



Effect of four medicinal plants for skin treatment, anemia, sever diarrheic and respiratory problems, and arterial hypertension

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Introduction

The lack of scientific knowledge of the effects of plants in the treatment for anemia, fungus on the skin, sever respiratory and diarrheic diseases, and arterial hypertension, produces insecurity and mistrust, because of its inadequate usage and management. This affects negatively the introduction of the products to the official system of health.

The research allowed us to know the positive effects of five products made out of garlic, ginger, carao, and guava, administrated to 641 patients who attended the health care centers of Cusmapa, and Estelí during 4 months in order to treat the aforesaid diseases.

During the execution of the research, 938 people who presented the above said pathology were treated. To make the analysis we selected 641 users (68.33%): 128 presented compatible symptoms with diarrheic process originated by: virus, bacteria, and parasites; 205 with symptoms compatible with anemia, 215 presented respiratory diseases, 39 presented skin

illness, the majority of them fungus and 54 patients with arterial hypertension.

In order to determine the efficacy and security of the 5 medicinal products in the treated patients, an observation study was carried out, using a clinical record elaborated to that end and making medical appointments with the population who regularly attends the health care centers that were already mentioned.

Description of the problem

Not using medicinal plants in the treatment of common diseases, in health care centers and hospitals of the country, is a problem that affects the poorest population, and is one of the cases to be solved through the execution of the present research.

Objectives:

General:

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To validate five medicinal products (garlic tincture, ginger, carao and guava syrups, and ajolin ointment) to contribute to improve the health of the population through the adequate use of medicinal plants of therapeutically proved efficacy, and scientifically validated to be introduced into the official system of health.

Specific:

- To determine the efficacy and security of five medicinal products in diseases like anemia, diarrheic and respiratory problems, arterial hypertension, and skin problems.
- To determine the exact dosage when applying the treatment to the patient.
- To know the adverse effects of the applied treatment if there is any.

Procedure

A series of sequential actions that permitted the efficient execution of the research were carried out in order to achieve the purposed objectives.

- Coordination visits with health care center directors who took part in the research.
- Selection of medical staff and training on the use of the products to be validated in this research.
- For the application of the medications in the formerly defined pathologies, were taken

patients who attend the health care center and that willingly decided to take part on the study.

- The patients submitted to the research were carefully controlled through a clinical record, and individual interviews to the patients who attended the appointments.
- Analysis of the results.

Results (What was found?)

Guava syrup:

128 people among children and adults, who presented symptoms of diarrhea compatible with the viral, bacterial and parasite etiology, were treated. (See graphics 1 and 2). All this patients were treated with guava syrup with a dosage of 3 table spoons tree times a day, and half the adults' dosage for kids.

50 out of the 128 users (of those treated in Estelí) were made parasite tests, 48 of them were positive (96%), 22 (45.83%) presented histolytic amoeba, 13 (27.08%) giardia, 10 (20.83%) a combination of histolytic amoeba and giardia, 3 (6.25%) intestine multi-parasites. 48 of the patients treated about parasites improved their health within 2 to 5 days 41 (85.42%) and 7 (14.58%) did not attend the appointment (see graphics 3 and 4)

In 78 patients that did not have laboratory tests, the diagnosis was



based on the medical evaluation of the symptoms presented by the patients.

Finally, in the second evaluation at the fifth day of the treatment 86 (67.18%) recovered their health, 31 (24.21%) had significant improvements of their symptoms and 11 (8.60%) did not attend to any of the evaluations (see graphic 5).

91.40% of those treated for diarrhea improved their health, 8.60% did not attend the evaluations.

Carao syrup:

205 patients among boys, girls, and adults with symptoms compatible with anemia were treated with carao syrup (see graphics 6 and 7).

45 (21.95 of the total users had analysis of hematocrits): 33 (73.3%) of them were made 2 or more analysis, and 31 (93.93 out of the 33) had an increase of hematocrits; 2.8% up to 41.4%, 12 patients had only one analysis, there fore it is not known if there was any increase.

There was an increase of hematocrits and hemoglobin in 4 patients out of 84 of those who said to have improved their health, in 13 patients out of 45 who said to be stable satisfied, in 3 out of 25 who said not to feel the previously mentioned symptoms and in 1 patient, whose hemoglobin was not reported, out of 17 who said to have improved their appetite, there was 34% to 37% increase of hematocrits.

Ginger syrup:

215 patients among children and adults who presented symptoms compatible

with sever respiratory process of viral and bacterial etiology were treated (see graphics 9 and 10).

51 patients out of those treated with ginger, combined ginger with other medications (acetaminophen-30-, herb teas- 3- and other drugs -8-). That is to say, 164 (76.3%) only used ginger syrup. All patients said that their respiratory problem was solved within the four to 7 days of treatment.

Finally, 212 (98.60%) patients who attended the appointments said to have solved their problems within the 4 to 7 days of treatment, in 3 (1.40%) the cough persisted and it was necessary to take a chemical treatment (see graphics 13 and 14).

Finally, 35 out of the 39 patients (89.74) attended all the appointments, 24 (61.53%) were diagnosed as healthy, 9 (23%) as clinical improvement of their lesions, 2 (5.13%) presented the same symptoms, and 4 (10.25%) did not attend the appointment. In general, 84.62% out of the 35 who were treated, improved their symptoms and only 5.12 did not improve, 10.25% did not attend the appointments (see graphic 16).

Garlic tincture:

54 patients with arterial hypertension were treated with garlic tincture, all the members of the clubs of hypertensive of the mentioned health care centers, in ages 31 to 70 years (48), younger than 30 (3), and older than 70 (3), the majority of the users are women and they represent a 85.18% (54) 57.40% are house wives) 14.82 are men (see graphics 17 and 18).



All the patients were called for periodical control of diastolic and systolic pressure, the normal average of these pressures is 120/80 mm de hg (120 for systolic and 80 for diastolic one) with a rank that varies between 100/70 and 140/90.

35 patients out of the 54, who were treated with garlic tincture, had by the end of the treatment ciphers of arterial pressure within normal boundaries, in 11 of them the pressures were reported above the normal boundaries, in 4 patients the data was not recorded and 4 were not controlled. In general the hypo tensor effect of garlic tincture was shown in the 64.81% of the 54 patients, in 20.37% this effect was not shown, in 7.41 the data was not recorded, and 7.41 of the patients did not come to the control. That is to say, in 8 patients (14.82%) it is not possible to know if ciphers of normal arterial pressure were reached (see graphic 20).

The applied dosage to the different groups of diseases were adequate in the treatment in the treatment according to the indications of the product, except for 2 chronic hypertensive in which the dosage was doubled, in general the indicated dosages were satisfactory.

Conclusions

Guava syrup presents properties against diarrhea and parasites (especially against histolytic amoeba) spasmodic, antibacterial, and astringent.

- Carao syrup showed to have properties against anemia, and

of nutritional recovering, when increasing hemoglobin levels, hematocrits, appetite, and

- Weigh, and decrease or extinction of other symptoms compatible with anemia.
- Ginger syrup showed to have properties against cough and also antipyretic, anti-inflammatory, antiviral, antibacterial, and analgesic properties.
- Ajolin ointment showed to have antifungal and antibacterial properties.
- Garlic tincture showed hypo tensor properties because of its diuretic, hypo glycemia, and hypo cholesterol properties described in the literature.
- The administrated dosage of each product was enough, with few exceptions.
- The adverse effects were scares. Only 4 patients treated with garlic tincture presented them.
- With the obtained results the efficacy of the products was showed, and the therapeutic effect of the four studied plants was validated. Future controlled works will allow clarifying in a higher level the effects found in the five applied products.

Recommendation

- The ministry of health should know the results of this and other similar works in order to introduce the products of natural origin to its basic list of medications.



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- To place these products in the private and public clinics for primary health care.
- To unify efforts for the acknowledgement of the natural popular and traditional medicine by the ministry of health.
- To train the medical and nursing staff of the health ministry about the therapeutic effects of medicinal plants.
- To widen the universe of action of studies in the health care centers of the northern region of the country with the same products and / or others existing in the laboratory CECALI.
- The effective and accepted therapies of natural popular and traditional medicine for treatment of those diseases that represent a load to the population should be indicated. In initiatives like integrated control of pregnancy and childbirths, the integrated control of children diseases, mental health, chronic diseases and others.