

Efficacy of the use of natural medicine in respiratory conditions in older adults

Eficacia del uso de la medicina natural en las afecciones respiratorias en adultos mayores

Darroman Hall Constantino¹
Vera García Martha del Rocío²
Sany Sofia Robledo Galeas³
Alexander Alessi Gavilanes Torres⁴

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Correspondence author

darromanh@utb.edu.ec

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Msc. Universidad Técnica de Babahoyo,
darromanh@utb.edu.ec
<https://orcid.org/0000-0002-9714-2894>

Msc. Universidad Técnica de Babahoyo,
martha.vera@utb.edu.ec
<https://orcid.org/0000-0001-6895-2962>

Msc. Universidad Técnica de Babahoyo,
sany.robles@utb.edu.ec
<https://orcid.org/0000-0002-0102-2557>

Msc. Universidad Técnica de Babahoyo,
alexander.gavilanes@utb.edu.ec
<https://orcid.org/0000-0002-8762-390X>

Abstract: The general objective of this research project is to determine the effectiveness of ancient medicine for respiratory diseases in older adults in the El Chorrillos sector of Babahoyo Canton. The sample was drawn from a survey of community citizens. Mainly men (75%), which is more than half of all and the difference (5%) represents the female sex, the most common respiratory illness is influenza (53%) or flu, the results also show (8%) that it is in a mild stage; Most respondents (87%) believe that ancient medicine contributed to their recovery; The treatments used vary from person to person, the most appropriate means to treat respiratory diseases are infusions (8%), creams (10%) and vapors (99%). In summary, it can be stated that the community (107%) supports the use of traditional medicine prescriptions for respiratory diseases and the implementation of respiratory physiotherapy as a preventive measure so that the elderly do not worsen respiratory infections and can maintain their traditions using a treatment that recognizes that they have cultural roots and ethnic identities specific to their field.

Keywords: skidding, ploughing, compacting

Resumen: El desarrollo de este proyecto de investigación tiene como objetivo general determinar la efectividad de la medicina antigua para las enfermedades respiratorias en adultos mayores del sector El Chorrillos del Cantón Babahoyo. La muestra se extrajo de una encuesta a ciudadanos comunitarios. Principalmente hombres (75%), que es más de la mitad de todos y la diferencia (5%) representa el sexo femenino, la enfermedad respiratoria más común es la influenza (53%) o influenza, los resultados también muestran (8%) que es en una etapa leve; La mayoría de los encuestados (87%) cree que la medicina antigua contribuyó a su recuperación; Los tratamientos utilizados varían de persona a persona, los medios más adecuados para tratar enfermedades respiratorias son las infusiones (8%), cremas (10%) y vapores (99%). En resumen, se puede afirmar que la comunidad (107%) apoya el uso de recetas de medicina tradicional para enfermedades respiratorias y la implementación de fisioterapia respiratoria como medida preventiva para que los ancianos no

empeoren las infecciones respiratorias y puedan mantenerse sus tradiciones el uso de un tratamiento que reconozca que tienen raíces culturales e identidades étnicas específicas de su campo.

Palabras claves skidding, ploughing, compacting

Introduction

The present research work differs from what is normally exposed as respiratory therapy in the context of the above mentioned, it offers a proposal related to natural or traditional medicine.

In the communities it can be seen that older adults frequently resort to their empirical knowledge as a first resource to treat respiratory discomfort, which can be a simple cold or a pathology such as tonsillitis. This is due to the fact that when reviewing the results they have had to do it with the direct use of the plants that they usually have within reach of their hands and homes.

They have empirical knowledge of the benefits because it has been passed down from one generation to the next, but it should be noted that as time passes, fewer and fewer community members have the knowledge. Traditional medicine is being used more and more strongly in the 21st century, however, as a result of the knowledge of the negative environmental effects caused by conventional medicine.

Older adults are more susceptible to respiratory ailments due to environmental factors and aging; therefore, this research work demonstrates several less aggressive, but equally effective infusions and alternatives in the treatment of respiratory ailments without affecting the conditions of old age. of the group at whose direction this study is aimed.

The purpose of the proposed topic was to demonstrate the effectiveness of the use of natural medicine in respiratory ailments in older adults of Ciudadela el Chorrillo, Babahoyo. The quali-quantitative methodology was applied to determine that natural medicine is effective for upper respiratory ailments such as rhinitis and flu, contributing to improve the quality of life of older adults, for this it was necessary to inform them about the benefits of medicinal plants, their correct handling and therefore their application for consumption.

Natural medicine has made contributions to the communities at all levels in relation to respiratory diseases that affect the population of the world and Ecuador, so it is described according to the international, national, regional and Ciudadela el Chorrillo of Babahoyo Canton contexts.

For the WHO, natural medicine encompasses a wide range of therapies that vary among countries and regions where they are performed. There are countries where it is known as complementary or alternative medicine.

Natural medicine as its name suggests dates back to ancient times of mankind in its use and practice has contributed to the significant improvement of the health of communities being the main providers of primary care in rural areas at all social levels of the community. (WHO., 2019)

Ancestral medicine has retained its popularity over time as it has not been completely eliminated in its use, however, since the last decade of the 1990s there has been a resurgence of great impact in developed and developing countries. (WHO., 2019)

Ancestral medicine is gaining ground in the field of medicine, it is a health system that is growing significantly and of great economic importance. For example, in Africa up to 80% of the population uses it to help meet their health needs. In Asia and Latin America, rural communities continue to use it as a result of their cultural circumstances and beliefs. (Bolivia)

However, international health authorities, such as the WHO and Mexican authorities, continue to promote the regularization of these practices and their rational use. The basic question is whether or not they comply with the four principles of bioethics considered fundamental for the safety of those who receive this type of care: justice, non-maleficence, autonomy and beneficence. (Yuan, 2016)

The ancestral medicine in Ecuador goes back many years in time which has been maintained and survived the republican life, as well as the Spanish conquest. Maintaining the validity of traditional medicine has served to sustain the health needs of indigenous peoples, mestizos, montubios, peasants, etc. and other ethnic groups that have found in this alternative a less expensive and accessible solution. (Abedrabbo, 2019)

In many communities the knowledge of the benefits of plants has been passed from generation to generation throughout history. What makes it accessible in these times to other people we can have knowledge of it by sharing the experiences of communities in each particular case, avoiding the use of chemical medicine in less aggressive conditions such as respiratory.

In many cases, the solution is found in plants that are found in the same environment in which they live.

In the city of Quito, a natural medicine project called "En la mira de nuestras abuelas" was created and is currently being developed in Calderón, an urban-marginal area of Quito, it is a multicultural pilot project involving mothers, herbalists and doctors; with the aim of integrating ancestral medicine and that it can be legalized for its operation hand in hand with general medicine. (Abedrabbo, 2019)

It was understood that they were simply healers performing spiritual rites. The researcher was able to confirm during the community outreach that the people there are intimately and empirically familiar with the use of plants and have been doing so for generations. Their use has advanced to new levels of acceptance because it is now common to hear alternative medicine promoted in various ways for various health conditions, particularly respiratory conditions.

In the city of Babahoyo in rural areas, the use of traditional medicine is widely disseminated and is used by the inhabitants of these sectors they mention that they do not have adverse effects and is the primary reason why they make use of it in addition to being more economical for being a vulnerable sector in their economy. (Gallegos-Zurita, 2016).

Medicinal plants have been a fundamental resource in the community of the parish of Los Angeles, it is considered that 60% of the inhabitants of this community make use of it because they do not have access to immediate chemical medicine and because of the lack of resources.

For the community it is their primary attention when considering improving their state of health, let's remember that people living in the countryside depend directly or indirectly on plants to cover their food needs, medicine because they have it within their reach, especially herbs and roots.

The respiratory system is in charge of respiration, a process that allows us to obtain the oxygen necessary to oxidize food and obtain energy from it. It contributes to eliminate wastes in the form of carbon dioxide and water. (Luna, 2003).

Since time immemorial, man has made use of medicinal plants not only to satisfy his hunger, but also to heal his illnesses, heal his wounds and elevate his mood.

Although there has been a decrease in the use of natural medicine due to the use of chemistry because of its high rate of contraindications and adverse effects, in recent years the population has become more and more interested in the use of natural medicine for the treatment of respiratory conditions among other pathologies (Ferrándiz, 2004). (Ferrándiz, 2004)

To cure respiratory infections we can resort to herbal remedies for topical use or oral consumption that help us to alleviate the symptoms in a natural way. Curing respiratory infections is very important because the symptoms are very annoying and can affect our daily life.

Therefore, being of this nature, it is often impossible to avoid getting an infection. However, if they can be treated and cured with very healthy and economical natural alternatives. (Health, 2019)

Therefore, the research project aims to analyze the effectiveness of the use of natural medicine in respiratory disorders in older adults of the Ciudadela el Chorrillo of Babahoyo Canton - Los Rios, the research topic is of great interest to the researcher since the misapplied natural medicine can even become harmful and can inhibit the effect of other therapies of medical assistance for diseases or ailments of their own age.

In the region where the research was conducted, medicinal plants are readily available to help people maintain their health in better condition within the limitations they already have. Older adults are more likely to suffer from respiratory ailments as a result of the side effects of diseases they already suffer from or due to the deterioration of their systems as they age and lose the ability to function properly.

Due to their prevalence and ease of recruitment, the investigation of respiratory conditions was crucial. In addition, they experience a high level of discomfort that makes it difficult for them to perform daily

tasks properly, which undermines the quality of life of older people suffering from other diseases and pathologies specific to their age group.

Their family environment and the daily tasks they must perform are improved by using natural medicine as the main aid.

The research was feasible because the community has medicinal plants within reach and this facilitated the work of the researcher for the development of this research project.

The direct beneficiaries of the present research project were the elderly adults belonging to the Chorrillo neighborhood of Babahoyo Canton, because there are plants that they themselves cultivate and that have been used to alleviate their ailments.

He also added that they were accessible, collaborative and aware of being able to improve their health by making use of plants that they have within reach in their homes.

The respiratory system is defined as the set of organs and ducts in the body of living beings that allow gas exchange with the surrounding environment in order to survive. Based on this concept, each system can vary according to its relationship with the place where it is located.

Its name comes from the fact that makes it possible for us to breathe: the entry of air into the body to obtain oxygen, which in turn will be expelled to the outside in the form of carbon dioxide or CO₂, the excess of carbon dioxide in the body can be harmful to health.

The respiratory system is linked to the circulatory system, which is the system in charge of carrying oxygen to all parts of the body, modifying the pH of our body.

Breathing involves two fundamental stages: the inhalation is known as inhalation, while the expulsion is known as exhalation.

Parts of the Respiratory System (Hospitalaria, 2019)

Nose. - Duct through which the air enters and is filtered by the fibrins, which are responsible for cleaning, purifying and moistening the incoming air.

Pharynx. - is an organ that belongs to both the digestive and respiratory systems.

Larynx. - The larynx is the organ responsible for our voice because it contains the vocal cords and the epiglottis, which serves as a plug to prevent food from entering the airway.

Trachea. - It is located in front of the esophagus, about 12 cm approximately, covered with cilia that help to expel the dust that may have passed to the pharynx, it has cartilaginous rings that make it always remain open towards the end there are two ramifications that are the bronchi composed of the same characteristic as the trachea.

Bronchi, bronchioles and alveoli. - The bronchi enter the lungs where they divide into finer branches known as bronchioles. At the end of the bronchioles we find small sacs of blood vessels, the alveoli, which are in charge of the gas exchange called hematosis, which is the gas exchange for oxygen fixation in the blood and the elimination of carbon dioxide.

Lungs. - reddish spongy organs are located in the thorax, near the heart and protected by the ribs.

The right lung contains three fragments while the left lung contains only two fragments due to the space between the left hemithorax and the heart.

As the last portion we find the diaphragm, characterized by being a large and thin muscle, it is under the lungs and its main action is to contract and move downward during inspiration and relax during expiration, that is why this process is known as passive.

- Functions of the respiratory system
- Phonation
- pH regulation
- Gas exchange
- Most common respiratory diseases

Respiratory conditions can arise from a number of causes, including inhalation of toxic agents, accidents, and unhealthy lifestyles, such as smoking. Infections, genetic factors, and anything that affects lung development, either directly or indirectly, can cause respiratory symptoms.

Respiratory conditions may affect the upper respiratory tract (nose, throat, trachea and bronchi) or the lower respiratory tract, i.e. the lungs.

We must consider that discharges are the most frequent and include, among others, acute rhinopharyngitis (common cold), pharyngotonsillitis and rhinosinusitis. Infections of the lungs, such as pneumonias, are much more serious, but less common. (Yuan, 2016)

Due to the cause that precedes them, they can be viral and bacterial. From this point of view we will list the most frequent ones:

Common cold. - The first signs and symptoms that appear are nasal congestion, mucus, coughing, sneezing, malaise and headache, sometimes accompanied by fever and sometimes in the absence of fever, this may be due to a rhinovirus or common cold. Initially the mucus may be watery and then yellow and thicker due to the accumulation of dead cells and other debris, but this does not indicate that an antibiotic is needed. (Gallegos-Zurita, 2016)

Pharyngitis. - Sore throat is presented as the main symptom, and may be of viral or bacterial origin. If it also presents cold symptoms, it is very likely to be viral.

On the contrary, if there is no mucus, no cough and the fever is around 38°C, we would be facing a bacterial type.

Rhinosinusitis. - It is an infection of the mucosa that covers the nose and paranasal sinuses and also causes a lot of congestion, pain in the face, general malaise and fever. (Luna, 2003).

Signs and symptoms of the common cold

The respiratory system is susceptible to respiratory diseases, among the main signs and symptoms that accompany it we find:

- Sneezing
- Nasal congestion
- Sore throat
- Cough
- Tearing
- Mild headache

- Mild body aches and pains

These symptoms may last up to two weeks and do not require antibiotics.

Alternative Medicine

According to the definition of the World Health Organization (WHO), traditional medicine "is the sum of knowledge, techniques and practices based on the theories, beliefs and experiences of different cultures, and used to maintain health, both physical and mental". It is worth mentioning that traditional medicine is also known as: complementary, alternative, popular, soft, marginal, non-official and non-conventional. (Gob.mx., 2017)

Ecuador is a privileged country due to the great diversity of plants it has throughout the territory. The ancestors made use of the properties of plants, knowledge forgotten by most of the society, which have great importance when it comes to cure diseases.

A common cold can be treated economically and less invasively thanks to ancestral medicine.

Beatriz Brito, researcher at the National Institute of Agricultural Research (INIAP), states that Ecuador has a great cultural tradition of plant species for therapeutic purposes; and considers it necessary to promote their virtues and encourage their rational use. (Superior, 2016)

"In Ecuador, alternative medicine, as well as alternative therapies have already become standardized because people are using them more and more frequently, not only to complement natural medicine but also because of their health benefits," said Mena, President of the Association of Naturopaths of Ecuador (APNE).

Older adults and the respiratory tract

Considering that the quality of life deteriorates as the years go by, it is not surprising that older adults weaken all their systems and this leads to diseases and infections of all kinds. One of the greatest ailments of older adults are respiratory problems, which can start with a common cold and end with an illness that requires palliative care and hospitalization due to the complications they present.

Age is a risk factor, your prognosis will not be favorable if you have a low immune system at the time of infection, and weather conditions also complicate health problems.

The changes due to the passage of time in the respiratory apparatus we can list mainly the loss of elasticity in the bronchi, as well as decreased mobility of the thorax due to skeletal and muscular alterations, this makes the volume of air mobilized by breathing less. (MAPFRE, 2018)

There is an increase in the fibrous tissue between the alveoli, which hinders the passage of oxygen to the blood and exhaled air. Changes in the defense system as the cilia of the bronchial tree decrease and there is an increase in the presence of mucus which makes breathing difficult. "These changes are present in older adults even without being pathological.

We must also keep in mind that these changes reach the older adult regardless of the lifestyle habits they lead, but it is clear that exposure to tobacco, pollution and other toxins present in the air, as well as the diseases they may suffer, worsen and accelerate these changes" said Dr. Montse Queralt (MAPFRE, 2018)

Materials and methods

The methods used in this research will be inductive and will be developed in older adults of the ciudadela el chorrillo parish, Babahoyo - los ríos canton during the period January-March 2023.

Inductive method: is the method that reaches general conclusions based on particular hypotheses or antecedents. The inductive method is usually based on observation and experimentation of facts and concrete actions in order to reach a resolution or conclusion.

The modality to be used will be mixed qualitative and quantitative for the development of this research project in the Los Angeles Parish of Ventanas Canton to determine and measure the results obtained. "The use of both qualitative and quantitative procedures in an investigation could probably help to correct biases inherent to each method."

In relation to the technique, the survey will be used because it allows data collection and allows contact to be established with the observation units by means of previously established questionnaires.

The instrument used will be questionnaires which is a set of questions designed to generate data necessary to achieve the objectives proposed in the research project, which requires careful elaboration for respondents to answer without evading".

In the present research project, the population will be represented by 110 elderly people who belong to the community of Ciudadela El Chorrillo, Canton Babahoyo.

The sample of the present work corresponds to 65 elderly people who belong to the community and who presented respiratory problems according to the census survey carried out in the parish of Los Angeles, of which 42 patients are male and 23 patients are female.

3. Result

For the analysis of the first question of the survey related to the sex of the people surveyed, the results show that there is a higher percentage of men represented by 65% of the sample, while women are represented by 35% of the total sample of people with respiratory diseases in the Chorrillo citadel.

For the analysis of the third question of the survey related to whether people had any respiratory condition at the time of the survey, the results show that 100% of the respondents answered yes to the question asked.

For the analysis of the fourth question of the survey on what type of respiratory condition they had at the time of the survey, the results show that 43% of the respondents had the flu, 26% had a cold or cough, 17% had rhinitis and 14% had some type of allergy.

For the analysis of the fifth question of the survey about the types of ancestral medicine techniques they use for the relief of respiratory conditions 49% indicated that infusions followed by 28% for the application of ointments, 15% mentioned vapours and 8% of the respondents answered that it is syrups.

For the analysis of the seventh and last question of the survey about the use of a recipe book of local medicinal plants and respiratory physiotherapy exercises for respiratory conditions 97% of the respondents answered affirmatively and 3% answered negatively.

4. Conclusions

The use of ancestral or traditional medicine in the sector of the parish of Los Angeles in the Ventanas canton is deeply rooted in their beliefs and for them it is of great benefit and usefulness for the inhabitants of the sector, which is why it is common to hear that they first turn to an empirical alternative before going to a general medical center.

The knowledge that they have of the plants, although it does not have a scientific basis, has been developed because putting it into practice relieves and the inhabitants acquire the necessary experience to be able to teach their children who in turn have the responsibility to continue preserving their culture and improving the skills that they will then pass on to their generations.

It was observed that the most prevalent respiratory condition was the flu or common cold, which, with the necessary care, is relieved within ten to fifteen days.

The technique they use the most is infusions of medicinal plants and they do it in its initial stage, which contributes to the improvement of their respiratory conditions.

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