

Ethnobotanical survey of medicinal plants used for maternal healthcare in Mondulakiri Province, Cambodia

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Abstract: This study aimed at conducting the ethnobotanical survey on medicinal plants used for maternal healthcare in Mondulakiri province, Cambodia. This survey is conducted from April 17 to 29, 2017 at Senmonorom City, Mondulakiri Province, Cambodia. Ethnobotanical data were obtained using a semi structured questionnaire method. The questionnaire was used to interview 8 respondents who are considered as the local traditional healers. Medicinal plants belonging to 30 genera distributed among 22 families were documented. Most of the reported plants belong to the families of Fabaceae, Zingiberaceae, Bignoniaceae, Celastraceae and Phyllanthaceae accounted for 13.33% (n = 4), 10.00% (n = 3), 6.67% (n = 2), 6.67% (n = 2) and 6.67% (n = 2) respectively. The most frequently used plant's parts were woods (29.79%; n = 14), roots (25.53%; n = 12) and barks (19.15%; n = 9). The medication was prepared as decoction (93.33%; n = 28), grill (3.33%; n = 1) and powder (3.33%; n = 1). The plants were administered through dermal (3.33%; n = 1), oral (93.33%; n = 1) and steaming (3.33%; n = 1) routes. The reported plants are used to treat mainly the symptoms of post-partum, diarrhea, hemorrhage and pain accounted for 33.33% (n = 10), 6.67% (n = 2), 6.67% (n = 2) and 6.67% (n = 2) respectively. Some plants also were used to improve the health condition as breastmilk enhancement (13.33%; n = 4) and warming effect (13.33%; n = 4). This study provides the documentation of the medicinal plants used for maternal healthcare in Mondulakiri province, Cambodia. Scientific validation of the biological properties of the surveyed plants is highly recommended.

INTRODUCTION

Traditional medicine practised in Cambodia is based on written scripts and is known to have been used for nearly a thousand years, is still widely used and plays an important role in everyday life. Medicinal plants especially are the core of this medicine and their uses have been well documented. Moreover, ethnopharmacological research has been conducted to evaluate some of the claimed activities (Chassagne *et al.*, 2016). This study aimed at conducting the ethnobotanical survey on medicinal plants used for maternal healthcare in Mondulakiri province, Cambodia.

MATERIALS AND METHODS

This survey is conducted from April 17 to 29, 2017 at Senmonorom City, Mondulakiri Province, Cambodia, which covers an area of 14,288 km² located between latitude 12°27'20.99"N and longitude 107°11'17.20"E. Ethnobotanical data were obtained using a semi structured questionnaire method. The questionnaire was used to interview 8 respondents who are considered as the local traditional healers. A descriptive statistic method using frequencies and percentages was used to analyze the distribution of plant species. Excell 2016 was used for the data analysis.

FINDINGS AND DISCUSSION

The findings of this ethnobotanical survey were strongly supported by Chassagne *et al.* (2016) and Kankara *et al.* (2015).

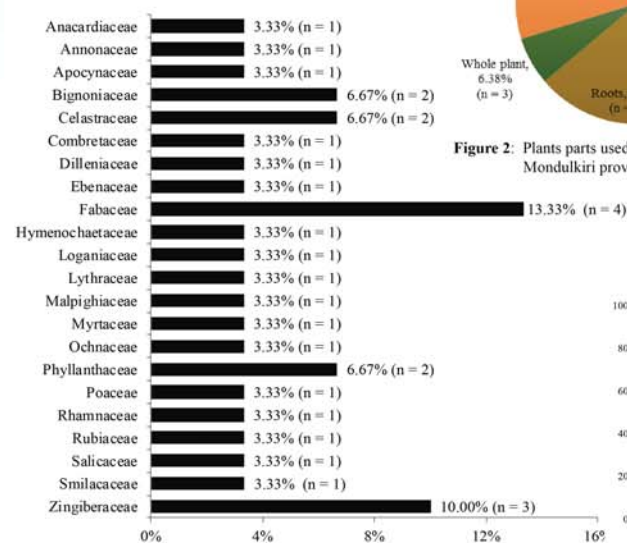


Figure 1: Distribution of plant families used for maternal healthcare in Mondulakiri province, Cambodia

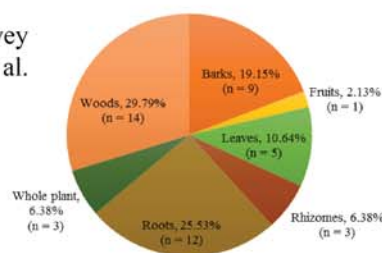


Figure 2: Plants parts used for maternal healthcare in Mondulakiri province, Cambodia

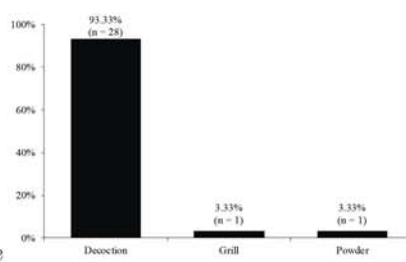


Figure 3: Preparation of plants used for maternal healthcare in Mondulakiri province, Cambodia

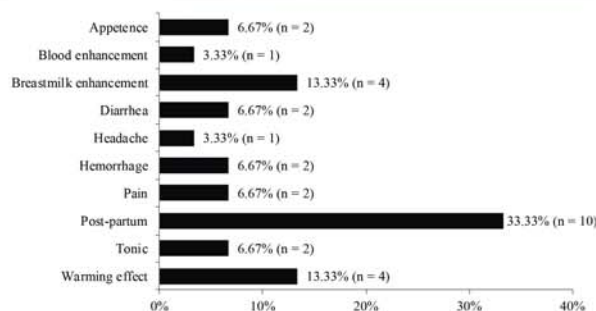


Figure 4: Conditions managed by using plants used for maternal healthcare in Mondulakiri province, Cambodia

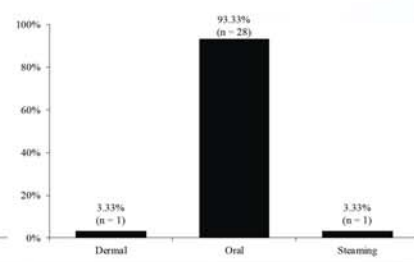


Figure 5: Route of administration of plants used for maternal healthcare in Mondulakiri province, Cambodia

CONCLUSION

This study provides the documentation of the medicinal plants used for maternal healthcare in Mondulakiri province, Cambodia. Scientific validation of the biological properties of the surveyed plants is highly recommended.

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- Chassagne F, Hul S, Deharo E, Bourdy G (2016) Natural remedies used by Bunong people in Mondulakiri province (Northeast Cambodia) with special reference to the treatment of 11 most common ailments. *Journal of Ethnopharmacology*; 191: 41-70.
- Kankara SS, Ibrahim MH, Mustafa M, Go R (2015) Ethnobotanical survey of medicinal plants used for traditional maternal. *South African Journal of Botany*; 97: 165-175.