VALORIZATION OF SOME MEDICINAL PLANTS USED TRADITIONALLY IN THE ROMANIAN HOUSES, IN SIBIU, VÂLCEA AND BACĂU COUNTIES

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Abstract: Looking for pharmaceutical remedies that are cheaper, handy and gentle with the body, the villagers rediscover phytotherapy and practice a traditional medicine in which plants play a major role. Unfortunately, much of the knowledge about herbs has been lost in recent decades. With this study we try to save from loss some of the information of folk medicine (types of preparations, more common diseases, species of plants used). Of course, archaic knowledge passed down from generation to generation is mixed with contemporary knowledge from books, magazines, radio and television shows. Even so, Romanian folk medicine can still enrich modern medicine, as it possesses phytotherapeutic information not yet valued by pharmacists and biochemists.

Key words: folk medicine, customs, traditions, herbs.

1. Introduction

Not so long ago foot pain was relieved with stagnant water, wounds were anointed with animal fats, burns were healed with egg whites, bleeding was stopped with flour, sore throat was treated with salt, conjunctivitis in young children was remedied with mother's milk and, to cure blisters, people rubbed their bodies with the ground under the quinces (Cydonia oblonga Mill.). For the removal of chicken lice people used dwarf elderberry (Sambucus ebulus L.) leaves. Pieces of hellebore (Helleborus

purpurascens Waldst. & Kit.) root were inserted into the outer ear of the pigs against the bleeding, and for diarrhea they were fed with leaves of black locust (Robinia pseudoacacia L.). Knowledge about herbs has been passed down from generation to generation for centuries but in recent decades they have dwindled. The rest of them should be used for human and animal health. Romania has a high phytodiversity (over 3,600 spontaneous cormophyte plants and hundreds of other rifely cultivated species) consequently, a rich medicinal flora that exceeds one thousand plant species [4].

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2. Materials and Methods

Through this study we aimed to obtain information about the plants that villagers in different regions of the country use to treat various diseases and which are the therapeutic plant species most commonly used by the respondents, to note different recipes of preparations which they use, in order to obtain information for the preparation of new remedies.

The information was obtained using a phytoethniatry questionnaire. The questions were asked to people known to have knowledge of folk medicine. The received data were used to perform several abundance analyzes.

The study involved women and men from rural areas, over the age of forty, from three distinct counties - Sibiu, Vâlcea and Bacău. Out of these, only nine people offered answers that deserved to be capitalized, the oldest of them being a ninety-year-old man from Curtea village, Vâlcea. Most of the subjects' occupations were housewives or pensioners.

3. Results and Discussion

This study identified twenty-four species of medicinal plants that continue to be traditionally collected today. Among these, the most abundantly used species remain: common plantain (*Plantago major* L.), chamomile (*Matricaria chamomilla* L.) and linden (*Tilia cordata* Mill.), followed by mint (*Mentha piperita* L.), St. John's wort (*Hypericum p*erforatum L.) and dandelion (*Taraxacum officinale* (L.) (Figure 1).

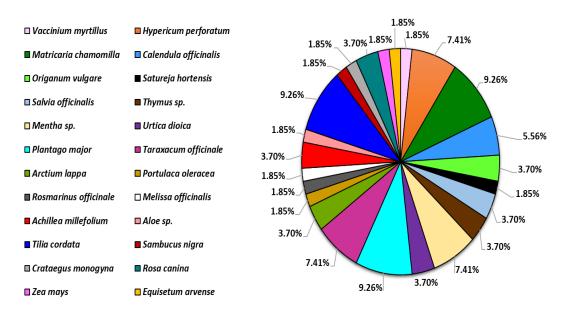


Fig. 1. The spectrum of relative abundance of medicinal plant species that the respondents usually collect for therapeutic purposes

Seven of the twenty-four species are cultivated plants, namely marigolds (Calendula officinalis L.), corn (Zea mays L.) [6], sage (Salvia officinalis L.) [2], [6], mint (Mentha sp. L.) [7], aloe (Aloe sp.) [8], thyme (Satureja hortensis L.) [11] and rosemary (Rosmarinus officinale L.) [2], other species growing in the spontaneous flora of Romania [3], [6]. However, there are also spontaneous medicinal species of mint such as Mentha longifolia (L.) L and Mentha aquatica L. [3], and the most common aloe species globally remain Aloe vera (L.) Burm. f. and Aloe aborescens Mill. [10].

All individuals who collect herbs responded that they do not collect more plant material than they need to use in a year, which is between a handful and 2 kg,

and the diseases for which villagers treat themselves mostly in a traditional way are: colds and digestive system diseases, followed by urinary tract infections, liver diseases and rheumatic pains (Figure 2).

Romanians who were surveyed reported that they collect herbs for their family and themselves, and less often for other relatives and traders.

Most of the information the subjects have comes from their parents and grandparents or has been heard from village elders, but there are also data that were passed on to them by doctors after medical consults or that resulted from readings (Figure 3).

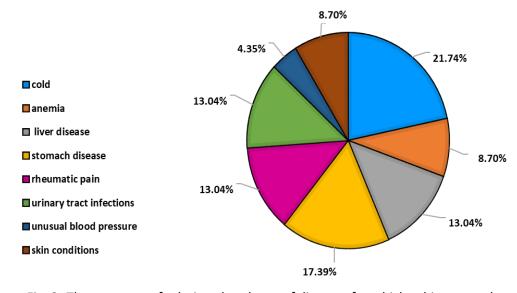


Fig. 2. The spectrum of relative abundance of diseases for which subjects use the knowledge of folk medicine

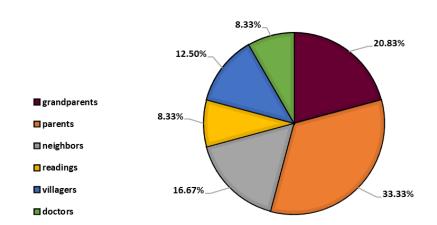


Fig. 3. The abundance of sources of knowledge related to popular phytotherapy

The majority of medicinal plant species were named by a 64-year-old woman from Viile Sibiului. A similar number of plants were listed by a 49-year-old woman from Vâlcea County, suggesting that younger people may also have important information learned from ancestors. Although we would expect females to hold most of the information about the local therapeutic flora, as they are mainly involved in the collection of healing species, the 90-year-old man shared a

volume of knowledge that rivaled and even exceeded that of some women.

As an overview of the 104 plant species, identified in the responses of the interviewed people, about whom information was collected: most of them are used for diseases of the digestive and respiratory systems, and then for conditions of the circulatory and the urogenital systems and skin problems (Figure 4).

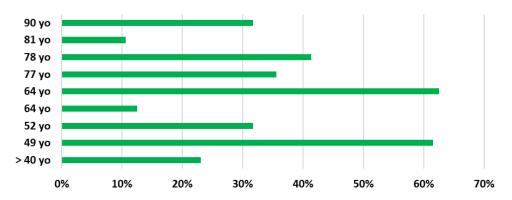


Fig. 4. Distribution of the number of known medicinal plants according to the age of the surveyed individuals

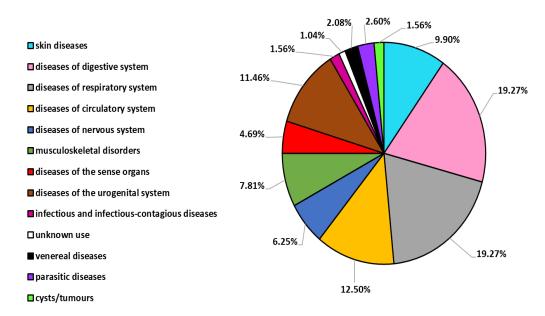


Fig. 4. The relative abundance spectrum of diseases for the treatment of which the curative species identified in the respondents' questionnaires are used

In most of the preparations, leaves (e.g. Rheum rhabarbarum L., Brassica oleracea L., Morus sp. L.), flowers (e.g. Crataegus monogyna Jacq., Cyanus segetum Hill., Hyoscyamus niger L.) and fruits (e.g. Prunus spinosa L., Cornus mas L., Capsicum annuum L.) are used.

Nevertheless, there were listed herbs from which latex (e.g. Chelidonium majus L., Euphorbia cyparissias L.), stems (e.g. Rubus idaeus L.), roots (e.g. Elytrigia repens (L.) Nevski, Urtica dioica L., tuberosum L., Symphytum Solanum officinale L.), bark or the entire aerial part of the plant's body (e.g. Polygonum aviculare L., Tanacetum vulgare L.) is used. Most of the species named are used to make teas, others are consumed raw or cooked, and others are utilized in baths with infusions (teas), as well as in antirheumatic compresses (Figure 5).

During childhood, several subjects mentioned that when they caught a cold,

they used to put cornflour on a stove or on embers to unclog a stuffy nose. The inhalations, used to alleviate some lung diseases, were made with isma (Mentha sp.), oregano (Origanum vulgare) and elderberry (Sambucus nigra). For otitis a drop of warm oil was put into the affected ear, and herbs that could be soaked for rheumatic pains included horseradish (Armoracia rusticana P. Gaertn., B. Mey. & Scherb.), walnuts (Juglans regia L.) and nettles (Urtica dioica L.), often mixed with gas or rubbing alcohol.

The most present plant species in the answers of the respondents were: plantain, potato and chamomile, followed by lime and hawthorn. Most uses have been reported for the species: Calendula officinalis, Vaccinium myrtillus (bilberry), Salvia officinalis, Matricaria chamomilla and Taraxacum officinale.

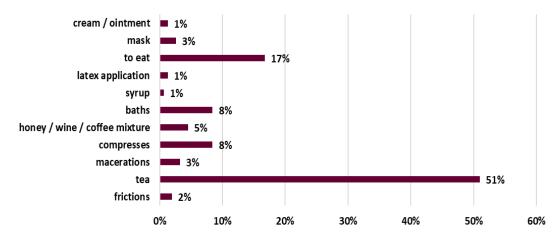


Fig. 5. Distribution of the various preparations used in folk medicine according to the uses attributed by the respondents

Some recipes that the surveyed people personally use at home were also recommended. Tea made from a liter of water, four hard-shelled nuts, an onion and sugar, which are kept to boil until the liquid is reduced by half or from nine crushed walnuts and the peels of four-five onions are boiled in half a liter of water until a quarter of a liter of water remains can be used for a cold; this tea should be drunk 2-3 times a day.

A syrup made from a tablespoon of fir buds (*Abies alba* Mill.) per kilogram of honey or a walnut macerate in honey, kept in the dark for ten days, ingesting one teaspoon a day, can also be used.

The tea was often admitted to being made intuitively, adding only a pincer grasp of plant into a cup of water, or with a teaspoon of dried vegetable material in a cup.

For rubbings, macerates prepared as follows were recommended: twenty nuts per liter of alcohol; crushed walnuts in gas, soaked for nine days, then grease the feet with the solution; horseradish root in brandy, kept nine days; black bryony

(Dioscorea communis (L.) Caddick & Wilkin) - crushed and kept in alcohol for nine days. It can be utilized for rheumatic pains as well a horseradish compress with alcohol, which must be removed within 5-10 minutes of application. Against dandruff, 20-30 walnut leaves can be boiled in a pot of water and with this decoction the hair must be rinsed.

For intestinal worms: mix a tablespoon of honey with 5 pumpkin seeds (*Cucurbita maxima* Duchesne); this mixture must be eaten every morning on an empty stomach.

For taking baths with wormwood (*Artemisia absinthium* L.), a twig or two to three liters of water can be used.

The oldest people, respectively the 78-year-old woman, the 81-year-old man and the 90-year-old man, were the only ones who could name a healing mushroom, namely "ciuciulete" or "burete de bubă", only one of them indicating that it could be consumed raw. It was also used to heal wounds and for "bubă la burtă" (ulcer). Zamfirescu [12] mentions the existence on the territory of our country of two species

of mushrooms known by the common name of "burete de bubă", these being Morchella esculenta (L.) Pers. and Phallus impudicus L., the first one being called "ciuciulete" in some areas of Romania [12], and being used to heal stomach aches and wounds [1], and the last one being used in other countries for rheumatic pain and wound healing as well [5], [9].

In the villages, enchantment is still practiced today. Thus, three types of enchantments were identified: spells for evil eye, for nausea and for twinge. The use of garlic in rubbing the patient's wrist on the veins was mentioned in the enchantment for nausea.

Another popular belief is that it is good to take a bath in St. Toader's Day to which an elecampane (*Inula helenium* L.) root has been added. In order for the girls from the village to have beautiful and healthy hair, this root must be passed through their hair by someone and that person has to say: "may my daughter's hair grow like the tail of a mare".

On the Sânziene Day, it is customary to put sânziene (*Galium verum* L.) or chicory (*Cichorium intybus* L.) around your waist so that you do not have back pain.

4. Conclusion

After analyzing the answers provided by the respondents, 104 species of medicinal plants and more than 239 of their uses were identified. Most of these species are used to treat digestive and respiratory conditions. Regarding the plants that are still collected today by Romanians, the majority of the latter prefer to gather plantain, chamomile, and linden. The most used preparation in the popular treatment proved to be the tea, and in most recipes

the leaves, flowers and fruits of the plants are used. Three types of spells have been identified and the use of herbs in these rituals has been mentioned in the past. Other beliefs related to the supernatural and tradition have been identified, as well as some recipes for folk remedies.

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