

# Relevancy and Sustainability of Ayurveda Education and Alternative Medicine in Nepal

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## Abstract

*The study focuses on the preventive aspect of health care and aims to promote healthy lifestyles in school children and tries to prevent and manage the incidence and prevalence of diseases. This research study was done to evaluate the relevancy and sustainability of the program. This study took data from schools of 7 districts, one from each province in Nepal with SAHYP between March to July 2019. Students felt the SAHYP is necessary for them as it makes them aware of medicinal plants, helps them to learn Yoga skills, and remain healthy. The program and its activities are very relevant in context to Nepal as the student needs to learn about the medicinal plants and students have also felt the need of such programs which help them to be healthy and develop healthy habits. The SAHYP should be conducted more frequently with provision of Ayurveda, Yoga teacher and educational materials. Program activities and changes have possibility of being sustainable. Major challenges for sustainability identified include insufficient funds, inadequate physical infrastructures, and lack of trained human resources. Community and institutional ownership and coordination with the local government are required for the sustainability of the programme.*

**Keywords:** Ayurveda, healthy lifestyle, relevant, school students, sustainability

## Introduction

Ayurveda is the science of life (Mamrani, 2005). It is a healthcare system since ancient times (Mukherjee *et al.*, 2017). The origin of Ayurveda is attributed to

Atharva Veda and it aims to bring harmony between intrinsic and extrinsic factors related to health (Narayanaswamy, 1981). It is widely practised in traditional medicine in South Asia (Warrier, 2011). As stated by the WHO global report not only in South Asia but there is use of Ayurveda in 93 WHO member countries, 16 countries have regulatory frameworks, and 5 countries have health insurance for Ayurveda practices (WHO,2019). Ayurveda is an extensively practiced and recognized healthcare system in Nepal (Yeola *et al.*, 2024). Ayurveda medicine was strongly encouraged in the medieval period of Nepalese history (Shankar *et al.*, 2006). About 2/3<sup>rd</sup> of the Nepalese population is still relying on Ayurveda directly or indirectly (Devkota *et al.*, 2023). Ayurveda management consists of the use of herbal, and herbo-mineral medicines, diet, yoga, panchakarma, and other practices for health promotion and disease management. Yoga is beneficial in physical and mental health (Bussing *et al.*, 2012). Yoga and meditation promote well-being and improve quality of life (Mamtani & Mamtani, 2005). Ayurveda's personalized holistic concepts emphasize health promotion, disease prevention, and treatment (Patwardhan, 2010). The global interest in traditional medicine has increased. The National Health Policy and Nepal Ayurveda Health Policy have emphasized on development of Ayurveda Health Services and its infrastructure and drug production (Ayurveda Health Policy 2052). The COVID-19 pandemic scenario has proved the need to use Ayurveda and Yoga from a public health perspective to strengthen the host immunity (Umesh *et al.*, 2022). 44 % of deaths and 80 % of outpatient consultations in Nepal are of Noncommunicable diseases (NCDs) (Bhandari *et al.*, 2014). Studies reported a high level of alcohol and tobacco use in Nepal (Aryal *et al.*, 2014.). According to the United Nations adolescents spend an average of 10 to 15 years at school (UNDP, 2007). Schools have the potential to teach about healthy habits and promote children's health and well-being (Ferreira *et al.*, 2015).

It is expected that introducing Ayurveda education and practices at the school level can create healthy behaviour and a healthier and prosperous Nepal (Parajuli, 2020). Department of Ayurveda and Alternative Medicine (DOAA) is responsible for the formulation and implementation of various Ayurveda programs in Nepal. Among the various programs School Ayurveda Health and Yoga Education Program (SAHYP) is being implemented at the school level to create awareness about the Ayurveda lifestyle; the importance and uses of locally available medicinal plants; benefits of different Yoga and their practices. WHO has provided financial assistance for the IEC materials. The program is being implemented through Ayurveda hospitals, Ayurveda health centres, and dispensaries. It is a major program that focuses on the preventive aspect of health care aims to promote a healthy lifestyle

in school children and tries to manage the incidence and prevalence of diseases. This research study was done to evaluate the relevancy and sustainability of the programme.

## **Material and Method**

### **Study Design**

This study adopted both the qualitative and quantitative approaches.

### **Study Area**

The study covered 7 districts, one from each province during the year 2075/76 B.S, namely Taplejung, Bara, Bhaktapur, Mustang, Dang, Mugu, and Kanchanpur where the SAHYP Program is being implemented representing 7 provinces and 3 ecological zones. The research study was funded by the Department of Ayurveda and Alternative Medicine and facilitated by the National Ayurveda Research and Training Centre Kirtipur.

### **Study Population**

The study population included the Head of Ayurveda hospital/district Ayurveda health centre/Ayurveda dispensaries, other health workers, members of the health/school management committee, principal and teachers, students, FCHVs, Service beneficiaries (were included with the norms of GESI), elderly people and people with disabilities.

### **Study Methods/Tools**

This study data were collected through Key informant interviews (KII Guidelines), FGD (FGD guidelines) and Questionnaires/forms.

### **Sampling Method**

The health institution and its coverage school site as a sampling unit were selected on a simple random sampling method. For the sampling, the list of the schools where the programs is being implemented was prepared and the same was taken as the sampling frame. The sample size for the study was 14 (FGD), 28 (KII) = 42. Informants for KII were the head of zonal Ayurveda hospital/district Ayurveda health centre, head of Ayurveda dispensaries and other health workers,

school principal and teacher, chairperson/mayor of rural/urban municipalities and ward. Informants for FGD were community people and student. The sample size for the study can be seen in the table No 1.

**Table 1**  
*Sample Size for the Study*

Informants	Method	Taplejung	Bara	Bhaktapur	Mustang	Dang	Mugu	Kanchanpur
Head-Ayurveda centre	KII	1	1	1	1	1	1	1
Health workers	KII	1	1	1	1	1	1	1
School Principal/ Teacher	KII	1	1	1	1	1	1	1
Chairperson/ Mayor	KII	1	1	1	1	1	1	1
Community people	FGD	1	1	1	1	1	1	1
Students	FGD	1	1	1	1	1	1	1
	Total	14 (FGD), 28 (KII) = 42						

**Data Collection Tools and Techniques**

For the data collection, enumerators with sound knowledge of Ayurveda and the local language were hired. The hired enumerators were oriented on the objectives of the program and the study. After that enumerators were oriented on the tools and techniques for data collection and recording the information in a recorder. For key informant interviews, a key informant interview guideline was developed. For focus group discussion among the beneficiaries, a FGD guideline was developed and used. For the secondary data, the institutional data form was developed and used to record the data from the school and health centre.

**Data Management**

The qualitative data were collected through the recorder with a unique ID. The recorded information was translated into English. The quantitative data collected was entered in Excel. The qualitative data were analysed in a thematic aspect being based on the objectives and research question of the study. For analysis of qualitative data free listing of narrative responses, domain formation, code application, and data summarization steps were undertaken. For the quantitative data, descriptive analysis was done.

## **Ethical Consideration**

During and after the period of study ethical integrity was highly maintained. For this, the anonymity of respondents and responses confidentiality was maintained throughout the survey and after the completion of the survey as well. Informed consent was taken.

## **Result and Discussion**

The number of SAHYP in FY2072/73-75/76 were Taplejung-36, Dang -19, Bhaktapur- 17, Kalaiya -16, Kanchanpur-15, and Mugu -4. Taplejung district conducted the highest number (36) of SAHYP in that period, which was followed by Dang (19). Mugu has the least number of SAHYP conducted in that period. The total number of beneficiaries reached via SAHYP (FY2072/73-75/76) were Taplejung-1447, Dang-2282, Bhaktapur-895, Kalaiya -486, Kanchanpur-1406, and Mugu-245. In reaching the beneficiaries Dang has reached the maximum number of beneficiaries (2282) whereas the least was of Mugu (245). The SAHYP quantitative data of Mustang district couldn't be included as the exact details of SAHYP and beneficiaries couldn't be figured from the records of the Ayurveda centres. The number of schools covered varies across the districts; it ranges from 1 to 8 schools. From one event average of 150-200 students benefitted. One SAHYP per school is being conducted in a year but in some districts, teams were able to conduct 2 SAHYP in a school in a year. Students as well as the community people have shown interest in taking the class and learning something new about Ayurveda. The community and the schools were very positive about the SAHYP and have been very supportive. The school has been supporting in management of the space, time and gathering the participants, and encouraging and motivating students to participate in the program. Meanwhile, in some instances, schools were not able to help by allocating many classes, as they didn't want to hamper their schedule, especially in mountain districts as in these areas people migrate to the lower belt before it starts to snow.

## **Relevancy of the Program**

Students felt the SAHYP is necessary for them as it makes them aware of medicinal plants, helps them to learn Yoga skills, and also helps them to remain healthy.

*KII\_Principal: Previously students were not aware of Ayurveda, but the team from district Ayurveda Aausadhalya has been taking classes for the*

*last 2/3 years. Due to this class, students have become more enthusiastic and motivated and they are developing an inclination towards Ayurveda.*

*FGD community: Yes, the activities of this program are relevant to bringing changes in Students. If this activity were done in the community, then students wouldn't have been regular. It is good that it is conducted in school, students become regular. We have noticed the changes due to yoga, I am feeling better and it was like a physical exercise, and due to this, I got good sleep.*

*FGD community: Yes the program is relevant. The thing noticed is previously community people didn't seek Ayurveda for health problems but now it has changed and people are being attracted to Ayurveda.*

*FGD community: It is very relevant, as people tend to learn skills very slowly in older age, and also yoga might be difficult to practice at older age. If people learn yoga education right from an early age many diseases can be prevented.*

*FGD community: This program is very relevant for the formation of habit in students as habit formation is very difficult. Once the habit is formed then it is beneficial to the society.*

*KII Mayor: Activities are very relevant and rational. As per the need of the present time, participants are very interested in the Ayurveda program and insist on bringing more programs like this. There is some positive changes due to this program, although it is a small-scale program. People learned the medical uses of household spices and condiments. People were aware of local herbs and condiments but became clearer about the herbs and plants.*

In some instances, community people also participated in the program actively and were very positive about the program, and had shown interest in future programs. SAHYP has helped in the maintenance of the cordial relationship between health workers, teachers, students, and the community. People also have been helping by sharing information about the medicinal herbs they knew about, which is beneficial to health workers as well. This program has provided a platform for discussion and interaction with the community people. The most significant changes noticed were an increase in the service utilization by community people, a change in the knowledge of Ayurveda, and the habit of yoga practice as physical exercise. The activities of this program were considered very relevant to bring changes in students.

## Sustainability

All the participants of the survey were confident about the possibility of the sustainability of the program and its changes but, due to the lack of a sufficient number of events they were in doubt that the changes brought by the program may not be sustainable. For the sustainability of the program and its changes, they stressed the regularity and frequency of the program as the sustainability of the positive change is a long process and takes time. Due to SAHYP now students and teachers both are aware of Ayurveda this can lead to sustainability if the teachers and students put in their input.

*FGD Student: The positive change and the activities of programme can be sustained if we practice yoga regularly and inform others about healthy behaviour to other as well.*

*FGD community: Yes, the result of this program can be sustained for the long run, as now students and teachers both are aware. If students and teachers understand then students will inform their parents and teachers can influence the leaders of the community regarding Ayurveda. For sustainability, this program should be done regularly, and budget and infrastructure should be included sufficiently.*

*FGD community: To sustain the program, we should make a policy that will guide the staff and we should actively participate along with the staff.*

*KII Head: I don't feel there is anything that needs to be added in SAHYP, at the school level the activities that are being conducted are appropriate and sufficient. Ayurveda has Swathyabreet, diagnosis and treatment services in broad classification. At this level, Swathyabreet, information about the medicinal plants and yoga sessions can be given.*

Whereas in the district, teachers of the school have been trained in yoga for sustainability and requested regular conduction of Yoga as an extracurricular activity. All participants focused on the community awareness program to be added for the betterment of SAHYP and also the development of “We Feeling” among the people on programs on Ayurveda. The students focused on the regularity of yoga classes. Leaders focused on adequate coordination with local authorities. Teachers focused on yoga training to the teachers and introduction of Ayurveda in the school curriculum. The program is being implemented at an appropriate time but has been up to the required target but the frequency of the program is less. There has been a development in positive relationships between school students,



teachers, and community people due to this program. The program and its activities are very relevant in context to Nepal, as the student needs to learn about medicinal plants and students have also felt the need for such programs which help them to be healthy and develop healthy habits. It has also helped in the exchange of skills and knowledge in home remedies and herbal plants. The program is relevant but the number of events is notably low which may not meet the objectives of the program. Program activities and changes have the possibility of being sustainable for this, for a certain time, the SAHYP should be conducted more frequently with the provision of Yoga teachers and educational materials related to Ayurveda and Yoga. The school also needs to involve and motivate students to participate in the SAHYP program and coordinate with the Ayurveda health centre for training of teachers on Yoga and Ayurveda. This will lead to a continuation of learning among the children and the formation of habit in them.

People have forgotten the importance and medicinal values of locally available herbs. Ayurveda practices holistic principles focused on personalized health (Patwardhan, 2014). It offers detailed guidance about diet as per the individual constitution and seasons (Tachaparamban, 2014). It provides valid and practical instruments for managing and coping with stress and lifestyle disorders (Basler, 2011). From early time education in Ayurveda involved *Gurusisya Parampara* (knowledge being transmitted personally from teacher to student) (Singh, 2015). The education system in Ayurveda changed considerably in the era of institutional education with established educational standards (Wujastyk & Smith, 2013). Incorporating Ayurveda in school health can reduce the prevalence of health risk behaviours and promote healthy behaviours among children (Begum *et al.*, 2022).

Schools play a great role in reversing the trends of child and adolescent health issues and education in school years can have a positive health impact going into adulthood. (Sinha & Kumari, 2021). School yoga studies have shown benefits in children and adolescents. (Serwacki & Cook, 2012). Multi-faceted efforts are needed to address the growing health problems (Story, 1999). Providing easy access to nutrition and hygiene education is a simple and cost-effective tool that can go a long way in the prevention and control of diseases. A ten-day practice of integral Yoga has a significant effect on Sattva, Rajas, and Tamas in children. (Patil & Nagendra, 2014). School health promotion programmes are effective when they take into account the relationships among students, families, schools, and the community (Cao *et al.*, 2014). Well-planned school programmes improve the competencies of students; they need to make decisions about personal behaviors that



influence their health. (Kolbe, 1985). Health education at school helps students maintain and improve their health and prevent diseases (Kann *et al.*, 2007).

SAHYP promoted Ayurveda health care, Yoga practice, use and cultivation of locally available medicinal plants. Other studies also recommend formulating and carrying out school nutrition education programs (Johnson & Butler, 1975). The impact of a school program is determined by the extent to which it is maintained in classrooms. (Basch, 1984). Training and reinforcement to increase teachers' feelings of preparedness can have significant classroom effects (Hausman, & Ruzek, 1995). Resource constraints, staff turnover, and a lack of training are hurdles to sustainability (Herlitzet *et al.*, 2020). Major challenges identified include insufficient funds, inadequate physical infrastructures, and a lack of trained human resources (Park *et al.*, 2015). Poor coordination and partnerships between stakeholders are also significant hindrances (Baidya & Budhathoki, 2010). Integration of school programs with other community efforts appears to produce more positive results than school or community programs operating in isolation (Allensworth *et al.*, 1997). Engaging Community health workers can have a good impact on NCDs prevention as suggested by a previous study (Rawal *et al.*, 2020).

Students were also taught about the importance of Ayurveda medicines, medicinal herbs, and a healthy lifestyle. This program also helped to aware students on the importance of hygiene, dietary habits, and the prevention of diseases. People have developed a strong tradition of Ayurveda and follow that tradition (Maas, 2018). The number of beneficiaries with healthy lifestyles and recipients of service have increased indicating the positive impact towards the reduction and management of NCDs. The program seems to be in line with goals and objectives. The program intervention is relevant. The level of community and institutional ownership is required for the sustainability of the programme.

## **Conclusion and Recommendation**

The program and its activities are very relevant in context to Nepal as the student needs to learn about medicinal plants and students have also felt the need for such programs which help them to be healthy and develop healthy habits. Students, this program has been beneficial to the health care provider in maintaining good relationships with teachers, students, and community people. Program activities and changes have the possibility of being sustainable. The SAHYP should be conducted more frequently with the provision of a Yoga teacher and educational materials related to Ayurveda and Yoga.

For the sustainability of the program, training, timely release of sufficient budget, and coordination with the local government need to be done.

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