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STUDY OF POPULAR KNOWLEDGE AND USE OF MEDICINAL PLANTS AND PANCS BY THE ELDERLY IN UBERLÂNDIA-MG.

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ABSTRACT: The use of medicinal plants by elderly people has been commonly used as an alternative for health treatments, and it is also known that this part of the population has knowledge passed down from generation to generation about medicinal plants and PANCs. The aim of this study was to assess the use of medicinal plants and PANCs by the elderly population participating in an outreach program. This is a descriptive, exploratory cross-sectional study with a qualitative and quantitative approach, carried out in the municipality of Uberlândia MG, in the Universidade Amiga da Pessoa Idosa extension program. Seventy-one elderly people were interviewed, 73.2% of whom were female and 26.8% male, most of whom had a university degree. According to the questionnaires, 57.7% use medicinal plants because they believe in their healing power. In addition, 67.6% described that they continued to use medicinal plants even after their illness had ended. When asked which professional they turn to for knowledge about medicinal plants, 100% said they ask their doctor. Regarding the acquisition of medicinal plants and PANCs, 31% reported that they acquire these plants from neighbors, friends or family members. The main use of medicinal plants is through tea 91.5% from the leaves for various purposes. We found that the elderly people interviewed are aware of medicinal plants and PANCs and their uses. The limiting factor of this study was that it was carried out on a small group of elderly people. In this sense, our study cannot be generalized to the entire population of Uberlândia-MG. Therefore, new studies should be carried out with the population of various neighborhoods in Uberlândia in order to have a more comprehensive view of the use of medicinal plants and PANCs by elderly people in the municipality.
Keywords: Elderly; Medicinal plants; PANCS, Popular Knowledge.

INTRODUCTION

According to statistical projections, the world population in 2050 will be 9.15 billion people, considering that in the year 210 the population was 759 million, this population will triple and we will have around two billion elderly people in the year 2050 (WORLD POPULATION PROSPECTS, 2008). The number of elderly people in Uberlândia MG between 2010 and 2022 saw a significant increase of 75.3%, from 61,674 to 108,148 people aged 60 or over (IBGE, 2010). With the city having a total of 713,224 inhabitants, the elderly now represent 15% of the total population, more than in 2010, when only 10% of residents were elderly. The elderly population generally has a large number of chronic illnesses that lead to the use of a large amount of medication. Elderly people consume three times more prescription drugs than their younger counterparts, and are also considered to be heavy users of over-the-counter drugs (GORMLEY et al., 1993), which makes this class of people a major potential risk. Brazil is considered to be one of the largest countries in the world with a rich biodiversity of fauna and flora. The practice of using medicinal plants has meanings that have been built up through family relationships, in which the elders learned about their use from their ancestors, mainly mothers and grandmothers who played the role of carers. The acquisition of knowledge was passed down between generations, with the elderly considered to be the wisest people who shared their knowledge with younger people (Lima et al., 2012). The aim of this study is to identify and record the diversity, forms of use, propagation environment, growth habit, state of domestication, production cycle and identification of medicinal plants and PANCs used by the elderly in the city of Uberlândia-MG.

METHOD

The study was approved by the Human Research Ethics Committee of the Federal University of Uberlândia, under CAAE number: 88179718.5.0000.5152 and was approved with opinion number 2.703.000. This is an exploratory, descriptive, cross-sectional study of a qualitative and quantitative nature. The sample was by convenience, made up of 71 elderly people aged 60 or over, of both sexes, enrolled in the Medicinal Plants Workshop. Data collection took place from August 2018 to September 2019, after the elderly had been asked to sign the Free and Informed Consent Form and had read it and agreed to take part, by means of an interview with a semi-structured script containing open and closed questions involving the elderly's knowledge of their sociodemographic data, general knowledge of medicinal plants and PANCs. After each verbal interview, the data was transcribed and analyzed in graphs and tables. To ensure anonymity, everyone was identified with numbers. The data was tabulated and analyzed using Microsoft Excel software® , which also generated the graphs and tables.

RESULTS

A total of 71 elderly people were interviewed, aged between 60 and 91, 56.3% of whom were aged between 60 and 69. Of these, 73.2% were female and 26.8% male. With regard to schooling, the minority of elderly people (1.4%) had no formal schooling, followed by 28.2% of those who had incomplete primary schooling and 31% of those who had higher education. According to the latest demographic census carried out by the IBGE in 2010, it can be seen that in the city of Uberlândia the majority of the elderly 61,781 (87.12%) are female, which was also observed in this study.

Table 1 - Distribution of age, diseases and use of controlled medication by the elderly (60+)

Age	n	%
60 to 69 years	40	56,3
70 to 79 years	26	36,6
80 to 89 years old	4	5,6
90 to 99 years	1	1,4
Level of education:		
1st grade	20	28,2
High school incomplete	10	14,1
Completed high school	18	25,4
Higher or >	22	31,0
Illiterate	1	1,4

Source: Research data

Table 2 shows data on the use of medicinal plants. Among the elderly people who reported not using plants, many said that they were afraid or that they believed that they could not achieve a good therapeutic effect

Table 2 - Use of medicinal plants by the elderly

Variable	n	%
Do you have any illnesses?		
Yes	50	70,4
No	21	29,6
Do you take any controlled medication?		
Yes	50	70,4
No	21	29,6
Do you use medicinal plants?		
Yes	41	57,7
No	8	11,3
Sometimes	22	31,0
I used to before I got sick, I don't anymore	0	0,0
How long have you been using medicinal plants?		
I've always used medicinal plants	70	98,6
Since I was diagnosed with Cancer	1	1,4
For what purpose did you use medicinal plants or PANCs?		
Because I believe that medicinal plants can cure me	41	57,7
To mitigate the side effects of treatment	1	1,4
To reduce the symptoms of the disease	8	11,3
To aid conventional cancer treatment	1	1,4

To treat other diseases, but not cancer	10	14,1
Other	10	14,1
Do you continue to use medicinal plants or PANCs even after your illness has passed?		
Yes	48	67,6
No	23	32,4
If the previous answer is yes, you continue to use by:		
having acquired the habit	34	47,9
some illness	15	21,1
for prevention	22	31,0

Source: Research data

Information was collected on their state of health and their use and knowledge of medicinal plants and PANCs. As this is a group that generally suffers from various pathologies, the main illnesses of the elderly were surveyed. Of the 71 participants, 49 said they had some pathology, 19 said they didn't and three left the question blank. The comorbidities mentioned, in order of greatest repetition, were hypertension, diabetes mellitus, hypercholesterolemia, fibromyalgia, depression, anxiety, rheumatoid arthritis, arthrosis, hypothyroidism, insomnia, hypertriglycerinemia, arrhythmia, reflux, muscle weakness, pulmonary emphysema, hyperuricemia, deafness and trigeminal neuralgia. Other pathologies mentioned that were not specified or identifiable by the medications in use were cardiovascular, thyroid and emotional problems.

Table 3 shows the data on how medicinal plants are used and who recommended the use of medicinal plants. Among the elderly people who reported not using plants, many said that they were afraid or that they believed that they could not achieve a good therapeutic effect. When asked who recommended the plants, 32% said it was friends or neighbors, 32.4% family members, 5.6% doctors, 11.3% nurses and 5.6% other professionals. With regard to information on the use of the plant, 53.5% said that they checked with their doctors, while there were no professionals involved in nursing, pharmacy or other professions. As for informing the doctor about the use of medicinal plants, 47.9% said that they do use them, 32.4% do not and 19.7% reported that they sometimes tell the doctor. The main way in which the elderly who took part in the survey acquired plants was from neighbors, friends or family, 43.7%. The main form of medicinal plant use was by tea, 91.5% (Table 4).

Table 3 - How medicinal plants are used and who recommended the use of medicinal plants

Who recommended this medicinal plant(s) to you?	**n**	**%**
Friends/Neighbors	32	45,1
Family members	23	32,4
Medical	4	5,6
Nurse	8	11,3
Media	4	5,6
Do you find out about the medicinal plant from a health professional before using it?		
Yes	24	33,8
No	31	43,7
Sometimes	16	22,5
Yes	24	33,8
With which health professional do you find out about the use of medicinal plants?		
Medical	71	100,0
Nurse	0	0,0
Pharmacist	0	0,0
Others	0	0,0
Where do you get the medicinal plants you use?		
With neighbors, friends or family	31	43,7
In the backyard	18	25,4
At the supermarket, market or fairs	9	12,7
In health food stores	7	9,9
In pharmacies	3	4,2
Others	3	4,2
What did you notice after you started using medicinal plants?		
An improvement in symptoms	63	88,7
I didn't notice any difference	5	7,0
The symptoms got worse	0	0,0
Other	3	4,2
Why don't you use medicinal plants anymore?		
I don't believe in the effects	12	16,9

Have you ever used it and it didn't work	9	12,7
Can't prepare = 3	7	9,9
Not applicable	43	60,6

Source: Research data

Table 4 - How Medicinal Plants are Used

How have you used or do you use these plants medicinally?	n	%
Chas	65	91,5
Decoction	2	2,8
Infusion	2	2,8
Poultice	1	1,4
Ointments	1	1,4
In food	1	1,4

Source: Research data

A total of 82 different names of medicinal plants and 26 Pancs were mentioned Table 5. Of all the elderly people, 27 said they did not use controlled medicines. Some medicines that could not be identified were excluded from the list. However, those mentioned were: Eutirox, Losartan, Pantoprazole, Alprazolam, Hormone replacement, Sertraline, Levothyroxine sodium, Somalgim cardio, Anador, Natifa, Hydrochloridiazide, Simvastatin, Escitalopran, Fluoxetine, Atenolol, Clorana, Corus, Zyloric, Celozoc, Puran t4, Atorvastatin, AAS, Rivotril, Rosurvastatin, Eulirax, Janumed, Diamicron, Amato, Carbamazepine, Quetiapine, Atenolol, Dipyrone, Enalapril, Nifedipine, Metformin, Melhoral infantil and Neolidone.

Table 5 - Main medicinal plants and PANCs mentioned

Medicinal plants		**PANCs**
Avocado	Kale	
Safflower	Carnation	Safflower
Rosemary	Golden	Rosemary
Lavender	Lemongrass	**Lavender**
Lavender	Bug weed	Acerola
Absorbent cotton	St. Mary's wort	Watercress
Mulberry	St. John's wort,	Almeirão
Aniseed	Sweet grass	Sour
Arnica	Espinheira santa	Balsamo
Articuzim	Sucupira bean	Green banana
Babosa	Orange leaf	Burdock
Balsamo	Strawberry leaf	Purslane
Skirt bar	Fennel	Beet **leaf**
Batimao	Ginger	Chilean Bilberry
Bilberry	Guaco	Purple cashew
Bunia	Mint	Cambuqueira
Cajurama	Jaboticaba	Cariru
Cajuru	Jurubeba	Juniper grass
Chamomile	Orange tree	St. Mary's grass
Monkey cane	Sour lime	Sweet grass
Sugarcane	Lime	Hibiscus
Cinnamon	Lobeira	Ora-pro-nobis
Old fluting	Losma	Moringa
Carapia	Macela	Sawdust
Carqueja	Mangava,	Simari
Cataflan	Basil,	Taioba
Horsetail	Melissa,	
Green tea	Pepper	
Cogonha de bugre	Pennyroyal	
Comfrey	Stone breaker	
Mentrasta	Rome	
Muskmelon	Skirt	
Moringa	Parsley,	
Mostruz	Parsley	
Niperco	White fish	
Noni	Sucupira	
Ora-pro-nobis	Taioba	
Oregano	Transaction,	
Straw	Beef trunk	
Panacea	Marcelinha,	
Passion fruit		

DISCUSSION

In the present study, we found that the highest participation was by women, which is in line with the predominance of this sex in the city of Uberlândia MG and also in the literature related to the use of medicinal plants. These data corroborate other studies that have found an incidence of women for knowledge with medicinal plants (Pereira et al., 2016; Almeida et al 2017, Rabelo and Rolim, 2021), and that women have developed throughout human history the role of caregivers and have adhered to the cultivation and use of medicinal plants

to minimize and cure diseases (Vasconcelos et al; 2011, Singh et al., 2013). As for the level of education, considering that all the interviewees reported using medicinal plants, it was found that all categories of education use medicinal plants. However, because the project took place at a university, the majority of those interviewed had a university degree, which may not be the case if this research were carried out elsewhere, as it has been found that knowledge of medicinal plants is not linked to level of education, as seen in other studies such as Pereira et al: Pereira et al., 2016; Szerwieski et al., 2017; Vieira et al., 2024;

In our work we found that the study population used tea more as a medicine, our result is in line with the work of Britto et al., 2007 and Oliveira et al., 2010, Rabelo and Rolim, 2021. In the work by Brito et al., 2007, they pointed out that the chemical composition of tea is different from that of a pharmaceutical or herbal medicine, which uses a defined composition. This fact adds to that described in our study, as it was found that some elderly people do not tell their doctor about the use of medicinal plants, which may lead to an increase in self-medication by this population (Junior, 2005).

As for the professional, the doctor was the most consulted. It's important to note that in an effort to provide doctors with detailed knowledge, Anvisa published the Memento Terapêutico da Farmacopeia Brasileira, which guides medical professionals in prescribing medicinal plants. This document presents the popular nomenclature and the part of the plant used, as well as contraindications, precautions for use, adverse effects, drug interactions, routes of administration and dosage, thus helping with the prescription of these plants (ANVISA, 2016).

The limiting factor of this study was that it was carried out on a small group of elderly people, so the results characterize the profile of the population and cannot be generalized to the population of Uberlândia. Further studies should therefore be carried out with the population of various neighborhoods in Uberlândia in order to gain a more comprehensive view of the use of medicinal plants and PANCs by the elderly.

CONCLUSION

This study showed that the elderly people interviewed use medicinal plants and PANCs based on popular knowledge. This result highlights the importance of health professionals developing actions with the elderly in order to understand the practice of using medicinal plants, how to avoid indiscriminate use and how to prepare them, thus avoiding a higher incidence of self-medication. Thus, it is necessary to train other health professionals to disseminate the use of medicinal plants and PANCs, as educators to assist these users, informing them of the benefits that plants bring to ageing and arousing interest so that they can unveil social stigmas regarding the use of plants, and encourage the search for knowledge. The limiting factor of this study was that it was carried out in a center with few elderly people. Further studies are therefore suggested which could cover a larger population, verifying the possible interactions between the use of continuous drugs and medicinal plants and PANCs.

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