

Medicinal Plants: Habitus in Chamula, Chiapas, Mexico S. XXI

Ivett Reyes-Guillén
Faculty of Social Sciences.
Autonomous University of Chiapas
San Cristobal de Las Casas
Chiapas, Mexico

Socorro Fonseca-Córdoba
Faculty of Social Sciences.
Autonomous University of Chiapas
San Cristobal de Las Casas
Chiapas, Mexico

Ramón Mariaca-Méndez
The College of the Southern Frontier,
ECOSUR
San Cristobal de Las Casas
Chiapas

Abstract:- This article presents the results of a study conducted in Chamula, indigenous people of Chiapas, Mexico. The study aimed to learn about the use of medicinal plants as practices that have remained over time. In Chiapas, the Mayan culture exposes this knowledge in customs and customs, and specifically in self-care of health. Indigenous peoples have developed these medical uses and customs through the knowledge of the human body, coexistence with their environment, spirituality inserted into the magical-religious world. Among the main findings: 1) The most commonly used plants are chamomile (*Chamomilla recutita*), lemon tea (*Cymbopogon citratus*), and linden tea (*Tilia platyphyllos*). 2) The main health problems that are treated with medicinal plants are: diseases or digestive disorders (45%), respiratory problems (37%), nervous system disturbances (35%), circulatory (27%) or reproductive (26%).3) In the second decade of the 21st century, traditional medicine practices are cultural fields, objectively constructed with habitus that mark lifestyles in socially classified system.

Keywords:- Herbalism, Chiapas, Traditional Practices.

I. INTRODUCTION

Throughout history, humanity has developed different forms of use, cultivation and transmission of knowledge concerning medicinal plants, i.e. it has accumulated knowledge on therapeutic strategies related to the world magical-religious of different cultures, based at all times on the empirical rational method and even brought to the scientific method.

Herbal medicine is defined as the therapeutic use of a product derived from a plant or herb, valued for its medicinal properties, taste or aromatic qualities (Barnes, 2003).

Specifically, herbalism includes the use of substances extracted from herbs, which are prepared in the form of tea, ointments, bathing water, lotions, soaps, oils. Within traditional empirical practices, these are not evaluated and approved by government regulatory bodies; but that does not exempt the pharmaceutical company within the processed herbal medicine to approve its use and marketing through so-called naturist pharmacies (Carrillo et al, 2010).

Both in the Eastern world and in Latin American countries, the practice of alternative medicine or complementary medicine is common, among which herbalism stands out. In Chiapas, Mexico, Mayan culture exposes this knowledge in customs and customs, and specifically in health self-care.

The World Health Organization, traditional medicine is the set of knowledge, skills and practices for health maintenance, based on indigenous theories, beliefs and experiences of different cultures (WHO, 2017). Within traditional medicine in Chiapas, there are countless medical expressions, from the herbs who practice herbalism; the snoopers who practice empirical chiropraxia; pushbuttons with magical-religious strategies; to midwives in charge of midwives and those most often linked to Western medicine through training courses.

While it is true that health systems are cautious about the validity of traditional medical practices, it is also true that international health agencies are increasingly advocating the rescue of traditional knowledge, as well as linkage between the two types of knowledge. In this regard, Vázquez and collaborators (2011), state that specifically traditional knowledge and practice on medicinal plants is in force; that is, knowledge continues to be transmitted and practiced in this type of medicine for self-care.

The articulation efforts between traditional and western hegemonic systems are not horizontal and open, emphasizing the biomedical side in the process of validation and scientific translation of traditional medicines, which is ultimately assimilation of indigenous traditional knowledge (Bolívar y Reyes, 2009).

This document presents results of a study carried out in Chamula, Chiapas, Mexico, an indigenous population whose practices within traditional medicine continue to be part of the cultural legacy of their generations. Indigenous peoples have developed these medical uses and customs through the knowledge of the human body, coexistence with their environment, spirituality inserted into the magical-religious world. In this regard, the Pan American Health Organization (2001) mentions the strength and capacity of indigenous peoples as a result of the effectiveness of their traditional health system, whose worldview is based on balance, harmony and integrity.

The municipality of Chamula, in Chiapas, is located in the north-central part of the state. It is part of the Tzeltal-Tzotzil Region of the Altos de Chiapas, characterized by its mountainous geography, pine forest and ethnic-cultural diversity. It has an extension of 345 665 km². Its extreme coordinates are 16o 44' - 16o 54' north latitude and 92o 31' - 92o 52' west longitude and its altitude fluctuates between a maximum of 3,000 and a minimum of 1 200 meters above sea level. Chamula has 76,941 inhabitants, of which 35,555 are men and 41,386 women (INEGI, 2010).

II. METHODS

Qualitative observational and cross-sectional research, the information-gathering tool of which was a semi-structured questionnaire applied to a simple random sample n=100, in a Mayan indigenous population called Chamula, located in the Tzeltal-Tzotzil Zone in the highlands of Chiapas, Mexico, in a period from November 2018 to June 2019.

The questionnaire was applied prior to informed consent, having as the only element of inclusion that the individual was of indigenous origin tzotzil.

III. DISCUSSION

From the results obtained we can discuss two moments, one regarding the permanence in the use of medicinal plants through generations in the study population. The other time is intended to discuss the main health problems for which they choose to treat them completely with herbal medicine, or complementary treatment to allopathic medicine.

➤ Permanence in the use of medicinal plants through generations in Chamula Chiapas, Mexico

The average age of the population surveyed is 35 years (min 18-max 86, fashion 20), in equal proportions in terms of biological sex (men and women), 100% of indigenous origin and bilingual tsotzil-Spanish. Mostly married (64%).

The total number of interviewees consume teas and use herbal medicine by going to the institutional doctor only if the health problem becomes complicated and no longer manage to control it. The above coincides with Gómez (2012) and Escalona et al (2015), who claim that most of the people interviewed in their study obtain medicinal plants in the community itself and even grow them. In these studies, the percentage (90%) is high people who solve their conditions with medicinal plants and only go to the doctor when the affectation is severe.

About how they know how they use plants to treat some health problems, respondents claim to have this knowledge because their grandparents, mothers, family members, and even friends have taught them. Knowing the most frequent age range (18-20 years), the user population is young, and checks the transfer of knowledge in the use of medicinal plants from generation to generation.

The knowledge that different ethnic groups have of their environment and the uses and customs related to it has generated millennial knowledge, transcending by generations and even being more specific over time. Contrary to what Gluber (2000) mentions, the young population of Chamula, Chiapas, continues to make use of medicinal plants; He grows them; they are participants in a collective identity, of uses and customs typical of the Tzotzil ethnic group. Specifically, in health, they are participants in the coexistence of traditional medicine and allopathic medicine.

Contrary to what Rodriguez mentions (2009), in this study there was no difference in the knowledge and use of medicinal plants between men and women; neither was there in terms of age of the interviewee.

Within this study, the interviewees mentioned 23 different species of plants for medicinal use, within them in order of frequency mostly consumed in tea preparation are: chamomile tea (21%), lemon tea (14%), tila tea (14%). Most respondents claim to use herbal medicine frequently instead of allopathic medicine (74%). Regarding chamomile (*Chamomilla recutita*), it has been of common use worldwide for its healing characteristics, specifically in gastric diseases of infectious type, antiparasitic, antispasmodic, defrosting and healing (Osuna, 2005; Mile, 2008; Urióstegui-Flores, 2014; Ecoherbes, 2015).

Lemon tea (*Cymbopogon citratus*), has moisturizing and diuretic properties, as well as antispasmodic, anti-inflammatory, antioxidant (MS, 2015). Tila tea (*Tilia platyphyllos*) has diaphoretic, deinflammatory, diuretic, digestive and relaxing-sleeper properties (Escamilla and Moreno, 2015).

The other species mentioned, although less frequently are:

- Garlic (*Allium sativum*)
- Basil (*Ocimum basilicum*)
- Anis (*Pimpinella anisum*)
- Boldo (*Peumus boldus*)
- Cinnamon (*Cinnamomum verum*)
- Onion (*Allium strain*)
- Chilchahua (*Tagetes nelsonii*)
- Comino (*Cuminum cyminum*)
- Epazote (*Chenopodium ambrosioides*)
- Hierbabuena (*Mentha spicata*)
- Hinojo (*Foeniculum vulgare*)
- Ginger (*Zingiber officinale*)
- Laurel (*Laurus nobilis*)
- Parsley (*Petroselinum sativum*)
- Pepper (*Piper nigrum*)
- Oak (*Quercus robur*)
- Romero (*Rosmarinus officinalis*)
- Ruda (*Graveolens Route*)
- Sabyla (*Aloe vera*)
- Thyme (*Thymus vulgaris*)

This population grows or collects the medicinal plants it uses by 65%, in a small percentage they buy them in the market or in health food stores. It is precisely because of this practice, living in many mainly Latino cultures, that FAO (2005) proposes the family garden as an appropriate alternative for families to produce and consume at low cost fresh, healthy, solvent products some of your needs and preferences. The garden must generate products such as vegetables, edible, aromatic and medicinal plants.

As for the expense they consider making monthly for the use of these plants, it goes in a range of 60 to 280 Mexican pesos (3-15 DLS/USA). Some studies claim that the preference in the use of medicinal plants by the population is related by low costs, easy access, side effects that are minor or null, compared to allopathic medicine (Delpino, 2011; Lima, 2012).

➤ Main health problems for which they choose to treat them completely with herbal medicine, or complementary treatment to allopathic medicine

Among the main health problems that are treated with medicinal plants, in order of frequency are: diseases or digestive disorders (45%), respiratory problems (37%), nervous system disorders (35%), circulatory (27%) or reproductive (26%), the remaining percentage corresponds to another wide variety of occasions when they use these plants, such as bone pain, depurative baths, cosmetic use.

Specific mention should be made that, of the total number of interviewees, most use this type of plants with healing characteristics within a magical-religious framework, that is, not only consume them, but they do so accompanied by a series of rituals of healing involving spiritual, magical, religious aspects. 88% of respondents make use of different types of traditional medicine through so-called hierberos, pulsadores, sobadores, midwives.

These practices are always associated with beliefs in supernatural forces, quoting Malinowsky (1948), with ideas about beings, spirits, ghosts, dead ancestors, or gods; although these practices, however primitive, could not be invented or maintained without the observation of natural processes and without a firm belief in their regularity, without the power to reason and without the confidence in the power of reason.

For indigenous groups, such as tzotziles interviewed in this study, nature is a living pantry that they turn to collect food, cook, eat and even heal. The route from nature to the stomach in these ethnic groups is very short; Malinowsky (1948) points out that, consequently, it is also so much up to his mind, and the world, for these groups, is an abundant warehouse from which species of plants and animals that are useful stand out. Cultural fields are then generated, closely related to their environmental environment and health care needs; understanding as a field what Bourdieu (1988), defines as historically constituted spaces of play, with its specific institutions and its own operating laws.

The above, show us in a reality where conflicts are generated between the different types of medicine, the Western, traditional, alternative. When asked specifically, 88% say they stop taking allopathic medications and replace them with medicinal plants. While studies have been conducted on the contradiction between these medical practices and hegemonic medicine, we also find that herbalism has become more meaningful due to discoveries about the healing properties of some species such as are the white zapote (*Casimira edulis*) for the treatment of high blood pressure; the nopal (*Opuntia streptacantha*) in the treatment of diabetes (Rivera, 1999; Uriostégui-Flores, 2008; Oliva-Peña, 2017).

IV. CONCLUSION

- Interviewees use herbal medicine for self-care health go to the allopathic doctor only if the health problem becomes complicated and they no longer manage to control it.
- The most commonly used plants are chamomile (*Chamomilla recutita*), lemon tea (*Cymbopogon citratus*), and tila tea (*Tilia platyphyllos*)
- The main health problems that are treated with medicinal plants are: diseases or digestive disorders (45%), respiratory problems (37%), nervous system disorders (35%), circulatory (27%) reproductive it (26%).
- Having quoted Malinowsky (1948) and Bourdieu (1988) before, we can affirm that the world of traditional medicine, in this case herbalism, in Chamula, Chiapas, Mexico, is a habitus and these are developed in a continuum through the generations. In the 21st century, the end of the second decade, traditional medicine practices are cultural fields, objectively constructed with habitus that mark lifestyles in socially classified systems.

REFERENCES

- [1]. Barnes J. Quality, efficacy and safety of complementary medicines: fashions, facts and the future. Part II: Efficacy and safety. *Br J Clin Pharmacol* 2003; 55: 331-40.
- [2]. Bolívar, E. & Reyes, G. Et al. (2009). Medicinas y encuentros heterogéneos: una mirada hacia el conflicto y el diálogo de saberes. En: *Diálogo de saberes: plantas medicinales, salud y cosmovisiones*. Universidad Nacional de Colombia, Sede Amazonia; Bogotá: ARFO Editores e Impresos Ltda.
- [3]. Bourdieu, P. (1988). *La distinción. Criterios y bases sociales del gusto*. Madrid: Taurus.
- [4]. Carrillo R E, Bolivar LC, JM Ruiz. (2010). Hierbas, medicina herbolaria y su impacto en la práctica clínica. *Rev Invest Med Sur Mex*, Julio-septiembre 2010; 17 (3): 124-130
- [5]. Delpino, GB. (2011). *Simbología do uso de plantas medicinais por agricultores familiares descendentes de pomeranos no sul do Brasil*. 2011. Dissertação (mestrado em enfermagem) – Universidade Federal de Pelotas, Pelotas, 2011.

- [6]. Ecoherbes. (2015). La Manzanilla y sus beneficios en nuestra salud. Consultado en: <https://www.ecoherbes.com/es/manzanilla-beneficios/>
- [7]. Escalona et al. (2015). Uso tradicional de plantas medicinales por el adulto mayor en la comunidad serrana de Corralillo Arriba. Guisa, Granma. *Revista Cubana de Plantas Medicinales* 2015;20(4)429-439
- [8]. Escamilla y Moreno. (2015). Plantas medicinales. Instituto de Ecología AC. Xalapa, Veracruz, México.
- [9]. FAO. Organización de las Naciones Unidas para la Agricultura y la Alimentación (2005). Manejo del Huerto Integrado. Consultado en: <http://www.fao.org/3/a-at761s.pdf>
- [10]. Gómez Álvarez R. Plantas medicinales en una aldea del estado de Tabasco, México. *Rev Fitotec Mex.* 2012;35(1).
- [11]. Gubler, R. (2000). Antiguos documentos de medicina Maya. *Anales de Antropología* 34; 321-349.
- [12]. INEGI. Instituto Nacional de Estadística y Geografía (2010). Compendio de información geográfica municipal 2010. Chamula, Chiapas.
- [13]. Lima, ARA. (2012). Agricultoras no cuidado da família com uso das plantas medicinais. 2012. Dissertação (mestrado em enfermagem) – Universidade Federal de Pelotas, Pelotas, 2012.
- [14]. Malinowsky, B. (1948). Magia, ciencia y religión. Planeta-Agostini. Antonio Pérez Ramos, traducción.
- [15]. Milla, KE. (2008). IBEROFORUM Revista de Ciencias Sociales de la Universidad Iberoamericana. Año III, No 6. julio- diciembre de 2008. Pp. 37-57 Universidad Iberoamericana A.C., Ciudad de México.
- [16]. MS. Muy en salud. (2015). Propiedades medicinales del Zacate Limón (Limoncillo). Consultado en: <https://muyensalud.com/2015/04/propiedades-medicinales-de-zacate-de-limon-limoncillo/>
- [17]. Oliva-Peña y, Andueza-Pech MG, Rodríguez-Angulo em y r Ojeda-Rodríguez. (2017). conocimientos y usos de plantas medicinales en adolescentes de Yucatán. *Revista de Ciencias de la Salud.* 2017. 4-13: 30-34.
- [18]. OPS. Serie salud de los Pueblos Indígenas No. 18: Promoción de la medicina y práctica indígenas en la atención primaria de salud: el caso de los Quechua del Perú. OPS, 2001.
- [19]. Organización Mundial de la Salud. (2017). Recuperado el 7 de agosto de 2017 de: http://www.who.int/topics/traditional_medicine/definitions/es/
- [20]. Osuna Torres, L., Tapia M. y Aguilar Contreras A. (2005), Plantas medicinales de la medicina tradicional mexicana para tratar afecciones gastrointestinales: Estudio etnobotánico, fitoquímico y farmacológico. Barcelona, Universitat de Barcelona.
- [21]. Rivera E. Investigación reciente sobre plantas medicinales mexicanas. En: *Arqueología mexicana, plantas medicinales prehispánicas.* México: Editorial Raíces-Instituto Nacional de Arqueología e Historia. 1999; VII (39)
- [22]. Rodríguez GY, Carballo AL, Geadá LG, Flores JL y PL Páez Fernández. (2009). Plantas medicinales como productos forestales no maderables en el ecosistema forestal del Parque Nacional Viñales. CIGET
- [23]. Urióstegui-Flores A. (2008). Conflictos en el empleo de medicina tradicional. *REGIÓN Y SOCIEDAD / VOL. XX / NO. 43.* 2008
- [24]. Urióstegui-Flores A. (2014). Hierbas medicinales utilizadas en la atención de enfermedades del sistema digestivo en la ciudad de Taxco, Guerrero, México. *Revista de Salud Pública* (2015),17(1):85. <http://dx.doi.org/10.15446/rsap.v17n1.42235>
- [25]. Vázquez, B., Martínez, B., Aliphath, M. & Aguilar, A. (2011). Uso y conocimiento de plantas medicinales por hombres y mujeres en dos localidades indígenas en Coyomeapan, Puebla, México. *VOL. 36 N°7: INTERCIENCIA.*