

Nursing Actions from Ethnobotany in Medicinal Species. Ramosloma Community, Ecuador

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Abstract

Introduction: Nursing as a science feels the need to know the origin, context and action of medicinal plants in order to contribute to the assistance being a field of interrelationships between active subjects.

Objective: To describe the nursing actions from the knowledge of ethnobotany in medicinal species.

Methods: Descriptive, cross-sectional study in the Ramosloma community of the Salasaca parish of the Tungurahua province in the central Andes of Ecuador in the period August-March 2019. The universe consisted of 183 inhabitants over 18 years of age, residents of the community of Ramosloma and the intentional sample of 163 of them that met the inclusion and exclusion criteria. The variables studied were: age, sex, way of obtaining knowledge, number of known species, nursing activities.

Results: 65.03% of the sample belonged to the female sex and 12.26% knew more than 9 medicinal plants. 96.94% of the nursing actions carried out were in the age group of 78 years and over. 59.56% acquired knowledge about medicinal plants in a traditional way, $p < 0.001$ when nursing actions were correlated with empirical and medical knowledge.

Conclusion: Nursing actions linked to the education of people about the correct use of medicinal plants, is of paramount importance for the adequate response to phytotherapy and its use is vital due to its easy acquisition, low economic cost and few adverse reactions.

Keywords: *Ethnobotany; Species; Nursing*

Introduction

Since the dawn of humanity there is an indissoluble relationship between medicinal plants and human beings. In ancient times this knowledge was a right of the sorcerers or gifted who professed to possess the ability to recognize which of the plants were lethal or not. The interest of ancient cultures in expanding and transferring the healing properties of plants was acquiring relevance until the appearance of medicinal drugs today. The increase in health problems and the difficult access to synthetic medicines have led humanity again to the search for traditional medicine [1].

There are several criteria given on the definition of medicinal plants by different authors. Those who consider a plant to be medicinal to plant species that contain in one or more of its organs, substances or chemical compounds that, upon contact with the human organism, act on certain pathological processes causing a therapeutic effect, or as a raw material in production. of medications [2].

Medicinal plants are an important resource for humanity, it is estimated that between 70 and 95% of the world population, especially in developing countries, turn to medicinal plants to meet their health needs. In Latin America and the Caribbean, the use of medicinal plants is highly ingrained, especially in the indigenous population, complementing this health system with rituals linked to its culture, beliefs and customs [3].

Ethnobotany investigates the traditional botanical knowledge of the most diverse communities, a cultural heritage of immeasurable value, based on ancestral local knowledge related to the natural environment [4].

Nursing professionals play an important role in the application and fulfillment of the different modalities of discipline of Natural and Traditional Medicine, since these procedures are included within the activities, functions and skills of their professional model, whose object of study is the care for the person, the family, the community and the environment. It also deals with diagnosing and treating in the area of its competences the individual and collective responses to the manifestations of the health-disease process, applying the logic of the nursing care process as a scientific method of the profession; taking into account promotional, prevention, healing and rehabilitation actions to guarantee physical, mental and social well-being. It also uses teaching, administrative and investigative processes to guarantee the quality and optimization of nursing services, in the pursuit of excellence [5].

Nursing as a profession has shown that its field of action is increasingly broad, modern and significant, and that it has acquired its own characteristics to act in the health branch, being considered a science due to its various specificities of knowledge. Nursing intervention is considered as any treatment, based on clinical knowledge and judgment, carried out by a nursing professional to favor the expected result of the patient. The promotion of health as a policy and philosophical principle, raises the creation of opportunities for the achievement of greater social and individual self-esteem, the increase of knowledge and health democracy as a strategy of social agreement for the achievement of health goals [6].

The progressive increase in Nursing personnel trained in Natural and Traditional Medicine courses allows there to be graduates and master's degrees that demonstrate, in scientific work, numerous independent actions in the Nursing Care Process that contribute to the comprehensive health care that our population [7].

Providing care from the use of plants with medicinal properties promotes human health, from the knowledge of its purpose, risks and benefits. Its influence on the quality of life of the communities has had a dizzying evolution, which is why the present research aims to describe nursing actions from the knowledge of ethnobotany in medicinal species.

Materials and Methods

A descriptive, cross-sectional study was carried out in the Ramosloma community of the Salasaca parish of the Tungurahua province in the central Andes of Ecuador in the period August-March 2019.

The universe consisted of 183 inhabitants over the age of 18, residents of the Ramosloma community and the intentional sample of 163 of them who met the inclusion and exclusion criteria.

Inclusion criteria

- Inhabitants of the Ramosloma community over 18 years of age.

Exclusion criteria

- Inhabitants of the Ramosloma community who did not want to participate in the study.
- Inhabitants of the Ramosloma community whose physical or psychological conditions did not allow them to participate in the study.

All those who participated in the study were surveyed for research purposes.

The variables studied were: age, sex, way of obtaining knowledge, reason for employment, nursing actions is nursing.

Nursing intervention and its actions according to Nursing Interventions Classification (NIC).

Statistical analysis was performed with the SPSS version 11.5 program for Windows, descriptive statistics were used, the Chi-square test for qualitative observations and the Pearson index was calculated for the correlation of variables, with a level of statistical significance of 95%.

The study was conducted in accordance with ethical principles for medical and nursing research in humans, established in the Declaration of Helsinki amended by the 59th General Assembly, Seoul, Korea, October 2008, and accepted by Cuba. All the patients studied signed an informed consent, which explained the characteristics of the research.

Results and Discussion

65.03% of the studied population belonged to the female sex and 12.26% knew more than 9 medicinal plants. 34.97% corresponded to the male and only 4.31% knew more than 9 species of medicinal plants (Table 1).

Number of known species	Female		Male	
	No	%	No	%
Rank				
1 - 3	15	9.22	22	13.49
4 - 6	28	17.17	15	9.20
7 - 9	43	26.38	13	7.97
> 9	20	12.26	7	4.31
Total	106	65.03	57	34.97

Table 1: Quantity of medicinal plants known by sex.

When analyzing the relationship between nursing actions and age, it was obtained that 96.94% of nursing actions were carried out in the age group of 78 years and over (Table 2).

Nurses actions	Age group									
	18 - 32		33 - 47		48 - 62		63 - 77		> 78	
	No	%	No	%	No	%	No	%	No	%
524001 Establish a therapeutic relationship based on trust and respect	50	30,67	59	36,20	10	6,13	29	17,80	15	9,20
524002 Demonstrate empathy, warmth, and sincerity.	10	6,13	11	6,80	30	18,40	50	30,67	62	38,04
524006 Provide objective information as needed and as appropriate	45	27,61	44	26,99	20	12,27	25	15,34	29	17,80
524016 Reveal selected aspects of one’s own experiences or personality to give authenticity and confidence, if appropriate	12	7,36	2	1,23	50	30,67	47	28,83	52	31,90
Total	117	71,77	116	71,22	110	67,47	151	92,64	158	96,94

Table 2: Percentage distribution of the study population according to nursing actions and age.

When distributing the studied population in percentage according to nursing actions and the way of obtaining knowledge, it was obtained as a result that 59.56% acquired knowledge about medicinal plants in a traditional way, that is, from generation to generation (Table 3).

Nursing actions	Way of obtaining knowledge (%)			
	Traditional	Doctor	Empirical	Medicine man
524001 Establish a therapeutic relationship based on trust and respect	30,67	1,20	15,33	7,80
524002 Demonstrate empathy, warmth, and sincerity.	6,13	0,80	8,40	1,00
524006 Provide objective information as needed and as appropriate	21,00	1,00	1,00	1,00
524016 Reveal selected aspects of one's own experiences or personality to give authenticity and confidence, if appropriate	1,76	0,55	1,74	0,62
Total	59,56	3,55	26,47	10,42

Table 3: Percentage relationship between nursing actions and way of obtaining knowledge.

When correlating the variables nursing actions and the way of obtaining knowledge, the doctor and the nurse found that each of the actions had a significant relationship with the way they obtained knowledge, $p < 0.001$ (Table 4).

Nursing actions	Way of obtaining knowledge					
	Doctor			Medicine man		
	X ₂	p	R	X ₂	p	R
524001 Establish a therapeutic relationship based on trust and respect	25.49	0.00	0,77	68.44	0.00	1.55
524002 Demonstrate empathy, warmth, and sincerity.	7,02	0.00	0,16	8,77	0.00	0,20
524006 Provide objective information as needed and as appropriate	8,77	0.00	0,20	8,77	0.00	0,20
524016 Reveal selected aspects of one's own experiences or personality to give authenticity and confidence, if appropriate	4,83	0.00	0,11	5,44	0.00	0,12

Table 4: Correlation between the variables nursing actions and the way of obtaining medical and curandero knowledge.

The correct use and knowledge about medicinal plants are a basic resource of popular medicine. It is important to carry out a proper rescue of this flank of culture. The “return” to nature announced by the consumer society with a wide variety of products of plant origin can lead us not necessarily to preserve the tradition or application of treatments in a traditional way, but to look for extracts or active ingredients for the production of supplements or of allopathic medicines of patent, which implies niches of opportunity and danger for this medicinal practice. For this, nursing actions are important to achieve its correct use by the population [8].

In the present investigation, the highest percentage of nursing actions were carried out in elderly women, an aspect that is conditioned by the fact that they are the ones in charge of most of the household care, in addition to having received the knowledge from generation to generation, which coincides with the results shown by Gallegos., *et al.* and collaborators, who stated that it is women who have a greater intervention in the preparation and application of herbal medicine [9]. Also, Escalona Cruz., *et al.* they agreed that women presented a more solid knowledge about medicinal plants and that they have a more active participation in the preparation and application of natural and traditional medicine [10].

The way of obtaining knowledge can be understood as a cumulative system of non-formal knowledge, the result of empirical observation and the oral transmission of experience that pass from one generation to another [11]. Similar results were obtained in said research where the form Traditional was the most common. This scheme agrees with the theory of phenomenology, which postulates that the world in which we operate was created by our predecessors and is given to us to experience and interpret it, which is revealed in the succession of the ancestors in this type of family tradition: they observe, experience, learn, finally approve and continue the tradition [12].

According to Lucas in the research carried out on the use of medicinal plants by mothers in children under 5 years of age in rural areas, one of the main factors that influence the behavior of Chachis families to deal with traditional agents are social, cultural factors, environmental and fear for injections or the procedures that may be performed. That is why they look for the traditional or sometimes lack of knowledge, innate trust towards traditional agents from generation to generation [13].

The use of plants by the inhabitants comes from the conceptions and customs they have, highlighting that a large part of them come from other provinces and districts of the Amazon region, so they maintain the customs of their areas of origin. It is necessary to mention that there is an enormous variety of medicinal plants, many of them have been studied for long years and their multiple applications and benefits in the treatment of diseases have been discovered. When used wisely, they constitute a valuable green first-aid kit for humanity [14].

Conclusion

The actions of nursing together with the education of people on the correct use of medicinal plants are of utmost importance for the adequate response to phytotherapy and its use is of vital importance due to its easy acquisition, low economic cost and few adverse reactions.

Conflict of Interest

None.

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