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MEDICINAL PLANTS USED IN SELF-CARE BY PEOPLE WITH CANCER IN PALLIATIVE CARE

Camila Timm Bonow[1]
Teila Ceolin[1]
Caroline Vasconcellos Lopes[1]
Juliana Graciela Vestena Zillmer[1]
Natália Rosiely Costa Vargas[1]
Rita Maria Heck[1]

[1] Universidade Federal de Pelotas, Programa de Pós-Graduação em Enfermagem. Pelotas, Rio Grande do Sul, Brasil.

ABSTRACT

Objective: to know the medicinal plants used in self-care by people with cancer in palliative care.
Method: this is a qualitative study, of the exploratory and descriptive type. The research was conducted in Pelotas, Rio Grande do Sul, in the participants' homes. Data collection was conducted between June and September 2018. The study participants were people with cancer in palliative care followed-up by the Program of Interdisciplinary Home Hospitalization, in use of medicinal plants. They totaled 20 participants, with 14 having the presence of the caregiver during the interview; she occasionally encouraged them to answer the questions.
Results: it was identified that people with cancer in palliative care already used medicinal plants before the illness and continued using them in a search for therapeutic action, both for reducing symptoms caused by late-stage of the disease and for curing cancer. The knowledge of medicinal plants, most of the times, was passed from generation to generation or by friends and, generally, the use of plants is not informed to the health care professionals.
Conclusion: the research produced a recovery of the popular knowledge of the species used in palliative care by people with cancer, promoting the comprehension of their habits regarding the use of the plants. Accordingly, the expansion of pharmacological studies related to the plants used for the treatment of signs and symptoms of cancer is essential.

DESCRIPTORS: Medicinal plants. Neoplasia. Palliative care. Nursing. Qualitative research.

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PLANTAS MEDICINAIS UTILIZADAS NA AUTOATENÇÃO POR PESSOAS COM CÂNCER EM CUIDADO PALIATIVO

RESUMO

Objetivo: conhecer as plantas medicinais utilizadas na autoatenção por pessoas com câncer em cuidado paliativo.
Método: trata-se de um estudo qualitativo do tipo exploratório e descritivo. A pesquisa foi realizada em Pelotas, Rio Grande do Sul, no domicílio dos participantes. A coleta de dados foi realizada entre junho e setembro de 2018. Os participantes do estudo foram pessoas com câncer em cuidado paliativo acompanhadas pelo Programa de Internação Domiciliar Interdisciplinar, que utilizam plantas medicinais. Totalizaram 20 participantes, sendo que 14 deles tiveram a presença da cuidadora durante a entrevista, a qual, em alguns momentos, os estimulava a responder as perguntas.
Resultados: identificou-se que as pessoas com câncer em cuidado paliativo já utilizavam antes do adoecimento e continuaram fazendo o uso das plantas medicinais em busca de uma ação terapêutica, tanto para amenizar os sintomas causados pelo estágio final da doença, quanto para a cura do câncer. O conhecimento das plantas medicinais, na maioria das vezes, foi passado de geração em geração, ou por amigos, e, geralmente, o uso das plantas não são informadas aos profissionais de saúde.
Conclusão: A pesquisa gerou um resgate do conhecimento popular das espécies utilizadas no cuidado paliativo pelas pessoas com câncer, proporcionando compreender seus hábitos em relação ao uso. Dessa forma, é essencial a ampliação de estudos farmacológicos relacionados às plantas utilizadas para o tratamento dos sinais e sintomas do câncer.

DESCRITORES: Plantas medicinais. Neoplasia. Cuidados paliativos. Enfermagem. Pesquisa qualitativa.

PLANTAS MEDICINALES UTILIZADAS EN EL AUTOCUIDADO POR PERSONAS CON CÁNCER EN CUIDADOS PALIATIVOS

RESUMEN

Objetivo: conocer las plantas medicinales utilizadas en el autocuidado por personas con cáncer en cuidados paliativos.
Método: se trata de un estudio cualitativo del tipo exploratorio y descriptivo. La investigación se realizó en Pelotas, Rio Grande do Sul, en los domicilios de los participantes. La recolección de datos tuvo lugar entre junio y septiembre de 2018. Los participantes del estudio fueron personas con cáncer en cuidados paliativos monitoreadas por el Programa de Internación Domiciliaria Interdisciplinar, y que utilizan plantas medicinales. Totalizaron 20 participantes, 14 de los cuales tuvieron a su cuidadora a su lado durante la entrevista, quien, en algunos momentos, los alentaba a responder las preguntas.
Resultados: se determinó que las personas con cáncer en cuidados paliativos ya utilizaban plantas medicinales antes de la enfermedad, y que siguieron haciendo uso de ellas en busca de una acción terapéutica, tanto para aliviar los síntomas causados por el estadio final de la enfermedad como para tratar de encontrar una cura del cáncer. En la mayoría de los casos, los conocimientos sobre las plantas medicinales fue traspasado de generación en generación, o por amigos, y, generalmente, el uso de las plantas no es informado a los profesionales de salud.
Conclusión: la investigación rescató el conocimiento popular de las especies utilizadas en el cuidado paliativo por las personas con cáncer, lo que permitió comprender sus hábitos en relación a su uso. De esta forma, resulta esencial ampliar la realización de estudios farmacológicos relacionados a las plantas utilizadas para el tratamiento de los signos y síntomas del cáncer.

DESCRIPTORES: Plantas medicinales. Neoplasia. Cuidados paliativos. Enfermería. Investigación cualitativa.

INTRODUCTION

The advanced stage of cancer is probably the factor that causes most impact on the quality of life of individuals, which is emphasized by a drop in the functional capacity and by the presence of symptoms caused by the disease or the treatment. Therefore, the care provided to patients with cancer at this stage is no longer curative, but palliative.[1]

Regarding palliative care, Brazil is slowly advancing, since that in some states there are laws ensuring to users the right to receive palliative care. Nationally, under the Unified Health System (*Sistema* Único *de Saúde*, SUS), resolution No. 41 was approved in 2018, proposing that palliative care shall be offered anywhere in the health care network.[2] It is believed that the quality of life in palliative care goes beyond conventional treatment, thus being able to incorporate the use of medicinal plants.

At the late 1970s, the World Health Organization (WHO) created the Traditional Medicine Program that motivated and intensified the insertion, acknowledgment, and regulation of practices, such as the use of medicinal plants.[3] In Brazil, in 2006, the Ministry of Health prepared the National Policy on Integrative and Complementary Practices (*Política Nacional de Práticas Integrativas e Complementares*, PNPIC) and the National Policy on Medicinal Plants and Herbal Medicines (*Política Nacional de Plantas Medicinais e Fitoterápicos*, PNPMF), aiming at the implementation of these policies in the SUS in order to carry out actions directed to the guarantee of safe access and rational use of plants and herbal medicines in the country, given that 80% of the global population uses plants or preparations.[4]

Plants are a complementary therapeutic action that is more accessible and accepted by the users of health care, being beneficial both physically and emotionally, improving quality of life.[5] Accordingly, integrative and complementary practices (ICPs), such as medicinal plants and music therapy, among others, have the potential of being applied to palliative care. They can improve scores of pain, depression, anguish, and humor; strengthening the capacity of treatment or of coping with death.[6]

In their daily life, the population uses different care practices, among them there are the ICPs, such as the use of medicinal plants, homeopathy, phytotherapy, acupuncture, nutritional care, self-help groups, and spirituality. Thus, it is understood that people with cancer in palliative care also use some care practices for the treatment of signs, symptoms and feelings of the tumor, or even seek for new alternatives/treatments for the cure of cancer.

An author approaches medical pluralism, which shows that in our society most of the individuals potentially use several information and types of care not only for different problems, but also for the same health problem. It is through the users that it is possible to record the diversity of types of care that they use and articulate, with the purpose of reducing or solving their problems.[7]

In view of the ideas exposed, the theoretical framework of the cited author, which considers the use of medicinal plants as a practice of self-care, was used. Self-care is a basic activity of the health/disease/care process, developed based on the own individuals and groups, autonomously. It is defined as representations and practices that the population uses, with no intervention of professional healers.[7]

In this context, this research had the following guiding question: What medicinal plants are used in self-care by people with cancer in palliative care? Therefore, this study aimed to know the medicinal plants used in self-care by people with cancer in palliative care.

METHOD

This is a qualitative study, of the exploratory and descriptive type. The participants of this research were followed-up by a multi-professional team, which is inserted in and reproduces certain practices and knowledge of the biomedical model. Despite that, people with cancer in palliative care use medicinal plants in health care, thus enabling to work with Eduardo Menéndez' concepts.[7]

The research was carried out in Pelotas, Rio Grande do Sul, in the homes of people with cancer in palliative care who use medicinal plants, followed-up by the Oncology Interdisciplinary Home Hospitalization Program (*Programa de Internação Domiciliar Interdisciplinar*, PIDI) of the UFPel School Hospital, affiliate of the Brazilian Company of Hospital Service (*Hospital Escola da UFPel/Empresa Brasileira de Serviços Hospitalares*, HE UFPEL/Ebserh). For investigation of the participants, a visit together with the PIDI's team was made for identification of the people who use medicinal plants.

Data collection took place between June and September 2018, conducting a total of 75 visits. During this period, the PIDI provided care to 38 people with cancer in palliative care. During the selection process of the participants, there was one refusal and 17 people did not meet the inclusion criteria, namely: three people approached did not use any type of medicinal plant; four did not communicate orally (three due to cerebral metastasis and one for being tracheostomized); three lived in highly dangerous places for the researcher to go by herself; two were going through severe depression; and five had passed away.

As inclusion criteria for the participants, the following were considered: people with cancer in palliative care and their corresponding caregiver, followed-up by the PIDI of by School hospital of the Federal University of Pelotas; current use of medicinal plants in health care; oral communication, lucidity, and orientation, based on the evaluation of the researcher; acknowledgment of their disease and health condition; age (being over 18 years old); and permission to use a voice recorder.

The person with cancer in palliative care and their caregiver were approached and asked about their interest in participating in the study. If they accepted, they were included. Selection took place in two manners: by telephone contacts and by means of home visits. The visit was made together with the PIDI's team, enabling the monitoring of approximately two individuals per week. This frequency was due to the unavailability of space in the team's car for the researcher's commuting, as in some days more professionals were required to monitor the patients. The daily visits to the patients are made by the team composed of: driver, nurse, nurse technician, and physician, assisted by other professionals according to the needs of each patient. In this way, the initial contact with some participants was by telephone.

After the selection, data collection was scheduled for another moment, in which the researcher commuted on her own vehicle or public transportation to the participant's home. 20 participants were interviewed and 14 had a caregiver during the interview, who at some moments helped them to remember answers and stimulated them to answer the questions made by the researcher about the medicinal plants used in health care, for a total of 34 participants.

During the research, cultural aspects that implicate in the adoption of a set of techniques were taken into account: semi-structured interview recorded, participant observation (during a period of four months), and photographic record. And, as instrument of record, a field diary (with descriptive, analytical, and methodological notes) was used.

In the guide used for data collection, there were 6 questions to contextualize the participants and 13 questions guiding the semi-structured interview. Regarding the approach about medicinal plants, the data was extracted from the following questions: Do you use any medicinal plant in health care? If so, which? After the diagnosis of your disease, did you start using any medicinal plants different from the ones you already used? If so, which ones? Did you already use medicinal plants before the illness? Comment; From whom did you learn about the use of medicinal plants? Comment;

Where do you buy the medicinal plants you use? Comment; When you have doubts about how to use/identify some plant, how are they clarified? Do you inform the health care professionals about the use of medicinal plants? Why? To which professionals? Additionally, a chart with information regarding medicinal plants was prepared, containing the popular name; where it is found; indication; part used; method of preparation; who indicated it; and photographic record.

The 20 interviews totaled 8 hours, 25 minutes, and 37 seconds of recording, which were transcribed literally and typed in Word. Later, data was organized and classified in an Excel spreadsheet for analysis of all the content, being organized by thematic groups based on the questions asked during the interview. No codes were inserted in the process.

The data was investigated and analyzed according to the hermeneutic-dialectic method, which proceeded in five stages: 1st: Approximation with data; 2nd: Organization of data; 3rd: Classification of data; 4th: Vertical and horizontal synthesis of each unit of analysis; 5th: Dialectical interpretative analysis of research data; 6th: this stage is different from the others due to the reconstruction of the material produced, the reinterpretation of the content of analysis, based on the approximation or exclusion of the researcher, who seeks the understanding of the object of study.[8]

In this study, Resolution No. 466/12 of the National Health Council of the Ministry of Health that develops guidelines about research with human beings was respected. The project was submitted to *Plataforma Brasil*, and approved by the Research Ethics Committee. To maintain anonymity, the participants were identified by a first name chosen by the interviewee, followed by the letter "P" - Person with cancer, or "C" - Caregiver, and by their age. Example: João (P), 66.

RESULTS

Among the 20 participants, 14 were men. Their age varied between 26 and 89 years old, with the predominant age group (30%) being between 60 and 69 years old. Regarding schooling, most of the participants had incomplete elementary education (55%), which also influences income, since 40% of the participants received the minimum wage (R$ 954.00, current in 2018). The majority (80%) of the interviewees stated they were retired.

Regarding the 14 caregivers, all were females, their age group ranged from 32 to 82 years old, and their prevalent occupation was "housewife". Regarding the relationship, 12 caregivers were family members of the people with cancer; most of them wives. Regarding income, one minimum wage predominated. The majority that was a wage earner was currently away from work to provide care for the family.

"I have always drank these teas": the use of medicinal plants before and after the illness

All the people with cancer in palliative care interviewed used medicinal plants before falling ill and continued to use them after the onset of the disease, intensifying their use according to physical and emotional needs. Some participants already used some plants, such as chamomile, lemon balm, and ginger before falling ill; and later they were used for the treatment of symptoms like flatulence, stomach pain, and anxiety. The majority continued using such plants after the diagnosis, as we can observe in the following reports: […] *Yes, chamomile tea, he always drank it, because he likes tea, he was raised in the colony. There, they were cured with tea herb, they didn't have resources, you know, so he loves tea and he drinks a lot of chamomile tea. After he came home, we prepared it all the time because he had stomach pain, also because of the chemical process, he complained a lot about stomach pain, so chamomile all the time, it is also anti-inflammatory.* (Neusa (C), 60).

[…] *I have always drunk tea, all kinds of tea, I also use fennel for gases".* (Norma (P), 61).

In addition to the medicinal properties of the plants, they were also used for presenting a pleasant taste, for having energetic singularities, and for providing a feeling of pleasure and wellness. We can see that in the report of a participant who drinks tea due to the flavor and not for its medicinal properties. […] *I drink tea* […]*, lemon balm, citron, orange peel or leaf, bergamot leaf teas. Now I'm drinking star anise tea.* (Norma (P), 61).

[…] *nd did you use it for medicinal purposes? Did you use lemon balm for any purposes?* (Researcher).

[…] *No, only because of the taste.* (Norma (P), 61).

The medicinal plants used by people with cancer in palliative care are grown in the courtyard of their homes, their neighbors' homes or their family members' homes, purchased in supermarkets ("box tea"), or in stores specializing in natural products based in the Central Market (Pelotas Public Market), in addition to herbalists in the center of Pelotas, who normally sell herbs in transparent plastic packages. Thus, the participants used medicinal plants both *in natura* and as a vegetable drug. […] *There is always a neighbor around who has it, in the neighborhood, next door, so you know who has some herbs.* (Bernardo (P), 26).

[…] *I bring them from outside* (rural)*, from my parents and brothers' property. Then, I keep them* (dry in a glass)*, some we have at home, we grow them in a vase.* (Ana (C), 53).

[…] *Most of them we borrow from the neighbors or they are in the courtyard, what I end up buying is soursop or another one that my mother-in-law gave to him. We bought from a herbalist at Osório* (General Osório street) *or at Neto* (General Neto street) *in the intersection with XV* (XV de Novembro street) *there, almost always there.* (Deise (C), 42).

[…] *Ah, we have a space here at home, and when we don't have what we need, some neighbor helps, or we buy some tea boxes at the supermarket*. (Neusa (C), 60).

"We learned gradually": the knowledge about medicinal plants

Most of the participants reported that the knowledge about the use of medicinal plants comes from their parents and grandparents. Some of them acquired the knowledge through books, with health care professionals, or by exchange of knowledge between friends.

It runs in the family, my mother drank it a lot, my mom knew all kinds of tea. This tea is for that, drink this, drink that, so we learned. (Norma (P), 61). […] *With my grandparents. In that time they didn't see a doctor, they drank tea*. (Mario (P), 82).

[…] *With this book about herbs and tea and with my grandmother, she always prepared a lot of tea.* (Orlandy (P), 82).

[…] *When I lived in Porto Alegre, there was a health center, they a doctor, Doctor Brasil, he was a specialist in tea, and they started to offer a course. I started going there and a lot of people from the countryside went. We exchanged a lot* (of knowledge about medicinal plants)*.* (Marisa (C), 75).

When there were doubts about how to use or identify medicinal plants, some participants said that they use the Internet due to its easy access, but most of them clarifies doubts with family members or friends, for relying more on their explanations or for having difficulties in using the Internet. […] *There's always someone* (friends, neighbors, family members) *who thinks that knows more, who is more used to prepare tea, and is giving tips, I think.* (Bernardo (P), 26).

[…] *I ask my aunt, my mother, my grandfather.* (Betina (P), 40).

[…] *I ask someone, some friend or family member.* (Norma (P), 61).

[…] *I normally ask them* (daughters) *to search* (Internet). (Paula (C), 50).

[…] *Yes, I search on the Internet, we use books to take a look.* (Luci (C), 52).

“Some of them accept and others do not believe”: contradictions in the use of medicinal plants

Regarding the matter of informing the PIDI health care professionals about the use of medicinal plants, the majority reported that they did not inform this practice. Among the reasons for that decision is the lack of interest of these professionals in knowing about the use and, for this reason, they did not ask the patients and family members about it.

Such situation was also identified when the patients were assisted by medical professionals linked to other health services, such as oncologists, in which the families prefer not to comment. This is because these professionals are against the use of medicinal plants and do not believe in their benefits when combined with conventional treatment. However, the use of plants was revealed only to the professionals who had a strong relationship with the families due to reliability and relationship built during home care.

We can observe in the following reports the reason why the participants usually do not talk to the professionals about the use of medicinal plants: […] *No, because they don’t believe in it. I talked about aveloz once, I told a doctor and he accepted, and another one said no, only chemotherapy could cure*. (Paula (C) 50).

[…] *I haven’t been talking about it because there are some who accept and others who don’t. There are some doctors who don’t accept blessings, but in the past it was only that and elderberry tea, elderberry flower, it was prescribed, now when you see a doctor it’s only drugs. You see, upset stomach also gave, the person blessed and everything was gone, now it doesn’t exist, it’s only medicine, medicine.* (Arnaldo (P), 68).

During data collection, it was possible to observe and record in the field diary the aforementioned theme when, usually, the physician does not know about the medicinal plants, resulting in discontinuation of their use. […] *The caregiver* (Fabiane) *reported that the PIDI nurse had prescribed the use of marcela if they did not have chamomile so that the user* (Maria) *would wash her eye, which was presenting a possible infection. However, when the medical evaluation was received, the professional suspended the use because marcela could not be used for this purpose, and they should only maintain the use of eye drops, which was prescribed. Some other day when I returned to the user’s home with the PIDI, her caregiver related that they had bought chamomile and were using it because they noticed that its daily use brought more benefits than the use of the eye drops prescribed by the doctor* (Field diary of 10/28/2018 and 9/21/2018).

During data collection, a diversity of medicinal plants was mentioned, both genus and species, totaling 103 plants, which are presented according to information provided by the interviewees. The participants reported that they used the following parts in the preparation: leaf, root, flower, fruit, and seed. Infusion was the main method of preparation; decoction, compress, tincture, and poultice were also mentioned. Below, Chart 1 with the 10 medicinal plants most mentioned by the participants is presented.

Chart 1 – The 10 medicinal plants most mentioned by the research participants. Pelotas, RS, Brazil, 2018.

Popular Name (number of mentions)	Scientific name	Place where it is	Indication	Part used	Method of preparation	Who indicated it
Rosemary (6)	*Rosmarinus officinalis* L.	Home's courtyard, supermarket, and grown with other plants in a vase at home.	Bloodstream, calming, and evil eye.	Leaf	Infusion, decoction, food spice, using in *mate* (*chimarrão*) and as decoration.	Family members, book, nutritionist
Garlic (6)	*Allium sativum* L.	Supermarket	Natural antibiotic, influenza, decongestant, lung fortifier, throat infection, cancer, increase in immune system.	Bulb	Influenza: put a clove of garlic chopped in boiling milk, stifle and drink when it is warm. Increase in immune system: 2 cloves of garlic, open them in the middle, put them in a glass and pour water, keep drinking and replenishing all day long. Infusion and decoction, spice.	Family members, book, physician.
Star Anise (5)	*Illicium verum Hook. f.*	Supermarket	Digestion, abdominal pain, influenza, colic, and to warm.	Fruits and seeds	Infusion, decoction, *mate* (*chimarrão*).	Friends, books, family members.
Aveloz (6)	*Euphorbia tirucalli L.*	Home's courtyard, friends	Cancer	Latex	*5 to 10 drops of the plant's liquid with 2 fingers of milk or water. *Break the thallus and put 1 drop in water. *One drop in milk and, in the next day, two, increasing until the 7th day, and after that start decreasing one drop each day.	Mother, family member, friends, people with cancer at the Center of Radiotherapy and Oncology (Ceron) in Pelotas.
Chamomile (10)	*Matricaria recutita* L.	Supermarket, home's courtyard, Central Market.	Calming, anti-inflammatory, stomach pain, eye disorders, shingles, mucositis	Flower	*Infusion, *mate* (*chimarrão*) *Topical use: prepare an infusion (compresses), wash twice a day. *Mouthwash: mouthwash with the plant tea several times a day.	Family members, wife, physicians, PIDI team, people with cancer.
Coyote bush (10)	*Baccharis* spp.	Friends' home, family members' home in rural places, herbalist, countryside.	Stomach, sickness, digestion, liver	Leaf	Decoction, infusion, *mate* (*chimarrão*)	Family members.
Ginger (7)	*Zingiber officinale* Roscoe	Supermarket, Central Market.	For throat, throat infection, influenza, cold, body aches*.	Root	Decoction, bits of ginger in the water of *mate* (*chimarrão*) and flavored water, chewing bits, and in food as powder. *Topical use (prepared with alcohol and bits of ginger to ferment).	Family members, friends, book.

Chart 1 – Cont.

Popular Name (number of mentions)	Scientific name	Place where it is	Indication	Part used	Method of preparation	Who indicated it
Mint (6)	*Mentha* × *piperita* L.	Home's courtyard	Digestion, calming.	Leaf	Infusion, *mate* (*chimarrão*)	Family members
Malva (7)	*Malva* spp.	Neighbors, friends	Infection	Leaf	Infusion, mouthwash	Family
Marcela (13)	*Achyrocline satureioides* (Lam.) DC.	Herbalist, neighbor, countryside, family members	Stomach pain, abdominal pain, lower arterial pressure, eye disorders, diarrhea.	Flower	Infusion to drink. Infusion with the flower. Wash the eyes 2 times a day.	Family members, health professionals

DISCUSSION

The predominance of cancer cases found in this research is in line with global indicators, which show incidence rates adjusted by age, both in men (217.27/100,000) and in women (191.78/100,000). Accordingly, a slight predominance of men is noted, the age group varied, but the highest incidence of cancer is from 40 years old.[8] On the other hand, the estimate for 2020 in Brazil shows that the incidence of cancer is higher among women and that the cancer mortality rate is higher for men.[9]

Regarding the caregivers, two studies carried out in Pelotas/RS with caregivers who are family members of people with chronic disease or of terminal patients, linked to the Home Care Service of the UFPEL/EBSERH School Hospital (PIDI and *Melhor em Casa* [Better at Home]), showed that most of the caregivers were women, wives or daughters, and that the age group ranged from 30 to 76 years old. They reported that they did not receive remuneration for the provision of care and that they live on the income of the beneficiary family member or retirees of the National Social Security System (*Instituto Nacional de Seguridade Social*, INSS).[10–11]

People with cancer in palliative care already used medicinal plants before the illness and continued using them for reducing the symptoms caused by the late-stage of the disease or even in search of a cure for cancer. Thus, there are different practices regarding health care, as nutritional care, use of medicinal plants, feeling of wellness, performance of work activities, and relationship with people.[12] Most people practice different activities to solve their physical and emotional discomfort, exposing pluralism in health care.[13]

People who suffer from physical or emotional discomfort have several alternatives to help themselves or to seek help from others: resting or taking a home medication, asking a friend, a family member, or a neighbor for advice, seeing a healer or a physician. They may follow all these stages, or maybe only one or two of them.[13]

In a study carried out with users in chemotherapy of a High Complexity of Oncology Center in Ijuí/RS, all the patients interviewed used medicinal plants; 67% used them in a search for therapeutic action and for the adjuvant treatment of cancer; the use of medicinal plants was reported by 40% of the people in the study. These plants were indicated by family members, friends, or neighbors.[14]

The users of the health services seek other treatments for health care, not only the one offered by the health system, within the biomedical model. The biomedical paradigm emphasizes materialist and mechanical conceptions, focused on the disease and control of the biological and social body. The conception of cure, as regards control of diseases, and the technology are part of this project. In this discourse, nature was separated from the sacred and from the human.[15]

In this context, integrative and complementary practices, such as the use of medicinal plants, fill out some "gaps of the biomedical model regarding the therapeutic resoluteness of their services; alongside, they support social senses, meanings, and values in the face of suffering and illness, as well as the treatment and cure of diseases, different from the dominant ones. These values tend to favor the autonomy of people in seek of a more harmonious life, i.e., mentally and physically balanced, less competitive or aggressive, and more supportive in relation to their family and society".[15]

It is important to emphasize that the use of medicinal plants, reported by the participants in the health/disease/care process, is an activity of self-care, a constant action, developed from the individuals and groups themselves, as a result of the autonomy to carry out health care.[7]

Based on the reports of the participants, it was observed that the access to medicinal plants is not only related to family farming or to the system of changes specified in a community. It was mentioned in a research study[16] carried out in Pelotas with herbalists and merchants that, in a specific period, people guarantee the acquisition of medicinal plants whether through formal or informal commerce.

The reports of the participants evidenced the perpetuation of knowledge regarding medicinal plants between generations, "we learned gradually". We can observe that the families have the habit of consulting their elderly people, as a research study carried out with inhabitants of a community in Brenha, Ceará, shows and indicates that the knowledge regarding medicinal plants is a legacy passed from generation to generation over time.[17]

The medicinal plant remembered or mentioned is always related to stories or examples confirming its therapeutic efficacy.[18] The transmission and preservation of the popular knowledge regarding plants are essential for the maintenance of the cultural identity of rural communities, as mentioned in the reports "*people from the countryside*", for this reason, research studies that confirm the preservation of ethnobotanical knowledge and medicinal plant knowledge are essential.[17]

Ethnobotanical studies and surveys on the popular knowledge related to medicinal plants are essential for the basis of clinical and pharmacological research studies, which will provide theoretical support to the health care professionals, so as to guide users on the use of medicinal plants. Therefore, knowing the risks of toxicity, drug interactions, and better ways of using complementary therapies is essential.[19]

The consumption of medicinal plants and plant food supplements has a growing world tendency. The intake of plants has different explanations for the population who uses them for health care. Accordingly, pre-clinical and clinical studies are important for the analysis of active substances in each medicinal plant, and, therefore, for identifying similarities between the components of conventional medications, avoiding possible adverse reactions.[20]

We can observe in this research that the participants use popular knowledge when there are doubts about how to use/identify some plant. It is the health care professionals' responsibility to guide the population about the use of medicinal plants but, according to a research with 28 healthcare professionals with higher education and technical education, the knowledge about medicinal plants is limited, making it difficult to meet the demand of the population regarding the care with the use of plants. In view of that, they expressed the need for professional qualification and mentioned that it is through courses on medicinal plants that the knowledge to be used in the daily work will be acquired.[21]

It is understood that the use of medicinal plants requires some attention from the nurse to the family, helping and sharing knowledge about the use of plants practiced by inhabitants of a community, therefore improving the health care provided to the population, which needs to be understood within the social, historical, and cultural context.[22]

According to people with cancer in palliative care, some professionals that monitor them do not believe in the medicinal properties of plants. This situation occurs due to conceptions of the world, academic training, life, values and habits of the health care professionals, who usually reproduce the biomedical model considering popular knowledge as illegitimate, as referred to in the following report: "*it's only medicine, medicine*", not recognizing or including the popular knowledge in health care.

A study carried out with professionals of a Family Health Strategy Unit in Petrolina-PE verified that training and motivation of the health care professionals are necessary for the indication of medicinal plants. Some professionals stated that they prescribed herbal medicines, but they could not mention the names of the products when asked. One of the suggestions given to solve the problem would be the universities include disciplines their curricula, such as Phytotherapy, exploring the theme and preparing the professionals, as well as updating courses.[23]

As a result of the increase in the use of integrative and complementary therapies, such as medicinal plants, there is a fundamental need to include this content during the academic training of health care professionals. However, medicinal plants are part of a millennial knowledge that is in constant construction, therefore requiring from the professionals training and qualification in the care provided to the users, appreciating their popular practices in health care, clarifying and suggesting new practices based on scientific knowledge.[24]

Through the analysis of scientific studies and of the reports of people with cancer, we can notice lack or insufficient communication about the ICPs between the professional and the user during the appointments, which can be a consequence of different factors, such as uncertainty to talk about the practices, as a result of the lack of theoretical deepening, and disbelief in their efficacy, in addition to scarcity of protocols associated with this context.

In light of the foregoing, the university, as a center that shares knowledge, is responsible for cooperating with the discussion about the ICPs in order to train qualified professionals, who contribute to the improvement of the quality of life of the population and to the strengthening of the SUS.[24]

The 10 medicinal plants most mentioned by people with cancer in palliative care and by caregivers were compared to the scientific literature and are presented in Chart 2.

Regarding the use referred to of these 10 medicinal plants, most of them have a scientific indication verified; rosemary has an indication similar to the popular knowledge.

The research studies, according to each of the 10 medicinal plants mentioned, are still scarce and outdated. Many of them are recognized by the Ministry of Health, but they still need to be explored and scientific publications need to be expanded, even if it is through popular knowledge, as research studies and tests in laboratory with medicinal plants are a slow process, taking up to 20 years.

The research presented some limitations, such as the impossibility of identifying all the medicinal plants mentioned, as normally they were not at the participant's home or did not have flowers and/or fruits during the data collection. Additionally, the research presents the particularities of the group investigated, which may vary in other regions of the country.

Chart 2 – The 10 medicinal plants most mentioned, based on the scientific literature. Pelotas, RS, Brazil, 2018.

Popular Name (number of mentions)	Scientific name	Scientific Literature
Rosemary (6)	*Rosmarinus officinalis* L.	Anti-inflammatory, oral cavity antiseptic, skin diseases, and scalp. Topical antiseptic, anti-mycotic scabicide.[25]
Garlic (6)	*Allium sativum* L.	Indicated as an adjunct to the treatment of chronic bronchitis and asthma, being an expectorant and preventing vascular changes. Adjunct to the treatment of hyperlipidemia, mild to moderate arterial hypertension, symptoms of influenza and cold, and for the prevention of atherosclerosis.[25]
Star Anise (5)	*Illicium verum Hook. f.*	Digestive, influenza, and kidney problems.[26]
Aveloz (6)	*Euphorbia tirucalli L.*	A few drops of the latex (a maximum of three) in a liter of water is indicated for the treatment of cancer.[27]
Chamomile (10)	*Matricaria recutita* L.	Antispasmodic, anxiolytic, and mild sedative. Anti-inflammatory for oral cavity diseases.[25]
Coyote bush (10)	*Baccharis* spp.	Dyspepsia (digestive disorders).[28]
Ginger (7)	*Zingiber officinale* Roscoe	Antiemetic, anti-dyspeptic, and for cases of motion sickness.[25]
Mint (6)	*Mentha × piperita L.*	Indicated for gastrointestinal disorders, inappetence, flatulence, enteritis, irritable bowel syndrome, vomiting, migraine, influenza and cold, bronchitis, rhinitis, sinusitis, and asthma. Topically applied to osteoauricular inflammations.[29]
Malva (7)	*Malva* spp.	It presents an anti-inflammatory and anti-tumor effect, as well as antioxidant properties.[30]
Marcela (13)	*Achyrocline satureioides* (Lam.) DC.	Abnormal digestion and intestinal colic; as mild sedative; and as anti-inflammatory.[28]

CONCLUSION

All the individuals with cancer in palliative care who were studied already used medicinal plants in self-care before falling ill with cancer. Most of the people reported that they do not inform the health care professionals about the use because, when they did it, the professionals were against it for not believing or accepting this practice. Therefore, there is the need for a reciprocal relationship between professionals and users for planning health care, since the use of medicinal plants can interfere in the treatment offered by the health system.

People with cancer in palliative care know about the use of medicinal plants in health care, as the benefits of many of them are scientifically confirmed by pharmacological studies. Through the research, it was possible to elucidate that the users are opened to talk about the use of medicinal plants in health care, and many of them felt valued by being able to contribute with the research.

The research produced a recovery of the popular knowledge of the medicinal plants used in the self-care of the palliative care by people with cancer, promoting the comprehension of their habits regarding the use of plants. Accordingly, there is a fundamental need to expand pharmacological and clinical studies related to the plants mentioned, based on popular knowledge, with a special emphasis on the ones used in the treatment of cancer signs and symptoms.

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Study design: Bonow CT, Ceolin T, Heck RM.
Data collect: Bonow CT.
Data analysis and interpretation: Bonow CT, Ceolin T, Heck RM.
Discussion of the results: Bonow CT, Ceolin T, Heck RM, Lopes CV, Zillmer JGV.
Writing and / or critical review of content: Lopes CV, Zillmer JGV, Vargas NRC.
Review and final approval of the final version: Bonow CT, Ceolin T, Vargas NRC.

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CORRESPONDING AUTHOR

Camila Timm Bonow
camilatbonow@gmail.com