouraging to the use of alternative therapies in health care within the official health care system, and they indicate that there is still a gap between the popular practices and those employed within SUS.

Medicinal plants showed to be a cheaper and easier possibility for users to access, when compared to synthetic medicines. The speech below makes clear the understanding on the cost/benefit ratio of plants. This respondent asks for an amount of money to provide the mixtures derived from medicinal plants, due to the cost of materials.

[…] So, many times, with R$ 5.00 the person gets cured, then, some people feel even ashamed to say they came here and got cured. (H. S. B.)

Analyzing data from the study, we notice that these female farmers are reference with regard to knowledge and care with medicinal plants in the community where they live, playing a role in the informal health care system. They learned to use the plants through the family knowledge, but they also use other means, such as books and courses to acquire this learning. They think that medicinal plants are a cheaper and more effective alternative and that knowledge, currently, has not been transferred in an effective way; the women who participated in this study highlight in a few speeches that the Brazilian health care system is still distanced from the use of alternative therapies.

DISCUSSION

Analyzing the prevalence of women in this research, it is believed that they seem more likely to use teas and natural medicines. This way, women may be regarded as caregivers par excellence, because, culturally, they have been chosen to provide care in the family circle.

In turn, the profile of older people may be regarded as favorable to studies which address the theme of medicinal plants in health care, since, perhaps, these people are those with the highest mastery of this knowledge, as it is acquired over time and from generation to generation.

We also noticed in the study the great family influence in the transmission of knowledge on these practices. This finding is similar to another research, in which knowledge on plants was transmitted mainly through family generations, orally.

The search for information in books mentioned by the farmers was also observed in other studies, such as one conducted in Ariquemes, Rondonia, Brazil, with prestigious people in the community, as they know medicinal plants, where the largest part of knowledge was acquired through books.

Among the 116 medicinal plants mentioned in this study, 25 are included into “Resolução da Diretoria Colegiada” (RDC) 10/2010, from the National Agency for Sanitary Surveillance (ANVISA), which lists 66 medicinal plants with scientific evidence for various symptoms through scientific studies, as well as dose, preparation, and contraindications.

Thus, it is understood that the popular health care system has a humanistic focus, with an emphasis on family, practical, economic, and social factors, emphasizing the provision of care. In contrast, the professional health care system has a scientific focus, highlighting facts outside the family, less practical and abstract, prioritizing cure with some care actions.

From this perspective, nursing needs to get closer to the popular practices of care and, thus, break with the paradigm of the biomedical model of health care. With this, there is a need that academic training is aimed at health promotion and not only at recovery.

The Brazilian Federal Council of Nursing (COFEN), through the Resolution 197/1997, recognizes the alternative/complementary therapies as a specialty and/or qualification of the nurse. To do so, the professional should attend a course with a total workload of 360 hours, whose offer is still very small in the country. Another limitation to the nursing practice with the use of medicinal plants is the lack of scientific studies which clarify the potential of the herbs used; further studies may provide the basis for the inclusion of these drugs into the primary health care.
Another perspective is that, currently, there are several documents published by the Ministry of Health, in which the nurse can find a basis for applying the complementary therapies. For this, the professionals need to have interest and willingness to learn new techniques and therapies. This is a great challenge for modern nursing, but it may bring good results, if properly overcome.

We must think through these implications in nursing care and bring up this discussion in the academic and professional spaces, so that this practice start playing a role in the everyday life of nurses and the other health professionals, providing a health care which connects the scientific to the popular knowledge.

**CONCLUSION**

This study has a considerable importance, because it provided a cultural resumption with regard to the medicinal plants used to care for and maintain the individuals’ health. Thus, it appreciated the popular knowledge and the people involved with the folk curative modalities, not recognized by the official health care system.

Among the results found, we realized a great use of medicinal plants whose knowledge is acquired mainly in the family environment, and the woman is the main holder of this knowledge. These female farmers have a great influence on the community where they live and they have become sources of knowledge and care for various health problems. They also perceive that the health care system does not use, in most cases, medicinal plants, since the professionals do not believe in the curative power of plants.

The results obtained showed that the use of medicinal plants has a widespread and accepted use among the rural population in the town. Thus, as provided for in the health policies on which this study was grounded, it is needed and urgent that Brazil creates a network of efforts for developing measures aimed at improving health care, strengthening family agriculture, the social inclusion, and the investment for including complementary practices into the public health care services.

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