

## **CHAPTER 4**

### **CONCLUSION**

Traditional medicine is the common way for primary health care of borderline people. All of ethnic groups in the world use traditional medicine for their health care need for a long time. Since modern medicine was developed, some diseases was treated effectively, in the other hand some chronic diseases could not been healed by modern medicine such as diabetes mellitus, and diseases that cause by the deterioration such as cancer. Some conditions relating women have not been concerned by modern physician whereas traditional medicine including oriental medicine has had many methods to care the conditions relating women such as in pregnancy and postpartum conditions. These traditional practices remain have been trusted and sustainable used by their traditional way.

The Mien are the ethnic people who are well known in use of medicinal plants. Their knowledge of the uses have been transmitted to later generations, many of recipes have been traditionally used for a long time. Postpartum herbal bath and tonic are the interesting preparations that commonly found in the Mien communities both in Thailand and other areas.

The results of surveys the medicinal plants use knowledge and medicinal plant habitats near Sancharun Village found that there were both traditional medicinal plant use knowledge and medicinal plant present in community, and some recipes also have been trusted to use in actual use especially medicinal plants used in postpartum

women both postpartum tonic and postpartum herbal bath recipes. However, medicinal plants regarding the use and also medicinal plants themselves have been threatened by many dynamic conditions. Even if it faces to many threats, it still has opportunities for development especially in recipes that have been trusted for the long time in community like the postpartum herbal bath and postpartum herbal tonic recipes. Information of phytochemicals and bioactivity of plants that were used in these recipes from literature review showed that the selected plants composed of many phytochemicals such as polyphenolic compounds and flavonoids which can play the role of antioxidant, antimicrobial, anti-inflammatory, analgesic, and others. These phytochemicals when combined in hot water, the water extracts make postpartum women feel cheerful and relax and their wounds also were healed in as short time. These positive effects may be the main cause of trust and confidence of the Mien's postpartum women to use in their traditionally use for a long time. However, there have been medicinal plants that have been used in the postpartum herbal bath recipes and still had been virgin from any tests. They had then been selected to tests of phytochemicals, antioxidant, and antibacterial activities in this study.

Results of phytochemicals screening and bioactivities in this study found that each of ten species of selected plants have had a high quality by themselves. They showed high amount of antioxidant activity on the tests of total phenolic content, DPPH scavenging activity and ferric reducing activity, have antibacterial activity against *Staphylococcus aureus* at the low of concentrations and none of them also showed any toxic chemicals for postpartum women health.

All tests in this study and in the reviewed literature showed that there are beneficial effects from postpartum herbal baths and the Mien's postpartum herbal bath recipes. Phytochemicals like phenolic compounds and flavonoids, when combined with the release of good smelling volatile oils in hot water can boost immunity, increase blood circulation, clear airways, make one feel relaxed, and may help recovery in postpartum woman by their antioxidant activities. Antibacterial and other activities such as analgesic and anti-inflammatory activity of these phytochemicals are also good for postpartum care.

To conserve this useful traditional knowledge and also medicinal plant habitats it need to integrate this local knowledge into scientific knowledge like an above laboratory tests to verify quality and effectiveness of the recipes and also improve preparations to increase the user confidence. Medicinal plant habitats also need to be managed by integrated methods. Scientific knowledge that was used to combine with the local knowledge to conserve medicinal plant habitats in this study were principles of Ethnobotany and Biodiversity.

Results both from community survey and scientific knowledge were then combined and then provided to community for a planning of conservation and sustainable use of their medicinal plant of the Mien in Sancharum Village. The local conservation processing in this study use participatory action research.

The Meeting between researcher, Village leaders, Villagers, and local government officers found that it increased the community's concerning and then they decided to build community medicinal plants garden at their temple and modified their home gardens also. The collaboration and assistance to perform gardens was received from Inter Mountain Peoples Education and Cultural in Thailand Association

(IMPECT Association), community health sector, sub district administration organization, and students from Sancharurn public school. The educational supports from these various parts have been reinforced through this project, especially the provision of material as medicinal plants inventory book and knowledge from this book has been added to community school curriculum.

However, this study is the original of conservation management, it need the long term supports for the conservation management and for sustainable use of medicinal plant in Sancharurn Village.

*Ex situ* conservation such as tissue culture, seed bank and/or gene bank of important medicinal plants should be encouraged in further project and the Mien's recipes should be further researched by pharmacognosy to study about the active phytochemicals, by pharmacology to provide appropriate dosage information and toxicity, and also for pharmaceuticals to provide good formulations and wider range uses in the future.