

Medicinal Plants and the Role of Women in Their Use in Traditional Medicine in Kenitra City, Morocco

Saad Ilham, Methal Aouatif, Leghlibi Hajar, Douira Allal, Fadli Mohamed

Laboratory of Plant, Animal, Agro-Industry Productions, Biodiversity and Terrestrial Ecology Faculty of Sciences Kenitra, Ibn Tofail University, Kenitra, Morocco.

Abstract

Morocco's richness and diversity of medicinal herbs have contributed to the development of traditional medicine over the decades. Thus, the heritage of knowledge in traditional herbal medicine developed in parallel. However, this heritage knowledge is often passed down from one generation to the next orally. The aim of this study is to evaluate the role of women in preserving this knowledge and passing it on from generation to generation in the city of Kenitra, Morocco. To achieve the set goals, we developed a questionnaire that was sent to a sample of 200 people taken at random, from the balanced sex quota. The difference in the importance of knowledge between women and men and the origin of this knowledge for the user was determined. The results showed that this knowledge of using the such-and-such plant for such-and-such disease can reach the plant user by different means (Father, Mother, Husband, Wife, Relatives, etc.). However, 37% of this knowledge passes through the "woman-man" path and 63% through the "woman-woman" path. Thus, the woman is the important driver of infection transmission, and therefore she is well acquainted with traditional medicine. Therefore, it plays a major role in preserving this heritage.

Keywords: Women, Traditional medicine, Medicinal plants, Knowledge, Transmission, Preservation.

1. INTRODUCTION

Heritage conservation is about identifying, protecting and sharing important aspects of our culture and history. Seen as a link to preserve tangible links with their historical roots, in almost all countries and ethnicities heritage conservation occupies an important place. This heritage conservation concerns

various natural areas and various anthropogenic activities and the area that concerns us in this article is traditional medicine through aromatic medicinal plants, in particular its knowledge and the means of its transmission in Morocco..

In addition, Morocco, by its geographical position, its orographic diversity, and its bioclimatic diversity offers a great floristic

richness[1], [2]. On this availability, a great knowledge of the use of medicinal plants in traditional medicine has been built up [3]. However, in Africa up to 80% of the population uses traditional medicine for primary health care REF, this knowledge is often oral, and its transformation from generation to generation is largely by word of mouth. oriel REF . Indeed, in traditional medicine, three ways of transmitting knowledge are generally observed: learning, support, exchange of documented recipes is only infrequent. Note that the continued use of TM in Africa is likely due to the limited accessibility, availability and affordability of the medicine [4]. Similarly, the high cost of its treatment in modern medicine limits access to its care to the poor, who then often resort to plants [5]. Thus, a series of volumes, the WHO monographs on selected medicinal plants aim to: provide scientific information on the safety, efficacy and quality control of widely used medicinal plants; provide templates to help Member States develop their own monographs or formularies for these and other herbal medicines; and facilitate the exchange of information between Member States[6]. Thus, through this work, we contribute to evaluate the role of women as sources and active factors in the transmission from generation to generation

of traditional medicine through medicinal plants in Rabat city, Morocco.

2. MATERIAL AND METHOD

We generated a questionnaire consisting of a set of questions and sent it to the study samples of 200 randomly drawn samples, with a gender-balanced ratio of 5 (100 women and 100 men). The age of the respondents is evenly distributed into three groups: people under 30 years of age, people between 30 and 50 years of age, and people over 50 years of age. Likewise, the questionnaire depends on the gender of the person and the sources of information for the survey. Based on the answers provided to the various questions developed in the questionnaire, the difference in the importance of knowledge among women in the studied geographical area (Kenitra) in the field of traditional medicine was evaluated. The expertise evaluated relates to the 14 types of medicinal plants most commonly used and best known in traditional Moroccan medicine.

3. RESULTS AND DISCUSSION

The results (Table1) show that the transmission to the user, male or female, of the knowledge of the use of medicinal plants

in traditional medicine, is carried out through various channels: mother, father, husband, wife, etc. Moreover, the amount of this knowledge received by the receiver varies significantly depending on the sex and age of the person who receives this knowledge and the social status that binds the "donor-receiver" doublet of the information.

Indeed, for humans as receivers, 14% of the information relating to the use of medicinal plants is transmitted to them by their mother, 29% by their wife, 23% by their cousins, and 10% by their neighbors. The rest of his knowledge emitted by the other sources is always weak or even nil. The results, therefore, show that 77% of Tran's knowledge to men is transmitted by way of "woman – man", that is to say from the quarter of women "mother-wife-cousin-neighbor". The results also show that the age of the man, as a user of medicinal plants does not intervene in a very significant way in the quantity (in percentage) of the knowledge transmitted to him by the woman.

As in the case of men, the results (Table 1) show that the transmission to women, as

users of knowledge of the use of medicinal plants in traditional medicine, passes through various routes: mother, father, husband, wife, etc. Indeed, for the woman, as receiver of this knowledge, 18% of the information is transmitted by the mother, 28% by the cousins, and 17%, that is to say, a total of 63% of her knowledge on the traditional treatment by plants, comes from another woman as a source of information.

The results also show that the amount of knowledge that the daughter receives from her mother decreases as the daughter gets older. Moreover, several factors are involved in the transmission, in quantity and quality, of knowledge and experience have shown the importance of the "woman-to-woman" path in the fluidity of family knowledge. Indeed, the quantity and quality of the information transformed between people vary, especially when the transmitter and the receiver of information are of different sexes. However, experience has shown that "woman to woman" and "woman to man" transmission is always more beneficial [7].

Table 1: Source of information on the use of the medicinal plants studied (in numbers and in percentage)

		Source of information on the use of the studied medicinal plants (numbers)												
		Gender and age of survey person	Mère	Père	Epose	Epoux	Cousin	Cousine	Voisin	Voisine	Herbo-riste	Media	Autre	
Purpose of use	Man	Inf is 30 years old	14	0	16	-	4	12	3	7	1	0	0	57
		Between 30 and 50 years old	11	5	22	-	5	18	4	7	2	2	1	77
		Sup. at 50	6	3	27	-	10	21	4	9	7	1	0	88
			31	6	64		19	51	11	23	3	3	1	222
	Woman	Inf is 30 years old	21	1	-	5	2	17	2	11	3	2	4	68
		Between 30 and 50 years old	16	4	-	7	1	25	2	15	4	5	3	82
		Sup. at 50	7	1	-	11	9	24	5	14	9	2	4	89
			44	6		23	13	66	9	40	16	9	11	239
	Source of information on the use of the studied plant (%)													
Purpose of use	Man	Inf is 30 years old	25	0	28	-	7	21	5	12	2	0	0	-
		Between 30 and 50 years old	14	6	29	-	6	23	5	9	3	3	1	-
		Sup. at 50	7	3	31	-	11	24	5	10	8	1	0	-
		Total	46	9	88		24	68	15	31	13	4	1	-
	Woman	Inf is 30 years old	31	1	-	7	3	25	3	16	4	3	6	-
		Between 30 and 50 years old	20	5	-	9	1	30	2	18	5	6	4	-
		Sup. at 50	8	1	-	12	10	27	6	16	10	2	4	-
		Total	59	7	0	28	14	82	11	50	19	11	14	-

In addition, note that as indicated by Pourchez (2014), within each society, female lineages promote the fluidity of the transmission of knowledge between women, various knowledge, in particular that related to the body, motherhood, children, to the use of certain plants (abortives, to facilitate childbirth, for the treatment of childhood diseases. In addition, some information primarily concerns only women, for example, plants to cause or soothe menstrual pain concern especially women. This role played by women is particularly developed in the societies of developing countries. Indeed, in the field of traditional therapy with medicinal plants, traditional family-type medicine is often present in these countries[8], [9]. Thus, it is in countries where women accumulate more information that concerns them – themselves – as women, and information about her as a sea, as a wife, as a relative and as a sage.

As a result, between the generations, transmissions of female knowledge are established. This knowledge concerns women and also concerns their relatives [10]. From her entourage and her experiences, women accumulate and transmit an important heritage of know-how. In the case of traditional medicine, this knowledge can be diverse: therapeutic knowledge concerning

self-therapy or the therapy of certain illnesses, body massages, etc. Thus, through these types of activities, the woman will find herself at the center of female networks of family solidarity and the conservation of the “Traditional medicine through aromatic medicinal plants” heritage [7].

4. CONCLUSION

The vast expanse, the climatic diversity and the orographic diversity have made Morocco a country with a very rich flora, part of which has been used by Moroccans in traditional medicine. Thus, traditional medicine has developed there since antiquity and continues to develop alongside modern medicine. However, this heritage knowledge is not well documented and requires further study. In addition, the transmission of this knowledge is often carried out from generation to generation orally. To know about the use of medicinal plants in traditional medicine, this study has shown us that this knowledge can be the user of the plant by various means (father, mother, husband, wife, relatives, etc.) . However, it is the woman who remains the important engine of transmission, and therefore the well-informed, of knowledge. In fact, 37% of this knowledge passes through the “woman, man” path and 63% through the “woman-woman” path. Women

therefore have a key role in the preservation of heritage.

5. REFERENCES

- [1] P. DONADIEU, "Contribution à une synthèse bioclimatique et phytogéographique au Maroc," *Trav Inst Agron Vét Hassan II Rabat*, pp. 1–155, 1977.
- [2] L. Emberger, "Projet d'une classification biogéographique des climats," *Ann Biol*, vol. 31, no. 5–6, pp. 249–255, 1955.
- [3] J. Bellakhdar, *Pharmacopée marocaine traditionnelle*. Ibis press, 1997.
- [4] Z. Shewamene, T. Dune, and C. A. Smith, "The use of traditional medicine in maternity care among African women in Africa and the diaspora: a systematic review," *BMC Complement. Altern. Med.*, vol. 17, no. 1, pp. 1–16, 2017.
- [5] A. Bio *et al.*, "Contribution aux connaissances des principales plantes antihypertensives utilisées en médecine traditionnelle à Bassila (Bénin, Afrique de l'Ouest)," *Pharmacopée Médecine Tradit. Afr.*, vol. 17, no. 2, 2016.
- [6] W. H. Organization (WHO), "Monographs on selected medicinal plants. Volume IV." Libros Digitales-World Health Organization (WHO), 2009.
- [7] L. Pourchez, "Savoirs des femmes. Médecine traditionnelle et nature (Maurice, Rodrigues, La Réunion)," *Trib. Sante*, no. 3, pp. 51–71, 2014.
- [8] N. Chaachouay, O. Benkhniue, M. Fadli, H. El Ibaoui, and L. Zidane, "Ethnobotanical and ethnopharmacological studies of medicinal and aromatic plants used in the treatment of metabolic diseases in the Moroccan Rif," *Heliyon*, vol. 5, no. 10, p. e02191, 2019.
- [9] N. Chaachouay *et al.*, "Mr Chaachouay Nouredine Sous le thème" Etude floristique et ethnomédicinale des plantes aromatiques et médicinales dans le Rif (Nord du Maroc)," PhD Thesis, Département de Biologie-Université Ibn Tofail-Kénitra, 2020.
- [10] O. Benkhniue, L. Zidane, M. Fadli, H. Elyacoubi, A. Rochdi, and A. Douira, "Ethnobotanical study of medicinal plants in the Mechraâ Bel Ksiri region of Morocco.," *Acta Bot. Barcinonensia*, no. 53, pp. 191–216, 2010.

