



## HERBAL USE EDUCATION FOR HEALTH IN THE COMMUNITY OF MUEANG DISTRICT KHON KAEN THAILAND

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### Abstract

Many community members do not know enough about herbs' benefits and how to use them properly, which often leads to distrust of their effectiveness as an alternative treatment. The habit of consuming modern medicines is more dominant than herbs. This is triggered by the perception that modern medicine provides results faster. Limited access to information about the types of herbs and their benefits and restricted access to quality herbal products in some areas. In 2024, 56 PCIM members studied in Thailand, and around 130 Indonesian students studied internationally at Khon Kaen University (KKU). Around 40% of these students experienced physical complaints such as colds, nausea, vomiting and dizziness due to physical conditions, weather and other factors.

The use of herbs/herbal medicine to maintain health and treat various diseases has been passed down from generation to generation. This legacy is expected to continue to be utilized by the younger generation, especially international students, as an alternative to increase endurance and overcome physical complaints. Indonesia and Thailand have similarities in using herbs as medicine, including ginger, melon, nutmeg, cinnamon, chilli, cloves, galangal, lemongrass, honey, and others. Community service was implemented in Mueang District, Khon Kaen, Thailand, on August 28, 2024, with 20 participants. After counselling and practice in making herbal drinks, participants learned the types, benefits and processing of spices to make herbal drinks that can be used as safe and effective alternative medicine.

**Keywords:** Herbal, Community, Alternative Medicine, Thailand

### INTRODUCTION

Thailand consists of several different geographic regions. The northern part is the mountainous highlands. Khon Kaen is a city in Isan, the northeastern region of Mueang Thai, and is the capital of Khon Kaen. The city has a population of 114,459. Khon Kaen City has a State's University called Khon Kaen University (KKU). KKU is a comprehensive and research-intensive University in Isan. Based on data from 2024, 130 Indonesian students were studying at the University and 56 were members of the PCIM organization.

Based on a preliminary study, 40% of students experienced several health complaints, such as nausea, dizziness, headaches, and colds. Around 20% of the treatment used conventional medicine to overcome minor physical complaints, and around 5% used traditional medicine with herbs.

Herbal medicine is an important alternative and primary treatment in various parts of the world. According to research by the World Health Organization (WHO), herbal medicine as a second alternative treatment has been implemented in Asian, African, and American countries. In fact, almost 80% of Africa uses herbal medicine as primary treatment (Adiyasa & Meiyanti, 2021). In Indonesia, the prevalence of herbal medicine use reached 20.99% in 2014, mainly due to milder side effects and significant health benefits (Pane et al., 2024). The use of herbal medicine in self-medication practices is also increasingly widespread, especially due to easy access to information via the Internet. However, better education is needed to ensure that the public gets accurate information and avoids

misuse of drugs, both herbal and modern (Supriadi et al., 2021). Thus, the development and utilization of herbal plants as part of traditional and modern medicine needs to be continuously supported through ongoing research and education

## METHOD AND PROCEDURES

Community service targeting students was held on August 28, 2024, at the Public Health Campus, Khon Kaen University, Thailand. This activity involved education and discussion on making herbs for various health complaints such as coughs and colds, chills, and diarrhoea, and making face masks. The materials and tools used included presentation materials, rooms, LCDs, laptops, herbal ingredients such as ginger, turmeric, charcoal, sappanwood, lime, honey, and practical equipment in the form of plastic cups, hot water kettles, spoons, and trays. The stages of the activity began with an opening by the Head of Community Service and remarks from representatives of Khon Kaen University and the team from Indonesia. Furthermore, a pre-test was conducted to measure the participants' initial knowledge of the material. In the education session, Lusi Oktaviani and Siti Lomrah delivered presentations on the types of herbs, their properties, and how to use them. After that, participants participated in making potions, such as cough and cold potions, and face masks through demonstrations that included the selection of ingredients, preparation, manufacturing process, and presentation. Participants could also taste the processed products and ask questions about manufacturing techniques. The activity was closed with a post-test to evaluate the increase in participants' knowledge and friendly gathering.

## RESULTS

The dependent test statistics in Table 1 show a significant difference in community knowledge before and after education and practicum.

Tabel 1. The Dependent Test Statistics

Pengetahuan	N	Mean	SD	SE	P Value
Pretes	20	5,20	1,281	0,287	0,000
posttest		8,65	1,182	0,264	

Before being counselled, most students had limited knowledge about various types of herbal plants and their health benefits. Many did not know the potential of herbal plants that are easily found around them, such as ginger, turmeric, pandan leaves, and other natural ingredients, in supporting daily health. However, their understanding was significantly increased after participating in the counselling activities. Students could recognize more types of herbs, understand their contents, and know how to use them to overcome health complaints such as flu, cough, fever, and skincare.

This counselling also had a positive impact on student's practical skills. Twenty participants successfully practiced making herbal concoctions, such as concoctions for flu, cough, fever, and face

masks. This shows their high interest in using herbs in everyday life. Students who were previously hesitant or did not have the skills now feel more confident making and using herbal concoctions. This real difference reflects the effectiveness of extension activities in improving students' knowledge and practical skills so that they can provide sustainable benefits for both themselves and their surrounding communities.



Figure 1 Presentation of material



Figure 2: Practice making herbal potions

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Figure 3 Participant attendan

## CONCLUSION

In conclusion, this outreach activity increased public knowledge about herbs and provided practical skills that can be directly applied in everyday life. Participants felt helped by the information and were enthusiastic to practice making herbal concoctions at home. In addition, this activity showed that the use of herbs as an alternative treatment could be a good choice, especially in supporting a healthy lifestyle and reducing dependence on chemical drugs. Although there were several obstacles, such as language barriers and difficulties in obtaining herbal ingredients, the positive impacts were still significant. Therefore, this activity can be a model for further community service programs, with improvements in aspects that are still lacking, as well as expanding the reach of information about the benefits and how to use more diverse herbal plants.

From the activities of Devotion to the community, it can be concluded that it Must always add insight and improve skills in early childhood learning and education to the community. Should better prepare the learning media to be used flow more actively communicate with children and also parents

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