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Record of Traditional Medicinal Practice of the Herbalists of Muslim Community in Manipur

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Abstract

Many countries and cultures inherited knowledge of plant medicines to cure diseases and health problems from time immemorial. Field survey work and the registration of patients on a daily basis for a number of 129 randomly selected days, mainly in Thoubal district from January 2006 to October 2006 were conducted, alongside the collection of plants up to April, 2008. Recorded patients belonging to these communities included communities 514 Muslims: 390 Meeteis: 159 Tribals. Male and female were in a proportion of 614:548. The present study deals with 13 plant species, under 14 genera belonging to 13 families closely associated with 12 categories of treatment of diseases and human health problems. The plant parts/plants employed are categorised as leaves (L), 7 times; whole plant (WP), 2 times and Fruits (F), Whole plant without root (WPWR), Seeds (S), Bulbs (B), Roots (R); 1 time each. Category of illnesses and health problems and number of patients recorded were - Bone dislocation, fracture & other bone related problems (BDFOP 402); Ligament (LG 86); Kidney stone and kidney related problem (KSAP 47); Joint, body ache &associated problems (JBAP 37); Gastric problems (GST 35); Diabetes(DBT 35); Leiman or Bad Womb (BW 30); Dhatu or Piles & Constipation (PC 27); Phunba and Lengba or Congestion of chest (CC); Asthma (AST 16); Stomach and associated problems (SAP 14); Heart weakness (9); Liver problems (LP)(9); Lack of blood & Blood problem (LBBP 8); Chakmangba or post-birth lack of appetite female case (PBLAFC 8); Paralysis (P6); Female white discharge (FWD 4); Irregular Men's Cycle (IMC 4); possessiveness due to black earth (PBE 4); Gall bladder stone (GBS 4); Fever (2) and others (OTS 366). The investigation of the traditional medicinal practices of Muslim herbalists in Manipur vis a vis finding along potentiality of the practical know how of indigenous medicinal knowledge. Comparative study of some plants for their useful aspects in solving health problems had been discussed in the paper.

Keywords: health problems, herbalists, herbs, Muslims, Manipur

Introduction

Herbs have been used by all cultures since time immemorial and are inseparable part of the growth of civilizations. It is a fact that early Man observed the diversity of plants around him, with the journey of time, the locals' added knowledge of the medicinal controls of herbs in their area. Many of the pharmacopoeias of scientific medicine today were derived from the herbal knowledge of native people. Many drugs common today are of herbal origin and an herb can be a leaf, a stem, a root, a seed, a fruit, a flower, or bark used in many forms, e.g. fresh, dried, cut, as a powder, ointment, tincture, or oil extract, or made into a liquid by infusion or decoction (Biswas, 2006).

Indian system of medicines (ISM) like Ayurveda, Sidha and Unani are originally popular and they are on great demand in the country as well as the materials employed therein (Singh, 2007). There are many countries and cultures where people have inherited knowledge about plant medicine. Africa, China, Japan and South America use herbs for healing many ailments on a day to day basis (Amzat and Ali, 2008). Most of these plants were discovered and identified for their curative qualities by the indigenous people and therefore are referred to as Ayurvedic, Unani, Chinese, Oriental medicine etc. (Biswas, 2006). India has a rich heritage of Indigenous knowledge/traditional medicine on (IK/TM) from plants that grow widely in forest and hill regions. All these medicinal plants and their produces have found their use and are required by pharmaceutical industries (Pandey *et al.*, 2007).

It is true that primitive people and economically weaker group after suffering long time from diseases started depending on wild plants for cure (Salave *et al.*, 2010). Jain (1999) noted that as humans are subject to most of the same diseases and infections as man's primate relatives, the control of parasitic and infectious diseases through use of plants in the past must have played a role in the evolution of man's plant selection (Johns, 1990). It is believed that the use of herbs in curing of various diseases is ample in the villages. Moreover, herbalists do not keep the record of patients. Thus, the documentation of knowledge in health care and diseases by keeping record of the patients in respect of herbalists in the Muslim community of Manipur state, India, is the first of this kind.

Materials and methods

Field survey work and the registration of patients on a daily basis of randomly selected 129 days were carried out mainly in the Thoubal district from January 2006 to October, 2006 and collection of plants up to April, 2008. During the study period only 2 out of 6 (Six) contacted Maiba (Herbalist) (Fig. 2) willingly maintained the record of patients with their age, address, health problems, malefemale numbers, community wise record of Muslims, Meeteis and Tribal etc.



Fig. 2. Herbalist with Patients

The plants were collected during the study period. The record of patients totalling 1162 included almost all the communities residing in Manipur (Ahmed and Singh, 2011). The number of patients may be larger than this because most of the herbalists are not keeping proper record. Most importantly, the Muslim herbalists were included in the present study to successfully record the plants, parts used, doses of medicinal preparation, how to use, collection of plants, etc. The plant/plant parts were sampled from homestead, field fences, riverbanks, field, village markets, etc. Plants were identified accoring to the available database. The present study followed some works by Borthakur (1976), (Borthakur and Goswami (1995), Rao and Hajra (1995), Jain (1995).

Results

The result indicates that the patients come from all the 9 (nine) districts i.e. Imphal East, Imphal west, Bishnupur, Thoubal, Chandel, Tamenglong, Churachandpur, Senapati and Ukhrul of Manipur. Male and female patients were 614:548 of the total 1162 patients. Females were aged from 8 months to 95 years whereas the males were 1 to 76 years old. The community distribution (Graph 1) of patients includes 514 Muslims: 390 Meeteis: 159 Tribals. Category of illnesses (Graph 2) and health problems and number of patients were - Bone dislocation, fracture & other bone related problems (BDFOP 402); Ligament (LG)(86); Kidney stone & kidney related problems (KSAP 47); Joint, body ache & associated problems (JBAP 37); Gastric problems (GST 35); Diabetes (DBT 35); Leiman or Bad

Womb (BW 30); Dhatu or Piles & Constipation (PC 27); *Phunba* & Lengba or Congestion of chest (CC); Asthma (AST 16); Stomach and associated problems (SAP 14); Heart weakness (9); Liver problem (LP 9); Lack of blood & Blood problem(LBBP 8); *Chakmangba* or post-birth lack of appetite female case (PBLAFC 8); Paralysis (P 6); Female white discharge (FWD 4); Irregular Men's Cycle (IMC 4); possessiveness due to black earth (PBE 4); Gall bladder stone (GBS 4); Fever (2) and others (OTS 366).



Graph 1. Pie graph representing number of community patients who of herbalists during the study period



Graph 2. Histogram showing category of illness against number of patients

The following are some category of illness, plants in the treatment of health problems, family, vernacular name, plant parts used, method of medicine preparation, doses, etc.

Abortion (upto 2 months): *Xylosma longifolium* Clos. (Flacouritaceae); Vern: *Nongleishang*; Plant part: Leaves; *Adhatoda* spp.; (Acanthaceae); Vern: Nongmangkha; Plant part: Leaves; 50 gm leaves of Nongleishang and 50 gm leaves of *Nongmangkha* are taken separately to boil in 1000 ml of water each. Finally 500 ml (250 ml each) of liquid boiled extract is mixed to be given to the person.

Anthelmintic: *Imperata cylindrica* L.; (Poaceae); Vern: *Ee*; Plant part: Root; 50 gm root is boiled in 1000 ml of water. Drinking ½ glass of tea daily for seven days for below ten years is administered. Drinking 1 glass of tea twice daily for seven days for ages above 10 can be administered.

Bad stomach: *Stellaria alsine* Grimm. 'Undulate' (Thunb.) Ohwi.; (Caryophyllaceae); Vern.: *Yerum keirum*; Plant part: Leaves; leaves of this plant is cooked with prawn without oil. The curry continued to be eaten untill cure. Or *Enhydra fluctuans* Lour.; (Asteraceae); Vern.: *Komprek tujombi*; Plant part: whole plant without root; 1/3 glass of tea of crush extract of the plant with honey as sweetener is allowed to be drunk every morning untill cure. 428

Constipation: *Belamcanda chinensis* (L.) DC.; (Iridaceae); Vern.: *Kabo leitrang*; Plant Part: Seed; Eating one seed once a day is useful for motion.

Dog bite and Snake bite: *Cyperus brevifolius* (Rottb.) Hassk.; (Cyperaceae); Vern.: *Sembang kouthum*; Plant part: Tuber; The bulb of the plant is pounded with cooked rice to make a tablet which is given to the patient twice a day for twenty days. Leaf paste is bound whit a clean cloth on the affected part. A 50 gm leaf is boiled in 1 litre of water. One tea glass of the exudate once a day can be drunk.

Irregularity of Menstrual cycle: *Osbeckia nepalensis* Hook.; (Melastomataceae); Vern.: *Yachubi laba*; Plant part: Leaves; Leaves of 100 gm is boiled in 1000 ml of water. Drinking the boiled exudate in a half glass oh tea twice daily for seven days before meal is advised.

Joint ache: *Clerodendrum serratum* (L.) Spreng.; (Clerodendraceae); Vern.: Moirang khannam (Fig. 1); Plant part: Whole plant; 250 gm of the plant is boiled in 1 litre of water. The boiled exudate is rubbed 2-3 times daily on the joint untill complete cure.



Fig. 1. Clerodendrum serratum(L.) Spreng

Kidney stone: *Allium odorossum* L.; (Alliaceae); Vern.: *Yenam nakuppi*; Plant part: Leaves; 250 gm leaves boiled in one litre of water by putting little sugar candy. A patient is administered one glass of tea of the boiled exudate till the stone is broken into pieces. It is also advised that the leaf of the plant is mixed with salad items.

Lack of Stamina, vigour, and malehood: *Eclipta prostrata*; (Asteraceae); Vern.: *Uchishumbal*; Plant part: Whole plant; One spoon of crushed exudate of the plant is mixed with one tea glass of milk along with one spoon of honey as sweetener to be given this preparation to the patient every morning untill cure.

Persistent cough: *Citrus limon* L.; (Rutaceae); Vern.: *Champra*; Plant part: Fruit; Half glass of tea of lemon exudate is mixed with the powder of 1/3 pkd of Kapur (crystal) along with sida misir (sugar candy) as sweetener. The patient is advised to drink this preparation twice daily for two days.

Vomiting (1-2 months): *Mentha arvensis* L.; (Labiatae); Vern.: *Podina* Plant Part: Leaves; 2-3 spoons syrup from the crushed extract enough of a sufficient numberleaves of this plant is given daily untill cure.

White discharge of women: *Malvaviscus penduliflorus*; (Malvaceae) Vern.: *Jubakusum*; Plant Part: Leaves; 250 gm of leaves are taken to boil in 1000 ml of water. One tea glass of the exudate is taken twice daily.

Discussion

The present investigation provides information on the use of plants and plant parts which carry ethnobotanical significance in by the Maiba (herbalists physician) belonging to the Muslim minority community for their treatment of some human health problems. Muslim herbal - men in Manipur state are popular for their own method of curing diseases and health problems. They attract a large number of patients every day (Ahmed and Singh, 2011). A number of plants are used for the treatment of diseases for which various methods are given in the Tab. 1.

Tab. 1. Summary of the plants used for their medicinal values in curing diseases

Botanical name and Families	Vern. Name	Plant parts used	Disease/ailments treated with
Xylosma longifolium Clos. (Flacouritaceae)	Nongleishang	Leaves	Abortion
Adhatoda spp. (Acanthaceae)	Nongmangkha	Leaves	Abortion
Imperata cylindrica L. (Poaceae)	Ee	Root	Anthelmintic
Stellaria alsine Grimm. Var. Undulate (Thunb.) Ohwi (Caryophyllaceae) Enhydra fluctuans Lour. (Asteraceae)	Yerum keirum Komprek tujombi	Leaves Whole plant without root	Bad stomach
Belamchanda chinensis (L.) DC (Iridaceae)	Kabo leitreng	Seed	Constipation
Cyperus brevifolius (Rottb.) Hassk. (Cyperaceae)	Sembang kouthum	Tuber	Dog bite and Snake bite
Osbeckia nepalensis Hook (Melasto mataceae)	Yachubi laba	Leaves	Irregular Menstrual cycle
Clerodendrum serratum(L.) Spreng. (Cleroden draceae)	Moirang khanam	Whole plant	Constipation
Allium odorossum L.; (Alliaceae)	Yenam nakuppi	Leaves	Kidney stone
Eclipta prostrata; (Asteraceae)	Uchishumbal	Whole plant	Lack of stamina
Citrus limon L.; Rutaceae	Champra	Fruit	Persistent cough
Malvaviscus penduliflorus; (Malvacea)	Jubakusum	Leaves	White Discharge of women
Mentha arvensis L. (Labiatea)	Podina	Leaves	Vomiting

The study deals with 13 plant species, under 14 genera belonging to 13 families closely associated with 12 categories of treatment of diseases and human health problems. The Plant parts/plants employed are categorised (Graph 3) as leaves (L),7 times; whole plant (WP), 2 times; Fruits (F), 1 times; Whole plant without root (WPWR), 1 time, Seeds (S), 1 time; Bulbs (B), 1 time, and Roots (R), 1 time. The present investigation aims at the validity of the traditional medicinal practices vis a vis finding along potentiality of the indigenous medicinal know how. From the works records, *Stellaria alsine* Grimm., is useful in expelling wind and cold. It is useful for the treatment of bruises, fractures and snake bites, etc. (Chinesemedicine.cbt.com). Juice of *Enhydra fluctuans* Lour is used in constipation (Das and Sharma, 2003).



Graph 3. Comparison of plant parts utilised in making traditional medicines

Belamchanda chinensis (L.) DC is an antidote to snake bite (pfaf.org). Paste of tuber taken from *Cyperus brevifolius* (Rottb.) Hassk. and seeds of *Sesamum indicum* L., is applied externally as ointment on piles (Das *et al.*, 2011). Tubers of *Cyperus brevifolius* is reported to cure dysentery (Kar and Borthakur, 2008). Pulp of the fruits of *Cyperus articulatus* L. is taken as it is abortive. Decoction of rhizomes of *Cyperus corymbosus* Rottb. is taken as contraceptive (Dhiman, 2006). The tubers of *Cyperus rotundus* Rottb. is used to cure body ache (Barua *et al.*, 2000).

Decoction of juice of leaves and tender stem of Clerodendrum colebrookianum Walp. are taken for lowering BP and as a remedy for gastric disorder (Gupta, 2006). Root of Clerodendrum viscosum Vent. is crushed and the decoction is taken for the treatment of dysentery (Bora, 1996). Decoction of the root bark of Clerodendrum multiflorum (Burm.). Kuntze is used as an anti-fertility agent (Dhiman, 2006). Clerodendrum serratum (L.) Spreng is grown as medicinal and aromatic plant in the herbal garden (Pandey et al., 2005). Likewise, Muslims of Manipur grow the plant in their frontyard, sideyard gardens. Clerodendrum phomidis L. f. is used in fever, cough, bronchitis, cholera and as antifertility drug (Chhetri, 2006). Leaves of Clerodendrum colebrookianum Walp are boiled and then used to get relief from blood pressure. Decoction of the leaves is given for diabetes. Young leaves of *Clerodendrum viscosum* Vent are used against worms (Das and Sharma, 2003). Boiled leaf juice is given to cure cough. Boiled leaves of Clerodendrum

colebrookianum Walp are taken to get relief from high blood pressure (Das et al., 2011). Hepatoprotective activity of C. serratum L. is reported (Vidya et al., 2007). Eclipta spp. extract is used to cure in urinary bleeding of women (Barua et al., 2000). Eclipta alba (L.) Hassk. is used to cure chronic skin diseases (Chhetri, 2006). Juice of the *Eclipta* prostrata L. is mixed with 2 teaspoonful of sugar and taken once daily to cure constipation (Das and Sharma, 2003). A decoction prepared by boiling the ground seeds of *Cit*rus limon Burm. in water mixed with a small amount of the seed powder of *Piper nigrum* is prescribed in typhoid (Dutta and Nath, 2000). Extract of Mentha arvensis L. is mixed with candy to cure urinary trouble or smooth urination (Singh et al., 1996). Mentha arvensis L. oil is carminative and stimulant (Chhetri, 2006). Stem and leaf of Mintha spicata L. (Syn. M. cordifolia) is used against cough and stomach trouble (Das and Sharma, 2003).

By comparing some reports across the country and elsewhere, it can be reported that the application of *Tamarindus indica* L. cough is recorded (Hosagoudar and Henry, 1996). The root extract of *M. cochinchinensis* Spreng. is used in gastric trouble. It is a promoter of hair growth as well (Islam, 1996). In a similar case in the present study, an infusion of the leaves of *Altertnanthera philoxeroids* (Mart.) Griseb. is administered to dissolve urinary calculi (Dutta and Nath, 2000).

Fruits of *Emblica officinalis* Gaertn. are used in constipation and piles by the Manipuri community (Das and Sharma, 2003). Boiled leaf juice of *Cinnamomum tamala* (Ham.) Nees & Eberm is given during cough (Das *et al.*, 2011).

Conclusion

A number of patients prefer herbal medicines to modern medicines. The practice of herbalists encourages belief in traditional practices to cure various ailments. A number of plants are employed as first aid because herbal employment methods to cure diseases and health problems have been claimed having no side effects. The diseases have been living with us since time immemorial and plants have been a great success to treat ailments and this documentation has given us an opportunity to conserve useful plants at our surrounding.

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References

- Ahmed MM, Singh PK (2011). Traditional Knowledge of Kidney Stones Treatment by Muslim Maiba (Herbalists) of Manipur, India. Not Sci Biol 3(2):22-25.
- Amzat J, Ali AA (2008). Role of traditional healers in the fight against HIV/AIDS. Ethno-Med. 2(2):153-159.
- Barua KN, Barua IC, Das M (2000). Ethnobotany of Rajabanshis of Assam. J Econ Taxon Bot 23(2):609-614.
- Biswas PK (2006). Encyclopaedia of Medicinal Plants. Dominant. Publishers and Distributors. New Delhi.
- Bora PJ (1996). A study on ethnomedicinal uses of plants among the Bodo tribe of Sonitpur district, Assam, India, J Econ Taxon Bot 23:604-608.
- Borthakur SK (1976). Less known medicinal uses of plants among the tribes of Karbi-Anglong (Mikir hills). Assam. Bull. Bot Surv Ind 18:166-171.
- Borthakur SK, Goswami N (1995). Herbal remedies of the Nepalese of Assam. Fitoterapia 67(3):231-237.
- Chhetri RB (2006). Trends in ethnodomestication of some wild plants in Meghalaya, North east India. IJTK,5(3):342-347.
- Das AKr, Dutta BK Sharma GD (2011). Ethnonobotanical study of Hmar of Southern Assam. Ass Univ J Sc & Tech Bio Env Sc 8(1):103-108.
- Das AKr, Sharma GD (2003). Ethnomedicinal uses of plants by Manipuri and Barman communities of Cachar district, Assam. J Econ Taxon Bot 27(2):421-429.
- Dhiman AK (2006). Birth control through herbal Folk-Medicines. Flora and Fauna 12(2):285-291.
- Dutta M, Nath SC (2000). Ethno-Medico Botany of the Tai-Ahoms of Assam, India. In: Ethnobotany and Medicinal plants of Indian Sub Continent, by Maheshwari, J.K. (ed.) Scientific Publishers (Jodhpur) India. Kameng, Arunachal Pradesh. Nat.P.Rad. 5(1):53-59.
- Hosagoudar VB, Henry AN (1996). Ethnobotany of Soligas in Biligiri Rangana .Betta, Karnataka, Southern India J Econ-Taxon Bot 122:28-243.
- Kar A, Borthakur SK (2008) Medicinal plants used against dysentery, diarrhoea and cholera by the tribes of erstwhile Kameng district of Arunachal Pradesh. Nat Prod Rad 7(2):176-181.
- Gupta V (2006). Plants used in folklore medicine by Bagnis of East Kameng, Arunachal Pradesh. Nat P Rad 5(1):53-59.
- Islam M (1996). Ethnobotany of certain underground parts of plants of North Eastern region, India. In: Ethnobotany in South Asia by Maheshwari, J.K. (ed.). Scientific Publishers (Jodhpur) India, p. 338-343.

- Jain SK (1995). Ethnobotany in the context of National priorities and health care programmes. In: A Manual of Ethnobotany, by Jain, S.K.(2nd ed.). Scientific Publishers (Jodhpur) India, p. 128-134.
- Jain SK (1999). Human Aspects of plant diversity, Distinguished Economic Botanist Award Lecture, The Society for Economic Botany, Institute of Ethnobiology, Lucknow, India, p. 460.
- Johns T (1990). With bitter herbs they shall eat it: chemical ecology and the origins of human diet. Univ Ariz Press Tucson.
- Pandey BK, Tripathi YC, Hazarica P (2007). Role of Traditional Medicinal. Plants in Indian System of Medicine and their conservation. In Proceedings National workshop on Conservation and Commercialisation of Medicinal and Aromatic Plants in the NE Region with special reference to Manipur. State Medicinal Plants Board, Govt. of Manipur in association with the Institute of Bioresources & Sustainable Development, Takyel, Imphal, p. 40-46.
- Pandey AK, Patra AK, Shukla PK (2005). Medicinal plants in Satpura plateau of Madhya Pradesh: Current status anfuture prospects. Ind For 131(7):857-883.
- Rao RR, Hajra PK (1995). Methods of research in Ethnobotany. In A Manual of Ethnobotany, by Jain, S.K. (2nd ed), Scientific Publishers (Jodhpur,) India, 28-43.
- Salave AP, Reddy PG and Diwakar PG (2010). Studies on Traditional Ethno-Medico- Flora used by Mahadeo kolis from Ghatsiras areas in Pathardi Taluka of Ahmednagar District (M.S.), India. Asian J Exp Biol Sci 69-74.
- Singh HB (2007). Medicinal Plants: Concept & Prospect in Manipur. In Proceeding National workshop on Conservation and Commercialisation of Medicinal and Aromatic Plants in NE Region with special reference to Manipur. State Medicinal Plants Board, Govt. of Manipur in association with the Institute of Bioresources & Sustainable Development, Takyel, Imphal, 64-68.
- Singh J, Bhuyan TC, Ahmed A (1996). Ethnobotanical studies on the Mishing tribes of Assam with special reference to food and medicinal plant. J Econ Bot Addi Ser 12:350-356.
- Vidya SM, Krishna V, Manjunatha BK, Mankani KL, Ahmed M, Singh SDJ (2007). Evaluation of Hepatoprotective activity of *Clerodendrum serratum* L Indian J Expt Bio 45:538-542.
- URL:http://www.chinesemedicine.cbt9.com/blogs/stellariaalsine-grimm-s-uliginosa-murr-effect-and-role-of-traditional/ (Retrieved 15 July, 2012).
- URL: http://www. (www.pfaf.org/user/plant.aspx. Plants for a future) (Retrieved -15 July, 2012).