

EMPOWERING YOUNG LEARNERS WITH USE OF HERBAL PLANTS THROUGH FIELD VISIT AND PRACTICAL WORK: A STUDY

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ABSTRACT

The paper focuses on the Indian Ancient knowledge about Science and Technology through the use of herbal medicine. The researchers visited an herbal garden to identify some medicinal plants and use them at the time of need. She applied some leaves of some herbal plants to help the students in curing the wounds caused by accident. She observed the effects of the juice of the leaves of Tulsi, Mandar, Gangasiuli etc. on many occasions. Similarly, she used Gheekuanri helps in checking the severe headache of the children. Similarly, she used Alovera and other plants for different common diseases. She collected the opinion of the students regarding the effects of the herbal plants. The researcher experimented with a small sample of 15 no. of students of class VII of Nodal School. She used observation schedule, checklist, and questionnaire for the purpose. For practical work, she took the students on field trip to a herbal garden. The students worked with the teacher while filling in the worksheets. After coming back from the field trip, the worksheets had filled during observation were shared in the class. The students could know how the plants of the herbal garden can be used for medicine. As a starting work leaves, stems and roots were used as the First aid in the school. The students could know how common plants can be used as medicine which has been used from the period of their grandfathers. The teacher clarified in the class about the utility of the herbal plants in a class and then took them to an herbal garden for acquiring practical knowledge.

KEYWORDS: *Herbal Plants, Alevora Juice, Field Visit, Worksheets, Sharing*

INTRODUCTION

This is the age of science and technology. The modern man feels proud of using the benefits of scientific inventions. Still, we go back to the old days while using the Indian ancient knowledge in different aspects in general and Ayurvedic medicine in particular. Tribal people who are living in the hilly and mountain areas depend on the herbal plants and use them as medicine. They do not run to the medicals or medicine shops for their headache, toothache, they use the leaves or roots of herbal plants and get cured. They have inherited the knowledge from their forefathers and their sons and daughters, grandsons and granddaughter use the herbal medicine and get cured. In the remote hilly areas, there are no medical facilities and the inherited ancient knowledge about herbal medicine comes to their rescue. By churning the leaves with help of stones, they take the juice and get cured. Thus the ancient knowledge about medical science cannot be denied, so far as a number of plants are taken into account.

OBJECTIVES

- To help the students in identifying the herbal plants around us in the immediate environment.
- To make them familiar with the herbal plants that can be useful in our day to day life.
- To analyze the attribute of herbal in curing the common disease.

METHODS AND PROCEDURES

Fifteen (15) no. of students of class VII were selected purposively to bring them to the field of experiment. They were taken to a nearby herbal garden. A lecturer of Gopabandhu Ayurvedic College, Puri with Karttikeswar Behera acted as their mentor and the Researchers observed the activities minutely with an active involvement of the students. Tools like Structured Observation Schedule was developed by the Researchers and the students were clarified about the use of the observation schedule. Previously they were trained to ask questions to the mentor about the common plants they know and how they can be used as medicine. The mentor took them to an herbal garden nearby and acquainted them with the herbal plants. Some of the plants like 'Tulsi', 'Bela', 'ghrutakuanri', 'Raktakhai' were already known to them but they were not acquainted with varieties of use of the plants. The mentor gave them conceptual clarity about the multi-variety use of the herbal plants. For over a period of one week, the students observed the plants and filled in the observation schedule contained the following columns with items.

Work Sheet-1

Sl. No.	Name of the Herbal Plants	How it is Used	Which Diseases can be Cured using the Herbal Plant
1			
2			
3			
4			
5			
6			

Then the mentor took the students to the college to have interaction with the students studying in the Ayurveda College for better clarity of their doubts. Their doubts were clarified about the use of the following plants. Ten common herbal plants and five new herbal plants were discussed pertaining to their utility and manner of taking in doses using the following format.

Work Sheet-2

Name of the Herbal Plant	How to use it as Medicine	Dose/ Quantity	Very Useful	Useful	Just Useful
Tulsi					
Turmeric					
Ginger					
Coriander leaves					
Ashwagandha					
Bela					
Honey					

RESULTS AND DISCUSSIONS

Table 1: Level of the Student in Identification of the Plants (Before Field Trip) N - 15

Grading	Number	Percentage (%)
High	Nil	-
Average	5	33.33
Low	10	66.67

Table 2: Level of Knowledge in the Use of the Herbal Plants (Before Exposure)

Grading	Number	Percentage (%)
High	Nil	-
Average	5	33.33
Low	10	66.67

Table 3: Level of Knowledge in Identification of the Plants (After Field Trip)

Grading	Number	Percentage (%)
High	3	20
Average	10	66.66
Low	2	13.33

Table 4: Level of Knowledge in the Preparation of Medicine only by Crushing, Churning and use of Proportionate Water

Grading	Number	Percentage (%)
High	1	6.66
Average	10	66.66
Low	4	26.66

If we compare the base level performance of the students in respect of identification of herbal plants it increased as a result of the field visit, interaction and exposure in respect of scent and size of the plant. Similarly in relation to use of the herbal plants as mentioned which required skill with regard to crushing the leaves or stems and churning the root there was satisfactory improvement marked in case of the students of class who are in the age group of 13-14 and this indicated that if the small students studying at upper primary stage are made familiar with identification of the herbal plants, its preparation, and use, the school students can develop the scientific skill to make the herbal plants usable in their day to day life.

FINDINGS

- The students could identify the herbal plant that can be used as medicine.
- Some of the juices of the plants like ghrutakuanri, Raktakhai was used by their friends on faith and they got the required benefit.
- The students' knowledge got expanded as a result of their exposure to the herbal plants.
- Stopping headache, bleeding, vomiting, toothache were proved when they were used by the students in the school.

IMPLICATIONS

The younger students can develop a sense of positive attitude towards herbal plants. The teachers can develop the herbal garden in the school and engage the children in watering the plants and protect the plants from the stray cattle.

When the plants grow they can use the leaves by crushing and churning the stems of the trees. A sense of belongingness can develop in the students towards the herbal garden. They can discuss the medicinal utility of herbal plants by devoting one or two periods in a week and the period must be placed in a daily timetable.

CONCLUSIONS

Time has changed and the people are mostly inclined to Allopathic which is not only expensive but also tends to side effect. Sometimes people fail to attend the hospital situated in a far-off place due to lack of communication facility in rural areas. In this context herbal garden can render utility for the people to check some diseases, a very simple example is planting of 'Patal Garuda' which can prevent snakes to enter into the house/ campus.

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ANNEXURE (List of Medicinal Plants and their Uses)

Sl No.	Name of the Plants	USES
1	Amala Juice.	Increases immunity in human being, protects eyes from untimely glaucoma growth and skin diseases.
2	Alevera juices	helpful for digestion and preventing Diabetics
3	Raktakhai	Checks bleedings due to cuts.
4	Gheekuanri	checks headache
5	Cinnamom	soothe digestion, treat colds, nausea and inflammation. Cinnamon's essential oil has antifungal, antibacterial and antispasmodic properties.
6	Ashwagandha	Neurotonic, Rheumatism, gout, hypertension, cancer
7	Cardamom	Expels gas by eructation (carminative)
8	Fennel	Expels gas by eructation
9	Garlic	To enhance libido, expel phlegm, for eructation
10	Tulsi	Anti-bacterial, insecticide and immune modulator
11	Turmeric	Anti-septic, anti-oxidant, condiment
12	Clove	Dental analgesic, anti-septic, carminative