

# Perception of primary care nurses in Pinheiro/ MA regarding phytotherapy and medicinal plants

Percepção de enfermeiros da atenção primária de Pinheiro/MA em relação à fitoterapia e plantas medicinais Percepción de enfermeras de atención primaria en Pinheiro/MA sobre fitoterapia y plantas medicinales

#### **RESUMO**

Objetivo: conhecer a percepção de enfermeiros da Atenção Primária sobre plantas medicinais e fitoterápicos. Métodos: estudo qualitativo realizado em Unidades de Saúde da Família no município de Pinheiro-MA, Brasil, no período de fevereiro a maio de 2022. Resultados: Observou-se baixo nível de conhecimento científico sobre a temática, relacionado à ausência de aprendizado significativo sobre o assunto durante a graduação e no período de atuação profissional, estando o pouco conhecimento que possuem condicionado a saberes familiares. A falta de qualificação adequada é a principal dificuldade para a aplicação da fitoterapia na assistência à saúde, apesar de reconhecerem a relevância dessa prática por seu baixo custo, eficácia e fácil acesso da população. Conclusão: Evidenciou-se pouco embasamento quanto à fitoterapia e plantas medicinais pelos profissionais, revelando a necessidade de criação de estratégias de ação voltadas à inserção da fitoterapia na Atenção Primária do município.

DESCRITORES: Práticas Integrativas e Complementares; Fitoterapia, Atenção Primária à Saúde; Enfermagem.

#### **ABSTRACT**

Objective: to know the perception of Primary Care nurses about medicinal plants and phytotherapics. Methods: qualitative study carried out in Family Health Units in the municipality of Pinheiro-MA, Brazil, from February to May 2022. Results: It was observed that there was a low level of scientific knowledge about the subject, related to the absence of significant learning about the subject during graduation and not the period of professional activity, with little or no knowledge that was conditioned to family knowledge. The lack of adequate qualification is the main difficulty for the application of phytotherapy in health care, despite the recognition of its relevance in practice due to its low cost, effectiveness and easy access to the population. Conclusion: There is little evidence regarding phytotherapy and medicinal plants for professionals, revealing the need for the creation of action strategies focused on the insertion of phytotherapy in Primary Care of the municipality.

**DESCRIPTORS:** Complementary Therapies; Phytotherapy; Primary Health Care; Nursing.

#### RESUMEN

Objetivo: Conhecer a percepção de enfermeiros da Atenção Primária sobre plantas medicinales e fitoterápicos. Métodos: estudo cualitativo realizado en Unidades de Saúde da Família no município de Pinheiro-MA, Brasil, de febrero a mayo de 2022. Resultados: Observou-se baixo nível de conhecimento científico sobre un tema, relacionado con ausência de aprendizado significativo sobre o assunto durante a graduação e no period of atuação profissional, estado o pouco conhecimento que possuem condicionado a saberes familiares. A falta de calificación adecuada es una dificultad principal para la aplicación de fitoterapia en la asistencia sanitaria, apesar de reconhecerem a relevância dessa prática por seu baixo custo, eficácia e fácil acesso da população. Conclusión: Evidenciou-se pouco embasamento quanto à fitoterapia e plantas medicinales pelos profissionais, revelando una necesidad de criação de estratégias de ação voltadas à inserção da fitoterapia na Atenção Primária do município.

DESCRIPTORES: Terapias Complementarias; Fitoterapia; Atención Primaria de Salud; Enfermería.

**RECEBIDO EM:** 31/08/2022 **APROVADO EM:** 01/10/2022

## Verônica Ramalho Vieira

Student of the Nursing Course at the Federal University of Maranhão, Pinheiro/MA campus. Brazil. ORCID: 0000-0003-2275-1334

#### Marisa Cristina Aranha Batista

pharmaceutical. Doctor in Biotechnology. Professor of the Nursing Course at the Federal University of Maranhão, Pinheiro/ MA campus. Brazil.

ORCID: 0000-0002-8089-6307

### Samia da Silva Araujo

Student of the Nursing Course at the Federal University of Maranhão, Pinheiro/MA campus. Brazil ORCID: 0000-0002-6227-3261

#### Vanessa Moreira da Silva Soeiro

Nurse. Doctor in Collective Health. Graduate Program in Nursing. Postgraduate Program in Health Sciences. Professor of the Nursing Course at the Federal University of Maranhão, Pinheiro/MA campus. ORCID: 0000-0002-4299-1637

#### Larissa Neuza da Silva Nina

Nurse. Master's Student of the Graduate Program in Nursing at the Federal University of Maranhão. ORCID: 0000-0002-0906-3759

#### INTRODUCTION

Nursing is a cooperative social practice, whose care, administrative, educational, research and integration activities require, in addition to scientific knowledge, interpersonal and interprofessional interaction, which are based on the act of caring, the essence of the nurse's work. This act, the care, must be operationalized in a scientific and integral way for effectiveness and improvement of the quality of life of the human being and, this, is effected by the Nursing Consultation. 1

The role of nurses in Primary Health Care (PHC) in Brazil has become an instrument for changes in health care practices in the Unified Health System (SUS), responding to the proposal of the new care model that is not centered on the clinic and cure, but, above all, on comprehensive care, on intervention against risk factors, on disease prevention, on health promotion and quality of life. 2

The nurse, when assisting in an integral way, will evaluate all the biological, psychosocial and spiritual aspects presented by the client/user of PHC, using interprofessionality to expand the possibilities of solving their demands. Thus, it is necessary for nurses to know the Health Care Network (HCN) available in their municipality, for the monitoring of patients in their multiple needs, involving health services and the multiprofessional team. 1

In order to promote comprehensive care in the SUS, in 2006, the Ministry of Health (MS) approved the National Program for Integrative and Complementary Practices (PNPIC - Programa Nacional de Práticas Integrativas e Complementares).3 This program was created with the objective of meeting the need to know, incorporate, support and implement experiences that were once being developed in the public health network and that had presented satisfactory results. 4

Phytotherapy, one of the 29 integrative practices of the National Policy, is a therapy characterized by the use of medicinal plants in their different pharmaceutical forms, without the use of isolated active substances, even if of plant origin. The use of medicinal plants in the art of healing is a form of treatment with very ancient origins, related to the beginnings of medicine and based on the accumulation of information for successive generations. Over the centuries, products of plant origin have formed the basis for the treatment of different diseases. 5

Human beings have always had the need to deal with the emergence of symptoms in their daily lives, due to trauma, use of new foods or illness. For this, medicinal plants were used, with knowledge obtained from shared experiences or from the observation of their use by animals. 6

Phytotherapy consists of the use of herbs as a medicinal therapy, in an alternative or complementary way, and gains evidence because it is an ancient therapy passed on through oral tradition throughout family generations. The knowledge about the methods is passed on by previous generations and is kept in the family, so that popular knowledge is favored and improved.

Popular and institutional interest has been growing in the sense of strengthening phytotherapy in the SUS. Since the 1980s, several events have followed emphasizing the introduction of medicinal plants and herbal medicines in PHC. 3 However, many managers declared that there was resistance within the municipal public administrations and the low acceptance of this practice by professionals in the network. It is noteworthy, however, that users who use this therapy need an adequate prescription, in addition to information on possible drug interactions, as the concept that the use of a medicinal plant is not harmful, because it is natural, combined with the thought that doctors do not understand medicinal plants, it often leads the patient not to comment that he is making use of this resource. 6

In this sense, the evaluation of the perception of nurses working in PHC is necessary to verify how the units have been adhering to the PNPIC, providing a diagnosis of the current situation. The adoption of this practice would expand options related to the prevention and treatment of diseases and diseases that affect the population, through the guarantee of access to medicinal plants and herbal medicines with safety, efficacy and quality, in the perspective of comprehensive health care. Thus, the present research aimed to know the perception of Primary Care nurses in the municipality of Pinheiro/MA

on medicinal plants and herbal medicines.

#### **METHODS**

This is a qualitative study with nurses from the Family Health Strategy (FHS), in the city of Pinheiro-MA, Brazil. We interviewed 20 nurses working in PHC, active in the FHS, assigned to the Department of Regulation, Assessment and Control of the Health Department of the Municipality of Pinheiro - MA and who carried out their work activities at the time of data collection, regardless of gender and length of profession, who agreed to participate in the research, signing the Free Informed Consent Term (FICT). Data collection was carried out at the Health Units where each professional was allocated, from February 16th to May 24th, 2022.

For the interview, we used an electronic voice recorder and a semi-structured questionnaire with open and closed questions addressing sociodemographic aspects (gender, age, marital status, training time and time working in the Family Health Strategy), actions developed in the community as an ESF nurse and on phytotherapy and medicinal plants - encompassing issues related to their technical and popular knowledge, about the public policies that involve the theme, as well as the use of phytotherapy by the population served and their respective opinions about the potential of insertion of phytotherapy in the Primary Health Care of Pinheiro-

Quantitative data were tabulated in a Microsoft Excel spreadsheet, expressed in tables with absolute and relative values (%). For qualitative analysis, the answers were handwritten by the interviewer.

The research meets the standards for research with human beings and is in line with Resolutions 466/2012 and 510/2016 of the National Health Council, having been approved by the Research Ethics Committee of the Federal University of Maranhão, under opinion number 3,716,852, CAAE: 25497519.4.0000.5087. To ensure anonymity in the presentation of the results, the responses were identified by codes with the acronym NUR for nurse, followed by the evaluation control number.

#### **RESULTS**

Twenty nurses aged between 24 and 52 years were interviewed, with a mean age of 32 years. All respondents are female, 35% married, 40% with more than 10 years of training in Nursing. The period of work in the FHS in the municipality of Pinheiro--MA varies from 03 weeks to more than

10 years with an average of 5.6 years. Most have been working for between 3 and 6 years (45%) (Table 1).

Table 2 describes the main actions developed by nursing professionals in the family health strategy, the most reported by the interviewees being: assistance to women's health (60%), monitoring of chronic and non-communicable diseases (55%), educational activities (45%) and child health (40%).

As for the nurses' perception and scientific knowledge about phytotherapy and

Table 1. Sociodemographic aspects of the nurses interviewed working in the Family Health teams in the municipality of Pinheiro, MA, Brazil, 2022.

Parameter	N	%
Sex		
Male	-	-
Female	20	100
Age		
20 – 29 years	4	20
30 – 39 years	14	70
40 – 49 years	1	5
50 – 59 years	1	5
60 or + years	-	-
Marital status		
Single	6	30
Married	7	35
Stable Union	5	25
Divorced	1	5
Unanswered	1	5
Training time		
Up to 1 year	-	-
1 to 3 years	3	15
3 to 6 years	3	15
6 to 10 years	6	30
More than 10 years	8	40
Time working in the FHS		
Up to 1 year	4	20
1 to 3 years	2	10
3 to 6 years	9	45
6 to 10 years	2	10
More than 10 years	3	15
Source: Authors, based on interviews.		



medicinal plants, 40% claim to have insufficient knowledge on the subject, 50% consider their knowledge average (they know some principles related to popular knowledge and custom acquired in the family). Only 10% believe they have satisfactory knowledge (Figure 1).

Regarding the contact with Phytotherapy during their academic training, 80% claim to have had no significant learning on the subject nor during their work in primary care, having only occasional contacts with the subject, by reports of health service users. The portion of respondents (20%), who had contact with the content during higher education, attributes the knowledge acquired to participation in lectures, workshops, Extension projects or University Research. In addition, 50% of respondents had contact during their work in primary care and only 10% know about any policy on medicinal plants and live pharmacy, as shown in Table 3.

During the analysis of qualitative data, the following categories emerged:

## Category 1: Indication of the use of medicinal plants/herbal medicines as a care technique in the unit for the users served

The majority (14 speeches) explained that they did not advise on the use of plants in the treatment of diseases, under different justifications, with the lack of specific knowledge about the practice being the main factor reported.

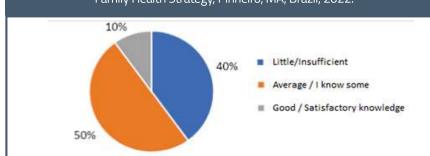
> "Yeah... Lack of even deeper knowledge, so I can be confident in doing the orientation. Because if I were to prescribe, in this case, it would be like this. I see the issue of hypertensive and diabetic patients, because they already come with this culture - "oh, I've been drinking tea", I should bring more grounding in their reasoning, to say how they have to use it, how not [...]". (NUR1)

"I would, if I had more knowledge,

Table 2. Data referring to questions about health actions carried out in the community by the Family Health Strategy, Pinheiro, MA, Brazil, 2022.

ACTIONS DEVELOPED IN THE COMMUNITY BY THE FAMILY HEALTH STRATEGY	N°*	%	
Monitoring of chronic non-communicable diseases	11	55	
Children's health	8	40	
Women's health	12	60	
Men's Health	2	10	
Educational actions: lectures, events	9	45	
Home visits	6	30	
Preventive and diagnostic actions of leprosy and tuberculosis	3	15	
Immunization campaigns	7	35	
Family planning	2	10	
Elderly's health	4	20	
Sexual health / STI prevention	1	5	
Mental health	1	5	
Healthy eating promotion	1	5	
Oral health	1	5	
* Cited more than one activity / Source: Authors, based on interviews			

Figure 1. Level of knowledge about phytotherapy reported by nurses from the Family Health Strategy, Pinheiro, MA, Brazil, 2022.



Source: Authors, based on interviews

Table 3. Questions about phytotherapy with nurses from the Family Health Strategy, Pinheiro, MA, Brazil, 2022.

QUESTIONS ABOUT PHYTOTHERAPY		Não		
		%	N	%
Any contact with phytotherapy in your academic training (discipline, content in discipline, graduate studies, legislation, among others)?	4	20	16	80
Did you have contact with this theme after your training, during your work in primary care?	10	50	10	50
Access to or knowledge of any public policy on medicinal plants and/or phytotherapics	2	10	18	90
Are you familiar with the "Farmácia Viva" program?	2	10	18	90
Source: Authors, based on interviews				



then I would! If there was a course, a training, a seminar, that could be approaching us better". (NUR 2)

## Category 2: Opinions on the use of medicinal plants and herbal medicines by the community.

Faced with this question, there were several opinions: both favorable and rejecting. The portion that proves to be favorable, however, is a habit that requires caution, mainly because of their lack of training to guide the form of rational use supported by scientific evidence that really proves the safety and efficacy of the method, while another part sees it as a process that enriches assistance, valuing the local knowledge of users, seeking to legitimize empirical ideas through scientific knowledge, as shown in the following speech:

> "[...] So, I'm not going to say I'm against the use of herbal medicine, I'm not! It depends on the way of use. So in an unknown way, I am against it." (NUR 3)

> "[...] When the patient tells me that he uses something, a tea, or crushes a leaf and puts it on top of something, I don't make any kind of restriction. I ask if it's really working. For me, the important thing is the result that the patient presents, if he had an improvement, great! You can continue, but I, on my own initiative, do not recommend it". (NUR 11)

"[...] Most patients believe and already have the practice of medicinal use of plants". (NUR 14)

"[...] I recommend it because it is a treatment that most often proves to be effective, in addition to being accessible to low-income people" (NUR 15)

"[...] I recommend, because I grew up in the midst of the care and treatment of illnesses with the same". (NUR 16)

"I believe that the use is valid as long as it is to complete a treatment and/or under medical knowledge and guidance". (ENF 20)

Those who showed little acceptance fear that users will abandon conventional drug therapy, causing the worsening of their health status:

> "[...] how can I tell you?!... Sometimes I even say that they can use it, but that it won't have an effect that will cure it. They do, but I give my opinion." (NUR 4)

> "[...] it gets in the way a lot. Some are very aware, but many are not. We know that it cannot be treated only with plants. Then a patient arrives who is hypertensive and refuses to take medication because he is drinking tea" (NUR 12)

The main difficulties (Chart 1) for the application of phytotherapy and medicinal plants in basic health units are the lack of adequate qualification, lack of stimuli on the part of managers and institutions.

#### **DISCUSSION**

In general, there was a great feminization of the nursing workforce in the Family Health Strategy in the municipality, a phenomenon also found by several studies carried out in other cities in Brazil. 4,6,8-9 This fact is justified by the historical construction of the profession, in which the female figure socially has always occupied the position of caregiver. 10

It is noteworthy that gender interferes in the adherence and perpetuation of alternative medicinal therapy, considering that elderly women are the main audience in adhering to the use of medicinal plants, given their history, family background, social class and level of education, while younger people with a high level of education, despite accepting phytotherapy, have greater adherence to the culture of medicines coming from the pharmaceutical industry. 7

The mean age of the sample was lower than that verified by other authors <sup>6,9,11,</sup> consequently, the average time to complete the undergraduate course was also shorter. From the results of age and time of graduation, the question of the time of work in the FHS in the municipality emerges, a factor directly related to the professional's bond with the community.

In our study, it was found that the average time of performance was 5-6 years, a relatively shorter time when compared to other studies. 4,9,11 This scenario seems to be a reality of the FHS throughout Brazil, in which employment contracts are of a temporary nature - usually annual - showing high professional turnover, being very susceptible to changes with each change of manager. 11

Regarding the actions developed by nurses in the community, it is clear that the treatment and rehabilitation of health problems are the priority, followed by disease prevention, in association with a curative

## Table 1. Main difficulties raised by nurses regarding the institutionalized insertion of phytotherapy in Primary Care, Pinheiro, MA, Brazil, 2022.

#### **MAIN DIFFICULTIES**

Academic training of health professionals deficient in phytotherapy.

Sensitization of managers with decision-making power for the implementation of public policies involving phytotherapy

There is a lack of partnership with institutions capable of jointly building the insertion of phytotherapy in primary care.

Source: Authors, based on interviews



biomedical model. Another relevant aspect is the perception that prevention and health promotion activities can and should be transversal in all actions developed in the FHS and not carried out just in a punctual way. The speeches of the participants, several times, point to a concept of health promotion, only as the fulfillment of specific actions linked to the official protocols of the Ministry of Health, such as days of vaccination campaigns, 'pink october', 'blue november' and in activities aimed at changing behavior and transmitting information to users. 11

Regarding the contact with Phytotherapy during their academic training, 80% claim to have had no significant learning on the subject. Other authors also point to the absence of specific disciplines that address phytotherapy contents in the curricula of undergraduate courses in the health area as one of the main causes of professionals' lack of familiarity with the topic. 12-13

Scientific knowledge itself is limited, being acquired by occasional contacts through conferences, being, in general, superficial for decision-making in the care scope. The little foundation they have was conditioned, still, to knowledge passed by parental relationships and/or isolated events and even by the cultural reality itself.

Another aspect to be highlighted was the high percentage (50%) of professionals who reported not having acquired any knowledge about medicinal plants and herbal medicines, either through training courses or literature on the subject, during their work in PHC. In his study, Goes 13 states that nursing, as a profession that seeks comprehensive care for human beings, realizing the influence of these practices on the community, must realize the need to continually update itself in order to allow safe care, incorporated by updated practices and within SUS guidelines. The lack of this initiative ends up distancing it from the cultural routine of the community.

The National Policy on Medicinal Plants and Phytotherapics was created in 2006, since then strategies have been considered on how to implement it in the comprehensive care of the SUS user, taking into account the cultural knowledge of each citizen and the scientific knowledge of health professionals, resulting in an improvement in the quality of care. 3

Regarding access or contact with legislation involving Phytotherapy as a Integrative Complementary Practice in Health (ICPH) by the professionals interviewed, as found that the majority had no contact with any policy, program or standardization related to the practice. This result was similar to other studies. 9,13

Asked about their perception of the Farmácia Viva Program, only 10% reported being aware of what it was about. The Farmácia Viva program, established within the scope of the SUS by Ordinance no 886 of April 20th, 2010, is a project that involves cultivation, collection, processing, storage of medicinal plants, handling and dispensing of masterful and officinal preparations of medicinal and phytotherapic plants. It arose from the need to expand the supply of phytotherapics and medicinal plants that meet the demand and local needs, respecting the legislation relevant to the needs of the SUS. 12

In Maranhão, the program is part of the agenda of the Assistant Secretariat for Primary Care Policies and Health Surveillance, which is part of the Superintendence of Primary Care. It is implemented in more than 125 municipalities. The program enables the selection of plants already used by the population (regionalization), stimulating dialogue between popular and scientific knowledge. 14 However, when asked about their perception of the project, 90% of the nurses interviewed in the survey answered that they did not know or even heard about the Program. Those who mentioned knew, claimed to have only a notion of the general lines, reinforcing the results presented by Fontenele 9 and Santos. 4

It is noteworthy that the use of medicinal plants in PHC has high therapeutic effectiveness, since it values popular practices, has low cost and high safety, in addition to being well accepted by the population, strengthening the relationship between health professionals and SUS users. 15

When the interviewees were asked if they usually indicate the use of medicinal/ phytotherapic plants as a care technique in their unit for assisted users, most of them explained that they did not provide any guidance on the use of plants in the treatment of diseases, for several reasons: lack of specific knowledge about the practice was the main factor reported. In this sense, it is pertinent to say that during graduation there are still few discussions about the topic, which often does not make it possible to add sufficient scientific knowledge, since, in general, they are sub-themes discussed within basic, non-specific disciplines. 13

However, the nurses who proved to be in favor of the use of medicinal plants defend the use of this practice in a complementary way to the treatment, because they believe in the effectiveness of medicinal plants as a complementary form of care and an alternative to the excessive medicalization found in the reality of the communities served.

The results showed that the practice of herbal medicine is understood in different ways by the interviewees, one of which is that it is a habit that requires caution, mainly due to the lack of training of professionals to guide the form of rational use supported by scientific evidence that proves the safety and effectiveness of the method, while another part sees it as a process that enriches care, valuing users' local knowledge, seeking to legitimize empirical ideas through scientific knowledge. The rejection speeches by some nurses was justified by the behavior of the users: there was fear that they would abandon conventional drug therapy, causing the worsening of their health status.

To Goés 13 the performance within the health units by the nursing professionals must always consider the local reality, the culture and the inherent needs of the way of life. This perception must be consolidated by the recognition of the importance of scientific and popular knowledge on relevant topics according to the needs of the population that will receive assistance. To Meneses 12 and Argenta 16 the use of medicinal plants by the population is almost always supported by popular knowledge, passed

on from generation to generation.

The main difficulty for the application of this practice in the basic health units surveyed (lack of adequate qualification on medicinal plants and phytotherapics that guarantee them safety for the indication of their use to users) corroborates the results of another research, which showed that professionals did not have enough information on the subject to prescribe. 16 Another difficulty raised by some interviewees was the population's preference for pharmaceutical pharmacological treatment, a characteristic of the biomedical care model, which is still predominant in Brazil. Added to this factor is the devaluation of traditional knowledge by managers and health professionals, skepticism and prejudice in relation to the effectiveness of herbal medicine. 4

#### CONCLUSION

The study showed that the professional nurses of the Family Health Strategy in the city of Pinheiro-MA have little theoretical basis with regard to phytotherapy and medicinal plants, as well as little knowledge about the policies directed to this topic. However, they believe in the importance of incorporating alternative and complementary practices, phytotherapy and medicinal plants in PHC, given their low cost, effectiveness and easy access to the population.

The results of this work provide subsidies for the incorporation of strategies aimed at the use of medicinal plants and phytotherapics. Further studies on this topic are necessary for a better understanding of other conditions that are linked to the lack of knowledge of the policy on Integrative and Complementary Practices.

## REFERÊNCIAS

- 1.Crivelaro PM, Posso MB, Gomes PC, Papini SJ. Consulta de enfermagem: uma ferramenta de cuidado integral na atenção primária à saude. Brazilian Journal of Development. 2020;6(7):49310-21.
- 2. Ferreira SR, Périco LA, Dias VR. The complexity of the work of nurses in Primary Health Care. Revista Brasileira de Enfermagem. 2018;71(suppl 1):704-9.
- 3.Brasil, Ministério da Saúde. Portaria Nº 971. Assunto: aprova a Política Nacional de Práticas Integrativas e Complementares (PNPIC) no Sistema Único de Saúde. Brasilia, DF: Ministério da Saúde, 03 mai.
- 4.Santos SS, Léda P, Oliveira DR. Plantas medicinais e fitoterapia em Oriximiná – Pará, Brasil: percepção e intenção de uso pelos profissionais do Sistema Único de Saúde (SUS). VITTALLE - Revista de Ciências da Saúde. 2018;30(1):11-25.
- 5.Brasil, Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Política nacional de práticas integrativas e complementares no SUS: atitude de ampliação de acesso. Brasília: Ministério da Saúde, 2015
- 6.Mattos G, Camargo A, Sousa CA, Zeni AL. Plantas medicinais e fitoterápicos na Atenção Primária em Saúde: percepção dos profissionais. Ciência & Saúde Coletiva. 2018;23(11):3735-44.
- 7.Cantante APSR et al. Arte milenario de cuidar: creencias y saberes de los adultos mayores sobre la fitoterapia. Temperamentym. 2022; 18(Esp): e18053o.
- 8. Brito GE. Perfil dos trabalhadores da estratégia saúde da família de uma capital do nordeste do Brasil. Rev. APS. 2016;19(3).
- 9. Fontenele RP, Sousa DM, Carvalho AL, Oliveira FD. Fitoterapia na

- Atenção Básica: olhares dos gestores e profissionais da Estratégia Saúde da Família de Teresina (PI), Brasil. Ciência & Saúde Coletiva. 2013;18(8):2385-94.
- 10.Lombardi MR, Campos VP. A Enfermagem no Brasil e os contornos de Gênero, Raça/Cor e classe social na formação do campo profissional. Revista da ABET. 2018;17(1).
- 11.Nascimento Júnior BJ, Lima FM, Rocha CR, Gonçalves RK, Souto LB, Vieira DD. Percepções sobre o uso de plantas medicinais por profissionais de áreas rurais e urbanas em cidade no nordeste do Brasil. Revista Fitos. 2021;15(2):231-41.
- 12. Menezes VA, Anjos AG, Pereira MR, Leite AF, Garcia AF. Terapêutica com Plantas Medicinais: Percepção de Profissionais da Estratégia de Saúde da Família de um Município do Agreste Pernambucano. Odonto. 2012;20(39):111-22.
- 13.Goés AC, Silva LS, Castro NJ. Uso de plantas medicinais e fitoterápicos: saberes e atos na atenção primária à saúde. Revista de Atenção à Saúde. 2019;17(59).
- 14.Bianchi RV et al. Farmácia da Natureza: um modelo eficiente de farmácia viva [Trabalho de conclusão de curso]. Rio de Janeiro: Fundação Oswaldo Cruz Instituto De Tecnologia Em Fármacos; 2012.
- 15.Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Práticas integrativas e complementares: plantas medicinais e fitoterapia na Atenção Básica. Brasília: Ministério da Saúde, 2012.
- 16.Argenta SC. Plantas medicinais: Cultura popular versus ciência. Vivências. 2011;7(12).