POWDERED CARABAO HORN: ITS USES AND EFFECTS AS AN ALTERNATIVE
TRADITIONAL MEDICINE FOR SKIN DISEASES AND WOUNDS

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Abstract: Carabao horn is known for its technical use like handle of knives and bolos and beauty accessories. In the ancient periods, Carabao horn was been used as herbal treatment for extracting venoms of snake bites. The Igorots folk are also users of powdered horn as an emergency drug for skin problems. To validate the mentioned traditional use, this study conducted a simple application to some identified cases. This study therefore aimed to present the following: a) The procedures in making powdered carabao horn; and b) the extent of effect the horn powder as a traditional medicine for skin infections, wounds, and diseases. The respondents of the simple study included five cases with different skin conditions who were actually subjected for the treatment of the application of the powdered horn. The researcher processed the horn into a powdered form then directly applied to patients with cuts, skin diseases-herpes zoster, infections-boils and toe infection. The findings of the study revealed that the carabao powdered horn is highly effective as alternative medicine for skin infections, cuts, and deep wounds. It was also observed that it is easier to use and more convenient and economic that the synthetic antibiotic, it is more effective than any other skin medicines.

**Keywords:** Horn powder, Carabao Horn Powder

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# **INTRODUCTION**

With the birth of Traditional medicines now a days, herbs and horn are recognized as substitute to pharmaceutical drugs due to the fact these have medicinal values that can deal with such illnesses. According to Philippine Traditional Medicine Journal, the government has recognized the importance of traditional medicine in the essential health care of the people. Considering that majority of the Filipinos cannot afford the rising cost of western "modern" medicines, the effort of the government to acknowledge and institutionalize traditional medicine is laudable. The creation of the Philippine Institute of Traditional and Alternative Health Care (PITAHC) through the promulgation of Republic Act 8423 otherwise known as the Traditional and Alternative Medicine Act (TAMA) of 1997 is a big leap to promote and advocate traditional medicine on the national level.

Historically, People in the past as compared to people of today have survived with lesser illnesses and longer life according to record and observation. In their health conditions though medicine was not sufficient or not available that time. The used of herbs as traditional way to cure ailments were effective. Today, herbal plants are being used as the basis in the formulation of cosmetics, supplemental vitamins and as substitutes of processed medical drugs whenever the need arises. This tells that the values of herbs are important in the processing of medicines and vitamins.

Horn is familiar for its technical and technological use in Abroad and in the country Philippines. Several items made from horn are described in "the technology of skeletal materials since the Roman period." Included are amulets, beads, bracelets, buckles, combs, dice, fastening pins, gaming pieces (e.g., for chess), and boards with areas marked by horn inlay, hammer heads used by silversmiths, handles of knives and razors, horns (blast, drinking and powder), scoops, spoons, strap ends (e.g., for belts), tuning pins for string instruments, styluses and tablets for writing. Horn has also been used for snuff bottles and tops of snuff bottles made from other materials because of its being virtually odourless.

In Northern Philippines, horn was being used as medicines by the traditional "quack" doctors to extract the venum from snake and dog bites. However, traditional Chinese medicine consumers superstitiously believe ingesting concoctions derived from pangolin scales and horn can reduce swelling, improve liver function, promote weight loss, stimulate

blood circulation, enhance lactation in breast-feeding women, and even cure cancer, among other things.

In the record of Chinese Traditional Medicines, The Chinese have found medicinal uses for the buffalo horns. As a medicine, the horns are halved, soaked in hot water, scooped out, sliced and dried in the sun for later use. A search of Chinese herbals shows that rhinoceros horn was already listed as a drug of the medium category among the 365 drugs in the Divine Plow- man's Herbal (Shennong Bencao Jing, 200 B.C.-200 A.D.). According to that herbal, rhinoceros horn tastes bitter, has cold properties, and is indicated for all intoxications and delirium. Subsequent herbals have added new applications and refined the medicinal value of rhinoceros horn. Current literature (Anonymous, 1977; Hsu et al., 19861 notes that rhinoceros horn is used for dispelling heat (especially heat trapped in blood), cooling blood, relieving convulsion and counteracting toxins, and is employed to treat febrile diseases, influenza, high fever, poisoning, convulsion, epilepsy, restlessness, delirium, macular eruptions, erysipelas, hemoptysis, epitasis, carbuncle, malignant swelling and abscess. In a review (Wu and Lu, 1986) on the possible treatment of AIDS with traditional Chinese medicine, rhinoceros horn was suggested helpful in those patients manifesting symptoms of fever and blood heat. Nowhere in Chinese herbals or medical treatises is the use of rhinoceros horn for promoting virility or aphrodisia mentioned, a fact confirmed by Martin (1983). However, this rumor continues to be perpetuated even in major Western medical journals (Gray, 1985; Milestone, 1987). AS for oral administration of rhinoceros horn in traditional Chinese medicine, the horn is always filed into fine powder or ground into an emulsion along the inside wall of a clay or porcelain bowl with a small amount of water. The powder or emulsion, raw, is usually swallowed with water or a herbal decoction. The powder is also used in making pills or decoctions in combination with herbal materials (Anonymous, 1977).

The above mentioned references and background have driven the researchers to undergo further investigations of the power of horn as a traditional medicine or skin remedies for infection to help the users document their data, and to initiate the possibility to formulate product development and further experimentations of this horn powder.

# THEORETICAL FRAMEWORK

The importance of traditional medicines in the lives of people is now being carried in the industry mission as evidenced by the present trends in product development for human consumption. Most of the product development-based are now mixtures of natural flavours

from fruits/herbs .This is a sign that now is time to consider the benefits of using the traditional way of curing such ailments because being traditional is proven good and effective.

Traditional Medicines are now being promoted and accepted as alternative medication of some illnesses especially in the countryside. In the Philippines, it has been a practice among different ethnics like the Igorots in the Cordillera who are among those who tend to doctor themselves whenever they are in times of crisis. They believed that the traditional way of medication could also be an effective remedy to prevent or cure such illnesses due to the fact that the use of herbs and other source of medicine like the parts of animals such as the snake bile, bones, and horns have medicinal values. The Igorots in Apayao used horn to cure any skin diseases and wounds.

The ancient history of Greek and European tradition, during the 5<sup>th</sup> century to 19<sup>th</sup> century, the horn could be used to detect poisoned liquids, causing bubbles in the presence of some poisons ..

Medical Records of Famous Physicians ,2004.recrded that horns have different functions due to the its high quality protein content; For instance, if it is in decoct form, the use of the horns can clears away heat from the body and blood and can eliminates toxic substances from the patients. Moreover, it could be used to treat high fever and coma with delirium, it has convulsion-relieving, anti-inflammatory, anti-infections, bleeding-time shortening, and can also treat a case related to vomiting of blood or nosebleed.

Further, the record revealed in the Medical book shown that the horn of buffalo is scientifically known to contain four major compositions such as: Cholesterol, peptides, proteins, and amino acids. Amino Acids are the "building Blocks" of the body. When protein is broken down by digestion the result is 22 known amino acids. Eight are essential (cannot be manufactured by the body) the rest are non-essential (can be manufactured by the body with proper nutrition). Sometimes the non-essential should still be supplemented to ensure an optimal available quantity.

Besides building cells and repairing tissue, amino acids form antibodies to combat invading bacteria & viruses; they are part of the enzyme & hormonal system; they build nucleoproteins (RNA & DNA); they carry oxygen throughout the body, and are part of all muscular activity.

## STATEMENT OF THE PROBLEM

This study aimed to describe the properties, uses, and effects of powdered carabao horn as an alternative medicine to skin problems such as infections due to skin diseases, cuts, and deep wounds.

Specifically, it aimed to satisfy the following objectives:

- 1. What are the profiles of the respondents?
- 2. What are steps in preparing powdered Carabao horn as a traditional medicine for skin infection, cuts, and wounds?
- 3. How effective is the horn powder when used as a medicine for skin disease infection, cuts or wounds as revealed by the Igorot folk in Apayao along the variables of healing period, and type of casualties?

#### **METHODOLOGY**

The study dealt with the use of Carabao horn. It made use of quantitative and qualitative description of the actual application and observation to gather facts about the medicinal uses of the Carabao horn powder as alternative and traditional medicine for skin cuts and diseases. The respondents of the simple study included six cases with different skin conditions who were actually subjected for the treatment of the application of the powdered horn and whom the horn powder was tried in 2008 to 2011 and even at present in Kalinga. This includes the preparation of carabao horn powder such as: Cut a 3 to 4 inches Carabao horn and wash thoroughly; Scour the horn to produce thin pieces from it; Pound the thin pieces to make it as a powdered form; and then place the powder in a clean container. To use the powdered horn, the following procedures are considered:

- 1.) Wash the infected parts thoroughly with hydrogen peroxide and then place enough amount of powder on the clean surface of the infected skin.
- 2) Spread the powder evenly and cover it with a clean cloth or bandage.
- 3) Wait for two to three days depending on the nature of the skin wounds or infection.

  The average healing efficacy is at least after three to four days.
- 4) After two to three days, try to open the bondage and examine it.
- 5) Slowly remove the plaster or cloth from the treated skin until totally remove.
- 6) If the skin looks fresh and bloody, repeat the procedure.

7) Check again after two days, if the cover can be easily removed without pain, then the skin is already healed.

The researchers did a trial use of a Carabao horn powder by transforming first the horn into a powdered form and applied to the actual cases .For every trial, the researchers recorded the details of the progress until the application was found successful and healed. The record of observations were based on the number of days treated, the number of application and the volume of powder applied. To facilitate the follow up of the application, the researchers made several visits and check up of the treatment with the respondent.

The observation of data were analyzed by use of the three –point scale as follows

| Value | Percentage of healing based on | Description    |
|-------|--------------------------------|----------------|
|       | the number of days             |                |
| 3     | 66.69 -100                     | Effective      |
| 2     | 33.34 - 66.68                  | Less effective |
| 1     | 0.00 - 33.33                   | Not effective  |
|       |                                |                |

#### **RESULTS AND DISCUSSION**

Table 1 . Profile of the Respondents with skin problems as to age and gender

| Respondents with the identified skin problems      | Age | Gender |
|--|-----|--------|
| 1.Ingrown infection/ inflammation                  |     | female |
| 2.Boil   | 46  | female |
| 3.Viral infection- Severe 'Herpes Zoster"          | 73  | female |
| 4.Accident- Skin cut is 2 <sup>nd</sup> degree     | 8   | female |
| 5.Car Accident- Skin cut is 2 <sup>nd</sup> degree | 12  | male   |

Table 2. The Effects of Powdered Carabao horn when applied as alternative medicine to some cases with skin Problems and Wounds in Apayao from year 2008 to 2011.

| Skin problem or diagnoses                          | No. Of days before treatment | Period of<br>treatment<br>by a<br>Medical<br>Doctor | Duration<br>of<br>Treatme<br>nt | Number<br>of<br>Applicati<br>on | Estimated percentage of Healing attained in certain days after application |
|--|------------------------------|---|---------------------------------|---------------------------------|--|
| 1.Ingrown infection/ inflamation                   | 3 days inflamed              | None  | 2 days                          | once                            | 90% healed   |
| 2.Boil   | 3 days                       | None  | 2 days                          | once                            | 85% healed   |
| 3.Viral infection-<br>Severe "Herpes<br>Zoster"    | 4 days                       | 2 days  | 7 days                          | four<br>times                   | 85% healed   |
| 4.Accident- Skin cut is 2 <sup>nd</sup> degree     | Fresh cut                    | None  | 5 days                          | Three times                     | 80% healed   |
| 5.Car Accident- Skin cut is 2 <sup>nd</sup> degree | Fresh<br>wound               | None  | 10 days                         | Four<br>times                   | 80% percent<br>healed  |

As shown in the table the most severe cases which is due serious skin wounds and severe viral infection due to "Herpis Zoster" was treated in seven days respectively, the case with severe boil was treated in three days. And the two cases due to skin cut infections were also treated in just five days. This results of the applications of the powdered carabao horn reveals that the horn when processed into powder is effective as medicine to skin diseases, skin infection , and wounds. This is because the horn, based on science findings of famous doctors, contains different properties which have anti-biotic and cell regenerating functions . Based on the account of the Medicinal book of famous physicians, these properties are found to be the keratin content of the horn.

Table 3 Presents the results of the treatment based on the actual trials regarding the extent of effects with the observed percentage of the healing period and process.

| Skin problem or diagnoses                           | Duration of<br>Treatment | Number of Application | Estimated percentage of Healing attained in certain days after application | Extent of effects |
|---|--------------------------|-----------------------|--|-------------------|
| 1.Ingrown infection/inflamation                     | 2 days                   | once                  | 90% healed   | effective         |
| 2.Boil  | 2 days                   | once                  | 85% healed   | effective         |
| 3.Viral infection-<br>Severe "Herpes<br>Zoster"     | 7 days                   | four times            | 85% healed   | effective         |
| 4.Accident- Skin cut is 2 <sup>nd</sup> degree      | 5 days                   | Three times           | 80% healed   | effective         |
| 5. Car Accident- Skin cut is 2 <sup>nd</sup> degree | 10 days                  | Four times            | 80% percent healed   | effective         |
|   |                          | Over<br>percentage    | 83%  | effective         |

Table 3 revealed that the actual application of the horn powder to the different cases of skin diseases that were treated is effective as supported by the equivalent percentage of 83 %.

#### **CONCLUSIONS**

The study reveals that the Powdered Horn of a Carabao has many important uses and is effective as alternative remedies for skin infections, cuts, and deep wounds.

#### RECOMMENDATIONS

From the results and conclusion of this study, the following are recommended:

- 1. The public must be aware that the horn is useful for medicinal purposes;
- 2. The production of the powdered horn must be done for its availability in times of needs for medicinal purposes.
- 3. Further experimentation of the powdered horn should be done in order to discover more significant uses and applications.

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