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Traditional pharmacopoeias and medicines among Albanians and Italians in southern Italy: A comparison

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Abstract

A cross-cultural comparison of traditional household remedies in primary health care and ritual healing practices in two economically and socio-demographically similar communities in Lucania (inland southern Italy) was considered: Ginestra/Zhurë, inhabited by ethnic Albanians, who migrated to the area during the 15th century, and Castelmezzano, inhabited by autochthonous South-Italians. In Ginestra/Zhurë, the number of traditional natural remedies (mainly derived from local medicinal plants) was only half of that in the local folk pharmacopoeia quoted in Castelmezzano. However, ritual magic-healing practices still play a central role among the Albanians in Ginestra/Zhurë, while they do not in Castelmezzano. Reasons for this shift, as well as components that have affected cultural adaptation phenomena and transitions among the Albanians are discussed.

Keywords: Ethnopharmacy; Ethnobotany; Ethnomedicine; Albanians; Italy

1. Introduction

The aim of this paper is to compare the use of traditional natural remedies and healing practices in two small rural communities located in the Lucania region of southern Italy. One of the communities, Ginestra/Zhurë, is inhabited primarily by ethnic Albanians (called Arbëreshë), who immigrated to the region in the 15th century. The other community, Castelmezzano, is inhabited by autochthonous South-Italians. A detailed survey of the traditional[1] ethnopharmaceutical means and food-medicines recorded in the two communities has been the primary topic of other papers (Quave and Pieroni, 2002; Pieroni et al., 2002a,b, 2004a,b).

Most studies on current Mediterranean folk pharmacopoeias, not being limited to historical literature-based perspectives (Afifi and Abu-Irmaileh, 2000; Lev and Amar, 2000, 2002; Lev, 2002; Said et al., 2002; Abu-Irmaileh and Afifi, 2003), have focused on the role of natural remedies (mainly medicinal plants) within a single cultural context (see for example in the last 4 years: Bonet et al., 1999; Guarrera, 1999, 2003; Tuzlaci and Erol, 1999; Yesilada et al., 1999; Agelet et al., 2000; Alvarez Arias, 2000; Ertug, 2000; Merzouki et al., 2000; Tuzlaci and Tolon, 2000; Agelet and Valles, 2001, 2003a,b; Ballero et al., 2001; Jouad et al., 2001; Leporatti and Corradi, 2001; Sezik et al., 2001; Palmese et al., 2001; Tuzlaci and Aymaz, 2001; Eddouks et al., 2002; Camejo-Rodrigues et al., 2003; El-Hilaly et al., 2003; Pieroni et al., 2003), while only one work has recently tried a cross-cultural comparison among the traditional phytotherapeutic data (gathered from bibliographic resources) of Italy and Bulgaria (Leporatti and Ivancheva, 2003). On the other hand, detailed medical-anthropological surveys on ritual magic-healing practices in this area have

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[1] As a premise, clarification is needed here concerning the term "traditional": it will be used in this paper as a means for defining something that has been *an integrated part of a culture for more than one generation* (similarly as underlined recently by Ogoye-Ndegwa and Aagaard-Hansen, 2003.

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been very rarely conducted (Kemp, 1935; De Martino, 1959; Kerewski-Halpern and Foley, 1978; Galt, 1982, 1991; Kerewski-Halpern, 1985, 1995).

In other surveys and sites of field study, little emphasis has been placed on a truly medical-anthropological comparison of folk pharmaceutical remedies among various ethnic groups that share a close territory, and most of these studies have had a strong ethnobiological/ethnobotanical focus (Heinrich et al., 1998; Moerman, 1998; Leonti et al., 2003). In addition, medical literature on this subject has rarely considered the "remedies" (pharmaceutical means) as a paradigm for understanding cultural differences in healing systems (Kelleher and Hillier, 1996).

In Europe, no comparative studies with original data has been carried out so far, although a comparative evaluation of ethnopharmaceutical issues may represent a first step to better understanding the cultural components influencing the perception of pharmaceutical means in different cultures, how these components change and evolve, and which strategies cultures put in place to face these changes.

Finally, analysing these phenomena within migrant communities could allow us to evaluate adaptive cultural processes, which strongly affect how newcomers, and among them maybe especially women, manage plants in the domestic domain and cope with household health care (Kuebel and Tucker, 1988; Stephenson, 1995; Balick et al., 2000; Corlett et al., 2002; Gladis, 2002, 2003; Jonsson et al., 2002a,b; Greenberg, 2003; Nguyen, 2003; Reiff et al., 2003).

2. Research settings and methods

In the present study, the traditional medical practices of two communities in the Basilicata region (Lucania), southern Italy were compared (Fig. 1). The Italian National Statistical Institute (ISTAT, 2000) reports that Basilicata represents the Italian region having the lowest percentage of urban population (17%, calculated in the period 1997–1999), the highest life expectancy (75.7 years, calculated in the period 1991–1995), and presents the lowest utilization of allopathic medical services (23.9% among men, 32.5 among women, calculated in 1997).

Two centres in Lucania having similar socio-economic and demographic characteristics, but different ethnic origins were selected for the study: Ginestra/Zhurë, located in the Vulture in northern Lucania, and Castelmezzano, located in the Dolomiti Lucane area, in central Lucania. Moreover, the two communities are separated by a distance such that there is no regular exchange between the two populations at present, and they have never been in contact in the past (Table 1).

2.1. Ginestra/Zhurë

Ginestra (Zhurë in Arbëresh), has ca. 700 inhabitants, and is located in the northern part of the Lucania, in a territory dominated by the dormant volcano Monte Vulture. Most of the Arbëreshë arrived in the Vulture area from Albania during the second half of the 15th Century. The Arbëreshë living in the Vulture are quite isolated from most other Arbëresh communities, which are concentrated in Calabria and Sicily, as well as from the other few Albanian ethnic isles in southern Lucania, Apulia, Campania, Molise and Abruzzo. The Arbëreshë of Vulture are concentrated in Ginestra/Zhurë, and the nearby small centres of Barile/Barilli (ca. 3400 inhabitants) and Maschito/Masqiti (ca. 1900 inhabitants).

The Arbëreshë are descendants of Albanians, who migrated in several flows from the 15th to the 18th century to diverse central and southern Italian inland areas (Dessart,

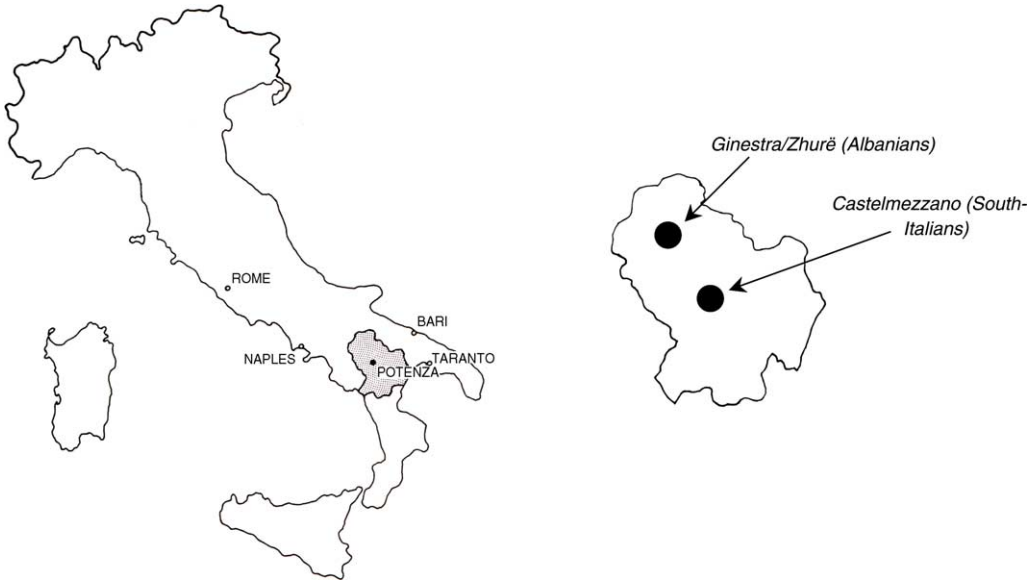

Fig. 1. Location of the studies areas.

Table 1
Summary of the ethnographical, socio-economic, and medical frameworks of Ginestra/Zhurë and Castelmezzano

	Ginestra/Zhurë	Castelmezzano
Eco-geographic characteristics		
Altitude	564 m	750 m
Climate	Mild winter	Cold winter
Natural landscape	Countryside	Mountains
Ethno-demographic data		
Population (1998)	730	840
Change of population (1991–998)	−6.3%	−9.5%
% population over 65 (1998)	25.6%	26.5%
Ethnic group	Albanians (Arbëreshë)	South Italians
Historical immigration flows from Albania	1470–1478	None
Current Albanian speakers (bilingual)	10–15%	None
Emigration flows during the period 1950–1980 to northern Italy and/or central Europe	+++	+++
Immigration flows of foreign newcomers in the last 10 years	+ (from Albania and Poland)	+ (from Ukraine)
Economic features		
Commercially important crops	Olive trees vine durum wheat	Durum wheat
Animal breeding (sheep, goats, *Podolica* cows)	+ (sh & go)	++ (sh, go & co)
Labour in nearby factories	+++	+
Labour in nearby services	+	++
Household incomes dependent on public pension payments to the oldest members of the households	+	++
Socio-pharmaceutical and medical frameworks		
Presence of stationary GP	Yes	Yes
Presence of a GP night service	Yes	Yes
Presence of a community pharmacy	Yes (part-time)	Yes (full-time)
Closest hospital	4 km far	32 km far
Specific traditional healers using medicinal plants	None	None
Character of traditional phytotherapy (and zootherapy)	Household PHC	Household PHC
Specific traditional magic-ritual healers	8	1

+: not very relevant; ++: relevant; ++: very relevant.

1982). At present, it is estimated that there are no more than 80,000 Albanian speakers, all bilingual in Italian and Arbëresh Albanian (Grimes, 2000). It is probable that even this low number of speakers is in fact an overestimation as it is based on the whole population figures of villages identified as "Arbëresh communities"—and does not necessarily correlate with the actual number of speakers in these communities. It can be estimated in the village of Ginestra/Zhurë, for example, that today only 10–15% of the population can actually actively communicate using their Arbëresh Albanian language.

Arbëresh Albanian belongs to the Tosk Albanian subgroup of Albanian, which represents the only surviving language from the ancient Paleo-Balkan group (Illyrian, Messapic and Thracian) of the Indo-European family (Grimes, 2000). In the Redbook of the Endangered Languages (UNESCO) Arbëresh Albanian has been classified as an "endangered language" (Salminen, 1999) and in December 1999, the Arbëreshë obtained – together with 11 other non-Italian speaking groups – official recognition as a "historical ethnic minority" from the Italian Parliament. This should ensure a future for their language in local schools and should also give the people the legal right to use their idiom in official acts of administration and indicate measures for sustaining cultural initiatives dealing with the defence of their heritage (Gazzetta Ufficiale della Repubblica Italiana, 1999).

The terrain of the Ginestra/Zhurë community was originally sustained by pastoralism and agriculture. Nowadays, the cultivation of olive trees (*Olea europaea*), a local variety of grape vine (*Vitis vinifera* var. Aglianico) and durum wheat (*Triticum durum*), as well as a car factory in the nearby centre of Melfi (open for the past 10 years), represent the main economic assets for the community.

In Ginestra/Zhurë, a very distinct cultural gap exists between age generations and today only the oldest members of the population are able to actively speak Arbëresh Albanian. The majority of the mid-aged (35–55 years) population can recall some words and basic customs of their Arbëresh history, but do not incorporate these facets of traditional life into their present daily life. The impact of 'modernization', or transition into the mainstream Italian culture, is most apparent in the youngest subset of the population. This group, for the most part, has abandoned the traditional agro-pastoralist way of life as a principal source of income and is sustained instead primarily by factory labour.

2.2. Castelmezzano

Although there are several Italian villages in the Vulture area, there exists a constant flux of people and traditional knowledge between the Arbëresh and Italian communities. In addition, while many of the communities in the Vulture

Fig. 2. Traditional natural remedies used in the folk pharmacopoeias of Ginestra/Zhurë and Castelmezzano.

region, such as Melfi and Rionero, are acculturated today to south Italian models, they have a history of Albanian occupation. In an effort to control for such confounding variables as informational flux between study sites and historical ethnic hybridization, the community of Castelmezzano was selected to study an autochthonous Italian community that is relatively isolated from the Albanian villages of the Vulture area. Castelmezzano is located in central Lucania (inland southern Italy), at a distance of approximately 60 km from Ginestra/Zhurë. The history of Castelmezzano (Dolomiti Lucane area) has been characterized by Norman (starting from the 11th Century A.D.), Swabian (starting from the 13th Century A.D.) and Spanish Bourbon (ca. the 15th Century A.D.) domination. Small-scale agricultural and animal breeding activities (sheep, goats, and a local breed of cattle, *Podolica*) have played a key role in this area for centuries. Similarly to Ginestra/Zhurë, in Castelmezzano most of the younger generation is reliant on industrial and service labour, which is carried out in Potenza, the capital of Lucania, while small agricultural and pastoral activities are dominated by the older generations.

A scheme of the geographical, ethnic, demographic, socio-economic, and socio-medical characteristics of Castelmezzano and Ginestra/Zhurë is reported in Fig. 2.

2.3. Field methods

Field work was conducted in Ginestra/Zhurë during the periods of April–June 2000 and March–July 2001, and during three other weeks in August and November 2000; in Castelmezzano, field work was conducted during the periods of March–June 2002, October 2002, March–June 2003, and two weeks in September 2003. Information regarding the use of traditional medicines was collected through the methodologies of participant observation and semi-structured interviews with about 130 persons, mainly chosen by random from the elderly populations, who still retain the major portion of traditional knowledge in their respective communities. Interviews were carried out with individuals, and also with groups, where informants were encouraged to discuss and express their individual opinions. Specific information concerning magical healing practices was gained after the identification of the last remaining ritual/magical healers, and during very constant, intensive visits with these practitioners.

Methodologies employed in field research strictly followed the ethical guidelines set forth by the American Anthropological Association, AISEA (Italian Association for Ethnological Studies) and the International Society of Ethnobiology. Informed consent was requested and obtained verbally before each interview, and permission for audio-recording or visual documenting of medical and pharmaceutical practices was always obtained before the use of any recording devices.

For each phytotherapeutical product quoted by a villager, a botanical specimen was collected, its identification was confirmed by the same informant, and taxonomic identification followed the standard botanical work “Flora d’ltalia” (Pignatti, 2002). Voucher specimens of all non-domesticated plants and most uncommon cultivated food botanicals were collected and are now deposited at the Herbarium of the Laboratory of Pharmacognosy at the School of Life Sciences of the University of Bradford (Herbarium code: BRAD).

3. Results and discussion

3.1. Complementary medicines in Lucania today

It has become evident from our field studies that Traditional Knowledge (TK) on complementary medical practices in the two chosen areas is in a state of rapid decline. Most of the plant remedies recorded are not used at present. In Ginestra/Zhurë, only 40% of the quoted uses were also directly observed during field research, while an even lower proportion of 31% was observed in Castelmezzano. Complementary medicine in both centres demonstrates a household character, and is intended mainly as a mode of primary heath care, which is perceived to have a preventive action or ability to heal minor illnesses.

No specific traditional healers, reputed to deal solely with use of natural remedies (plants), can be found anymore in the two communities. Yet these healers still exist in the collective memory of the population. For example, in Castelmezzano, there is still a clear remembrance of a female healer (“Zia Teresa ’a Lia”, alias Teresa Vertino), who died one year before our field study began, and who reportedly healed many illnesses with the use of herbs or mixtures of them. In addition, many people still remember the most famous “healer” of southern Italy (well described by the Italian anthropologist De Martino in 1959): the “Mago Ferramosca” (alias Giuseppe Calvello from Pietrapertosa) who died in 1968 in Castelmezzano, and from whom Zia Teresa learned the practice of herbal healing.

These two cases, however, are isolated examples: both in Ginestra/Zhurë and in Castelmezzano traditional phytotherapy was and is managed normally by women within the household. However, the role of these women as medical

caregivers is threatened nowadays since new generations have lost most of the traditional knowledge concerning plant and folk medicines (Pieroni, 2003) and, as pointed out in other works (Ertug, 2000, 2003; Pieroni, 2000), specific healers seem to have not played a special role in this particular domain.

On the other hand, small commercial pharmacies in Ginestra/Zhurë and Castelmezzano provide a wide variety of Pharmaceuticals from today's mainstream European market; most of which are bought by locals only via GP prescriptions. Self-medication carried out using over-the-counter pharmaceuticals is still very limited. We did not observe any particular tendency of indigenization of chemical drugs amongst either Albanians in Ginestra/Zhurë or South-Italians in Castelmezzano (Etkin et al., 1990; Cosminski, 1994), as recently described in other transitional societies (Cocks and Moller, 2002).

These local pharmacies also provide a few new modern phytotherapeuticals and herbal remedies in the form of nutraceuticals, or herbal supplements. These commercial phytotherapeutical products, however, represent only a very small portion of Complementary and Alternative Medicines (CAMs) used in the community when compared with the traditional phytotherapeutical (decoctions) means administered in households. These commercialized products tend to become important primarily for new couples, young women, and other locals who are not connected with familiar networks, in which their older relatives would normally provide traditional herbal drugs.

In Castelmezzano, other valued commercial plant-derived nutraceuticals and beverages are sold in the local pub to young people in the form of beverages containing gingko, ginseng and green tea extracts, normally traded by northern Italian companies. Consciousness of the commonality in plant derivatives between commercial products and traditional remedies amongst these young consumers is very low. These products are consumed instead in large part due to popular culture, which is strongly reinforced by extensive TV advertising directed at this age group, and in some small part, due to the belief that such beverages are 'good for you'.

This scenario is one example of the complex cultural transition phase, which both communities (ethnic and autochthonous) are faced with at present. This transition is quickly leading to a loss of the last remnants of these old agro-pastoral societies, and acculturation to metropolitan mainstreamed Italian customary trajectories.

3.2. Traditional folk pharmacopoeias: a comparison

Fig. 2 reports the number of natural remedies that we recorded in Ginestra/Zhurë and Castelmezzano, which represent or have represented until the recent past, the heritage of the traditional local pharmacopoeia. The number of the remedies that we could find in Castelmezzano was more than twice of those recorded in Ginestra/Zhurë. Both the variety of traditional plant remedies and of the few animal-derived remedies was much broader in Castelmezzano. This difference in ethnobotanical knowledge of medicinal plants may be largely due to differences in the traditional medical belief systems of these two ethnically diverse communities: the Arbëreshë of Ginestra/Zhurë perceive the majority of illnesses to be spiritual in origin, whereas autochthonous Italians of Castelmezzano maintain a naturopathic ideology. This also correlates with our findings regarding the strong presence of magico-spiritual healing rites in Ginestra/Zhurë, and the lack thereof in Castelmezzano.

Ethnic boundaries between Albanians and Italians in Vulture left the community of Ginestra/Zhurë in social isolation for centuries, and only recently (the first acculturation process was initiated by learning the Italian language in schools the 1950s–1960s) has the intercommunity flux of people and information begun to impact local TK. Economic factors, especially, have promoted this community's rapid transitory phase to mainstream Italian acculturation. Their previous isolation from mainstream culture and limited access to outside contemporary healthcare allowed for the conservation of traditional ritual-based medical practices. But, with their transition to the acculturated mainstream, such knowledge of healing means and, to some extent, the medical belief system itself, was not passed on to newer generations. It is for this reason that only the very eldest subset of the community population has any memory of or still employs these practices at present.

Isolation from larger Italian communities has also played an important role in conserving TK related to plants and medical practices in Castelmezzano. Although their isolation was not social in nature (the community is geographically isolated in a mountainous zone), the effect of low flux in information and people allowed for the persistence of old medical practices. The autochthonous Italian community of Castelmezzano maintains a widespread knowledge of medicinal plants and animal products, which is not limited solely to the eldest generation, but spans to the mid-aged subset as well. With the exception of the evil-eye, which is a common non-naturopathic illness throughout the Mediterranean (Elworthy, 1958; Di Stasi, 1981; Galt, 1982; Migliore, 1997), no illnesses of spiritual origin were identified in Castelmezzano. There is a total lack of this magical component to their medical belief system.

Considering the traditional plant remedies only (phytotherapeuticals), Fig. 3 reports the uses of plant remedies by categories. It is evident that in Castelmezzano, the use of diverse remedies for dermatological complaints is much higher, while those for respiratory complaints are lower. This could be due in part to the fact that this community is actively involved in traditional agro-pastoral activities, through which it is more likely to encounter minor dermatological troubles. On the other hand, many skin diseases recognized in Ginestra/Zhurë are categorized and treated under the scheme of ritual healing.

Fig. 4 illustrates the consensus distribution for TK of plant remedies in the two communities. In Castelmezzano a higher

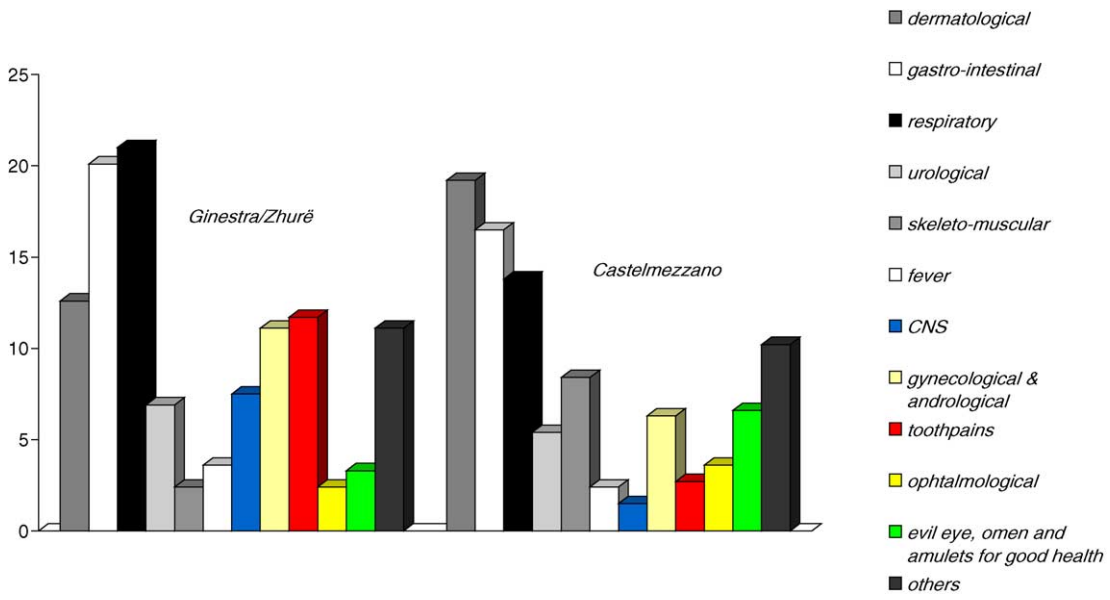

Fig. 3. Principal medical uses (in %) of the traditional phytopharmaceuticals recorded in Ginestra/Zhurë and Castelmezzano.

proportion of remedies have been quoted by more than 10% of the informants. That would mean that TK on plants and traditional pharmaceuticals is better retained in Castelmezzano, possibly due its geographic isolation and a community lifestyle that is strongly related to traditional activities. At the same time, this observation underlines the fact that the folk pharmacopoeia of Ginestra/Zhurë, which is much smaller than that of Castelmezzano, is not necessarily characterized by the unique (ethnic) and common heritage of the population.

In Table 2 we listed the medicinal plants of the folk pharmacopoeias of the Albanians of Zhurë/Ginestra and the South-Italians of Castelmezzano in southern Italy. We marked with an asterisk those ethnomedical uses never recorded before in southern Italy and/or very uncommon in the Mediterranean ethnobotany (Pieroni et al., 2004a,b and references therein).

Through looking at details about the main differences between the folk pharmacopoeias of the two centres, we can point out that only a few of the 10 most used and quoted

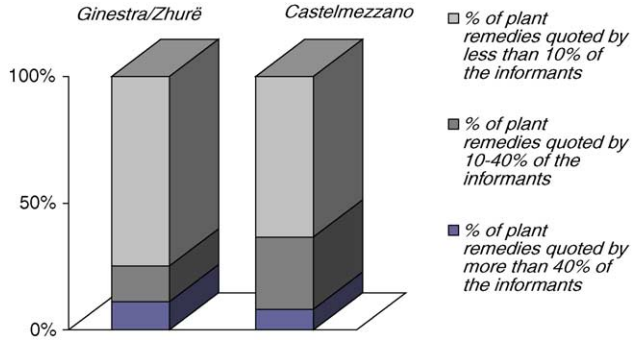

Fig. 4. Consensus index on the traditional phytopharmaceuticals quoted in Ginestra/Zhurë and Castelmezzano.

medicinal plants vary between communities (Table 3), but if considering the total number of plant remedies, the pharmacopoeia of Ginestra/Zhurë does actually contain all the remedies of South-Italian heritage.

When the whole plant-based folk pharmacopoeias (including "folk functional foods", that means plant foods ingested because considered to be "healthy"; Pieroni, 2000; Pieroni et al., 2002a) of the two centres are considered, only a very few ingredients identified in Ginestra/Zhurë could not be identified in Castelmezzano as well (14%, Fig. 5). Interestingly, most of these elements of the Arbëresh pharmacopoeia are defined mainly by lexical terms still used in present day Albanian (Demiri, 1981). Since the Arbëresh language is composed by lexemes derived both from archaic Albanians and from South-Italians, it appears evident that these few traditional phytotherapeuticals are maybe remains of an "original" Albanian heritage.

Upon comparison of "couples" of *medicinal plant-ethnomedical use*, we found that 65 out of a total of 123 couples (53%) represent the heritage of the Albanian phytotherapy. These uses were not recorded in the Italian counterpart. These findings reveal a certain cultural adaptation to the surrounding South-Italian culture that took place in Ginestra/Zhurë in the last decades, where only a restricted portion of possible features of an Albanian pharmacopoeia still remain intact.

A few of these original elements of the Arbëresh folk pharmacopoeia are represented by a variety of folk functional foods—wild green plants that are consumed and thought to be "healthy", while other ingredients are remedies of animal origin (scorpion and horse blood). In the very sparse folk medical notes published for Albania – mainly at the beginning of the last century by travellers and scholars visiting the country – the use of scorpions was reported to have played a

Table 2
List of the medicinal plants of the folk pharmacopoeias of the Albanians of Zhurë/Ginestra and the South-Italians of Castelmezzano in southern Italy

Botanical taxon or taxa	Botanical family	Plant used by the Italians or Albanians	Part(s) used	Uses in the local popular medicine
Achillea millefolium L.	Asteraceae	It	Ap	Haemostatic, diuretic
Adianthus capillis-veneris L.	Adiantaceae	Al	Ap	To enhance uterine contractions during delivery
Agrimonia eupatoria L.	Rosaceae	It	Ap	To prevent feet from sweating
Agropyron repens L.	Poaceae	Al and It	Rh	Diuretic
Allium cepa L.	Liliaceae s.l.	Al and It	Bu	To heal purulent skin abscesses (caused by thorns), galactagogue, anti-bruises
Allium sativum L.	Liliaceae s.l.	Al and It	Bu	Anti-hypertensive, to heal insect bites, vermifuge, anti-warts, skin anti-inflammatory
Anthemis altissima L.	Asteraceae	It	Ap	Digestive
Armoracia rusticana P. Gaertn., B.Mey. e Scherb.	Brassicaceae	It	Ro	Anti-rheumatic
Arum italicum Mill.	Araceae	It	Sa	Anti-warts
Arundo donax L.	Poaceae	Al and It	Cm	Haemostatic
Asparagus acutifolius L.	Liliaceae s.l.	It	Sh	Diuretic
Asplenium trichomanes L.	Aspleniaceae	Al	Ap	To enhance uterine contractions during delivery
Avena sativa L.	Poaceae	Al and It	Se	Reconstituent for small children, against sore throat
Ballota nigra L.	Lamiaceae	Al and It	Le	Diuretic, haemostatic
Borago officinalis L.	Boraginaceae	Al and It	Ap	Post-partum depurative, galactagogue, against sore throats
Brassica oleracea L.	Brassicaceae	It	Le	To heal mastitis or shoulder pains
Capsicum annuum L.	Solanaceae	Al and It	Fr	Anti-hypertensive, anti-rheumatic, anti-fever, against the evil-eye
Centaurium erythraea Rafn.	Gentianaceae	It	Ap	Anti-fever
Ceterach officinarum DC.	Adiantaceae	Al and It	Ap	To eliminate renal calculus; to heal muscular pains in the shoulder region
Cichorium intybus L.	Asteraceae	It	Wh	Depurative
Cichorium intybus L. (Catalogna Group)	Asteraceae	It	Le	Mild laxative, depurative
Citrus lemon (L.) Burm.	Rutaceae	It	Fr	Anti-diarrhoeal
Citrus sinensis (L.) Osbeck.	Rutaceae	It	Ep	To heal sore throat and cough
Clematis vitalba L.	Ranuncolaceae	It	Fr	To heal mouth inflammations
Conium maculatum L.	Apiaceae	It	Wp	Anti-warts
Crataegus monogyna Jacq.	Rosaceae	It	Fl	Tranquiliser; enhancing blood circulation
Cyclamen hederifolium Aiton	Primulaceae	It	Tu	Anti-warts
Cynara candunculus L.	Asteraceae	It	Ap	Anti-rheumatic
Cynara cardunculus ssp. *scolymus* (L.) Hayek	Asteraceae	Al and It	Le, Fl	Digestive, liver depurative
Diplotaxis tenuifolia (L.) DC.	Brassicaceae	It	Le	To heal muscular pains (especially in the shoulder region)
Ecballium elaterium (L.) A. Rich.	Cucurbitaceae	Al and It	Fr	Against tooth-ache, antiseptic and vulnerary
Erigeron acer Bivona	Asteraceae	It	Ro	To heal tooth-ache*, bruises* and arthritis*
Euphorbia cyparissias L.	Euphorbiaceae	It	La	Anti-warts
Euphorbia helioscopia L.	Euphorbiaceae	It	La	Male aphrodisiac (penile vasodilatator)
Ficus carica L.	Moraceae	Al and It	Fr and Sa	To heal sore throats, bronchitis and as intestinal depurative, to heal insect bites; anti-warts
Fraxinus excelsior L.	Oleaceae	It	Leaves	Anti-gastritis
Galium album Mill, and *G. verum* L.	Rubiaceae	It	Le	To heal wounds and gingival inflammations
Glycyrrhiza glabra L.	Fabaceae	Al and It	Ro	Against sore throat and anti-tussive
Hordeum vulgare L.	Poaceae	Al and It	Se	To heal sore throat and bronchitis, reconstituent for ill children and elderly persons
Hypericum hircinum L.	Hypericaceae	It	Ap	To heal bronchitis*
Lactuca sativa L.	Asteraceae	It	Le	Against gingival abscess, against toothache, to heal sore throat
Laurus nobilis L.	Lauraceae	Al and It	Le	Digestive, anti-stress*
Leopoldia comosa (L.) Parl.	Liliaceae s.l.	Al	Bu	Anti-fever*

Table 2 (*Continued*)

Botanical taxon or taxa	Botanical family	Plant used by the Italians or Albanians	Part(s) used	Uses in the local popular medicine
Linaria vulgaris Mill.	Scrophulariaceae	It	Ap	To heal stomach-aches
Lupinus albus L.	Fabaceae	It	Se	Anti-diabetes
Lycopersicon aesculentum Mill.	Solanaceae	Al and It	Fr and pe	Diuretic, to heal sore throat and bronchitis
Malus domestica Borkh.	Rosaceae	Al and It	Fr	Anti-tussive
Malva sylvestris L.	Malvaceae	Al and It	Ap and ft	As mild laxative, to heal menstrual pains, to heal sore throat and bronchitis, as intestinal depurative
Marrubium incanum Desr. and *Marrubium vulgare* L.	Lamiaceae	Al and It	Ap	Diuretic, digestive, anti-malarial, to heal cyst, as a panacea
Matricaria recutita (L.) Rauschert	Asteraceae	Al and It	Ft	As anti-hypertensive, eye anti-inflammatory, to heal sore throat and bronchitis, as intestinal depurative, digestive, sedative
Mentha spicata L.	Lamiaceae	It	Le	Against stomach-aches
Mercurialis annua L.	Euphorbiaceae	Al	Ap	Laxative
Morus alba L. and *Morus nigra* L.	Moraceae	It	Le and st	To heal sore throat and bronchitis*
Ocimum basilicum L.	Lamiaceae	It	Le	Anti-headache
Olea europaea L.	Oleaceae	Al and It	Ap	Hepatoprotective, against stomach-aches
Origanum heracleoticum L.	Lamiaceae	Al and It	Ft	Anti-tussive, against toothache
Papaver rhoeas L.	Papaveraceae	Al	Fl	Mild sedative for children
Papaver somniferum L.	Papaveraceae	Al and It	Fr and se	Tranquiliser, against toothaches
Parietaria judaica L.	Urticaceae	Al and It	Ap	Diuretic, against intestinal pains, post-partum depurative
Petroselinum crispum (Mill.) Nyman ex A. W. Hill	Apiaceae	It	Ap	Abortive, to treat insect bites
Plantago lanceolata L. and *Plantago major* L.	Plantaginaceae	It	Le	Suppurative
Potentilla reptans L.	Rosaceae	It	Ap	Anti-hypertensive, anti-malarial, anti-rheumatic
Prunus domestica L.	Rosaceae	It	Fr	Laxative
Prunus dulcis (Miller) D.A. Webb.	Rosaceae	Al and It	Ep and se	To treat against intestinal pains (children), to heal sore throat
Prunus spinosa L.	Rosaceae	It	Fr	Hepatoprotector
Pteridium aquilinum (L.) Kuhn	Hypolepidaceae	Al	Rh	Against non-specific pains
Pyrus communis L.	Rosaceae	Al and It	Fr	Depurative, mild laxative
Robinia pseudoacacia L.	Fabaceae	It	Fr	Anti-bronchitis
Rosa canina L.	Rosaceae	Al and It	Le, fl and fr	Against stomach-aches; anti-depressive; diuretic, to heal insect bites, against the evil-eye
Rosmarinum officinalis L.	Lamiaceae	It	Le	To heal sore throat, against stomach-aches
Rubus ulmifolius Schott.	Rosaceae	Al and It	Le	Diuretic, against carbuncles; to heal purulent skin abscesses (caused by thorns)
Ruscus aculeatus L.	Liliaceae s.l.	It	Sh	Liver depurative
Ruta graveolens L.	Rutaceae	Al and It	Ap	Digestive, anti-helminthiasis, against muscular pains
Salvia argentea L.	Lamiaceae	It	Le	Haemostatic*
Salvia officinalis L.	Lamiaceae	Al and It	Le	To heal sore throat, against headaches
Sambucus ebulus L.	Caprifoliaceae	Al and It	Ap	Anti-rheumatic, anti-diaphoretic
Sambucus nigra L.	Caprifoliaceae	Al and It	Le and fl	To heal sore throat, diaphoretic, against belly pains, against insect bites
Santolina chamaecyparissus L.	Lamiaceae	It	Ap	Anti-tussive
Scrophularia canina L.	Scrophulariaceae	It	Ap	Anti-rheumatic and against muscular pains*
Sedum rupestre L.	Crassulaceae	It	Ap	Diuretic
Sedum telephium L.	Crassulaceae	It	Le	Anti-warts
Senecio vulgaris L.	Asteraceae	It	Ap	To heal skin inflammations
Silybum marianum (L.) Gaertn.	Asteraceae	It	Ap	Laxative
Solarium nigrum L.	Solanaceae	It	Fr	Against toothache
Solarium tuberosus L.	Solanaceae	It	Tu	To treat burns, as an emollient for the eyes
Sonchus asper L. and *Sonchus oleraceus* L.	Asteraceae	Al and It	Le	Anti-gastritis, anti-afta*
Sorbus domestica L.	Rosaceae	It	Fr	Anti-diarrhoea
Spartium junceum L.	Fabaceae	It	Sa	Anti-warts
Teucrium chamaedrys L.	Lamiaceae	It	Ap	Anti-malarial

Table 2 (*Continued*)

Botanical taxon or taxa	Botanical family	Plant used by the Italians or Albanians	Part(s) used	Uses in the local popular medicine
Tilia cordata Mill.	Tiliaceae	It	Fl	To heal body tremors
Triticum aestivum L. and *Triticum durum* Desf.	Poaceae	Al and It	Se	Anti-tussive, against sore throat
Tussilago farfara L.	Asteraceae	Al and It	Le and ro	Diuretic
Ulmus minor Miller	Ulmaceae	Al and It	Ga	Anti-bruises, to relief muscular pains
Umbilicus rupestris (Salisb.) Dundy	Crassulaceae	Al and It	Le	Suppurative, against carbuncles and skin inflammations
Urtica dioica L.	Urticaceae	It	Le	Digestive
Verbascum thapsus L.	Scrophulariaceae	Al	Le	Anti-tussive
Veronica beccabunga L.	Scrophulariaceae	It	Ap	Diuretic
Vitis vinifera L.	Vitaceae	Al and It	Sh, sa, fr	Against insect bites, galactagogue, to relieve sore throat, anti-tussive, partum enhancer, to relieve eye inflammations, anti-gastritis, anti-fever, anti-rheumatic, anti-diarrhoeal
Zea mays L.	Poaceae	Al and It	Se and sti	Antiseptic, diuretic, reconstituent
Ziziphus jujuba L.	Rhamnaceae	Al	Fr	To heal sore throat or cough

Al: uses recorded by the Albanians of Zhurë/Ginestra; It: uses recorded by the South-Italians of Castelmezzano; Ap: aerial parts; bu: bulbs; cm: cambium membrane; ep: fruit epicarps; fl: flowers or inflorescences; fr: fruits or infrutescences (including pseudo-fruits); ft: flowering tops; ga: galls; le: leaves; pe: fruit peduncles; sa: sap; se: seeds; rh: rhizomes; sh: shoots; st: stems; sti: stigma; ro: roots; tu: tubers; wh: whorls; wp: entire plant parts. *: ethnomedical uses never recorded before in southern Italy and/or very uncommon in the Mediterranean ethnobotany.

central role in Albanian folk-medicine as a means to wound healing (Siebertz, 1910).

3.3. Ritual magic-healing practices

In Ginestra/Zhurë, and much less in Castelmezzano, diverse illnesses, which are only healed by the help of special ritual healers, were recorded. Ritual healers are known in both centres as "those who help": they are generally elderly women who work strictly in the realm of magical frameworks. These helpers accomplish their tasks through the use of gestures and prayers in which they invoke a variety of Catholic Saints or even sanctified objects or plants to displace the illness.

Twenty-one folk illnesses were identified in Ginestra/Zhurë to have been healed by helpers in the past, while nowadays healers in Ginestra/Zhurë treat only a few of these conditions. These particular folk-illnesses can described from an etic perspective as, for example, mastitis, nose bleeds, headaches, stomach-aches, abdominal pains, dermatitis, mumps, sore throat, erysipelas, and toothache (Table 4). These findings have been described in detail in another paper (Quave and Pieroni, 2005).

Interestingly, all healing ceremonies among the Arbëresh are conducted in the south Italian dialect or even proper Italian. No healers, including those who have the ability to fluently speak the original Arbëresh language, use this language in the healing process. This could be due to the possibility that Albanians originally learned these practices from Italians, even if nowadays Italians (as in Castelmezzano) have mainly forgotten them. The persistence of these magic-healing practices only among Albanians can underline once again the extremely difficult and complex cultural changes associated with the acculturation process that they have faced especially in the past decades.

The frequent occurrence of "evil-eye" and other psychosomatic illnesses in Ginestra/Zhurë could also be an indicator of high social stress in the community. An assessment of such illnesses, which are strongly correlated with socio-psychological components of causality, could explain how the complex cultural dynamics to social stress – motivated by acculturation processes in this case – are expressed in

Table 3
Ten most quoted medicinal plants used Ginestra/Zhurë and Castelmezzano (reported by more than 66% of the interviewees)

Botanical species	English name	Medicinal use in Ginestra/Zhurë	Medicinal use in Castelmezzano
Agropyron repens (rhizome)	Couch grass	+	+
Borago officinalis (aerial parts)	Borage	+	+
Ficus carica (dried pseudofruits)	Figs	+	+
Hypericum hircinum (aerial parts)	Stinking tutsan		+
Laurus nobilis (leaves)	Bay leaves	+	+
Malva sylvestris (aerial parts with flowers)	Mallow	+	+
Marrubium vulgare (aerial parts)	Black horehound	+	+
Matricaria recutita (flowering tops)	Chamomile	+	+
Mercurialis annua (aerial parts)	Mercury	+	
Ziziphus jujuba (dried fruits)	Jujube		+

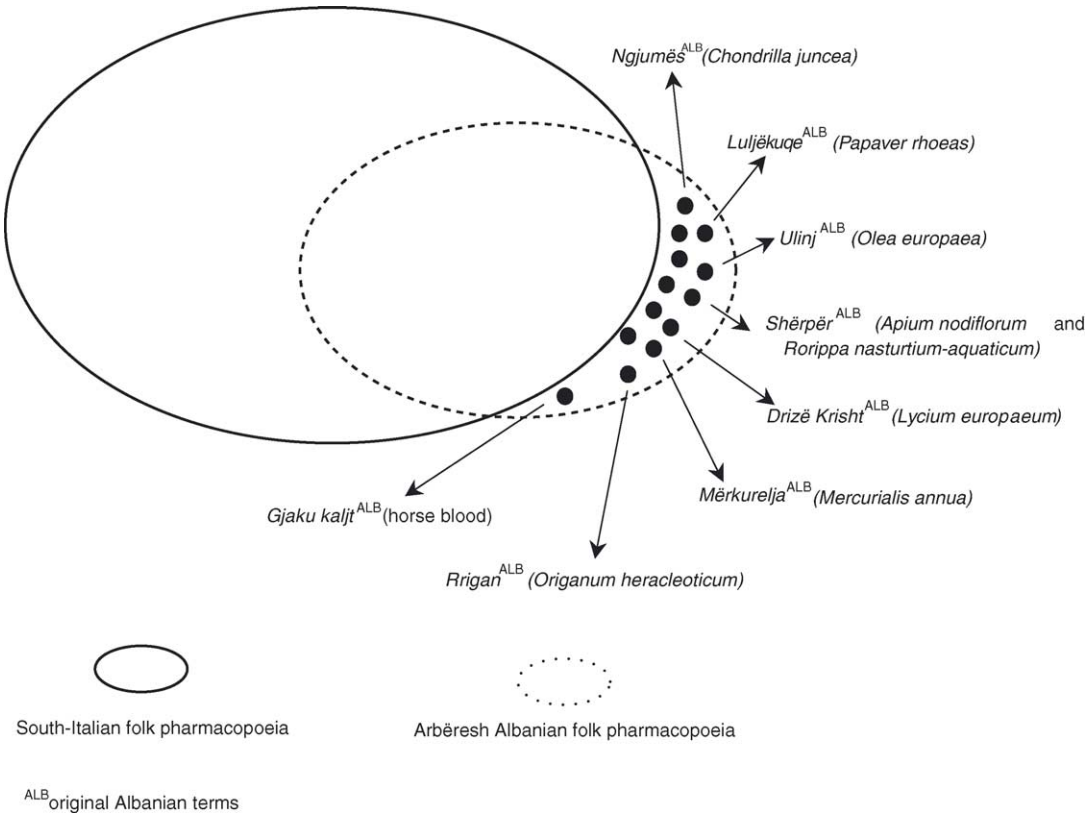

Fig. 5. Schematic representation of the links between the traditional plant remedies of the folk pharmacopoeias of Ginestra/Zhurë and Castelmezzano, also including medicinal foods considered to be "healthy" ("*folk functional foods*").

community wide psychopathologies. An in-depth discussion of the complexities of "evil-eye" is out of the scope of this paper. However, as Gallini (1973) hypothesized in her work on evil-eye in Sardinia, envy represents the central focus of the whole phenomenon, and this concept is very important in communities characterized by high social competition. Thus, this sociological framework fits the history of Ginestra/Zhurë very well, since its first inhabitants were Albanian refugees/shepherds, who escaped the political turmoil of their homeland (due to invasion of the expanding Ottoman empire) in the second half of the 15th century and moved to a sort of "no-man's-land", without any familiarity with the tradition of dominant classes/landowners, as was normal in the South-Italian frameworks of the time.

It is not by chance then, that in Ginestra/Zhurë still today, the discourse of climbing social status is tremendously central, and difficult to explain if looking at the real income of most of the households. Less decisive in this context of social status, however, is the concept of "liminals" (those who are at the borders of the wide "middle rural class", near both the lower and in the upper classes), as proposed in an analysis of the same phenomenon by Gait on Pantelleria Isle in Sicily at the end of the 1960s (Galt, 1982).

Shifts in medical dominance in Italy, most prominently noted in the changing paradigms of social medicine in the country over the past three decades (Tousijn, 2002) may be another influential factor for communities like Ginestra/Zhurë, which are already experiencing more social stressors, to cling more tightly to traditional medicine than other autochthonous populations. Furthermore, as suggested in a study on traditional healers in South America, social factors underlying these traditional medical practices, such as a familiar historical background in traditional medicine, play a crucial role in the transmission and survival of medical TK in communities (Vandebroek et al., 2004).

3.4. Newcomers today

Both in Ginestra/Zhurë and Castelmezzano a few newcomers from Eastern Europe have arrived in the past few years. Their numbers are still too small to evaluate the nature of possible further cultural changes, but in the domain of the folk medicines they brought with them to both villages, new practices have spread. For example, "new" Albanians have brought *caj malhit* (*Sideritis* sp. pl., Lamiaceae, unknown by the Arbëreshë and not-native in southern Italy) to Ginestra/Zhurë from their country, which they use in decoctions for the relief of sore throats and cough. Ukrainian women in Castelmezzano have introduced the use of an alcoholic chilli macerate with metamizole (classic example of a syncretism between medicinal plants and pure chemicals) for the external treatment of rheumatism, and the functional use of pickled

Table 4
Illnesses managed by magic rituals in Ginestra/Zhurë and Castelmezzano

Illness	Symptoms	Ritual healing practices recorded in the Albanian (Al) or in the South-Italian community (It)
Acqua dalla bocca ("water in the mouth")	Dry, cracked corners of mouth from excessive drooling of saliva	Al
Acqua nel pipi ("water in the penis")	Inflammation of the penis	Al
Cigli alla testa (migraine)	Sharp pin-like pain runs from the front to back down on the top of head	Al
Fuoco di Sant Antonio ("Saint Anthony's fire")	Dermatitis: pronounced, red, round inflammations with fluid on the skin (eruptions are more pronounced than in Fuoco morto)	Al
Fuoco morto ("dead-fire illness")	Dermatitis: pronounced, red, round inflammations with fluid on the skin	Al
La serra (fallen fontanelle)	Fallen fontanelle	Al
La zilla (head lice)	Head lice; scabies	Al
Mal d'arco ("rainbow-illness")	Jaundice, hepatitic symptoms	Al
Mal di denti (tooth-ache)	Toothache	Al
Mal di gola (sore throats)	Red inflamed throat	Al
Mal di pancia (abdominal pains)	Abdominal pain and gas; constipation	Al
Mal di testa (head-ache)	Posterior pain at the base of skull	Al
Mal vint ("wind-illness")	Dermatitis: small, round, red inflammations of the skin	Al
Malocchio (evil-eye)	Frontal headache with pain behind the eyes	Al and It
Nervi accavallati ("crossed nerves")	Nerve/muscular pain	Al
Occhi secchi ("dry eyes")	Dry, red, inflamed eyes	Al
Orecchioni (mumps)	Enlarged lymph nodes of the neck	Al
Pelo alla menna ("Breast-hair Illness")	Mastitis: red, inflamed breast with fever, unable to give milk	Al
Risibola (erysepalas)	Region of isolated dark, hardened, withdrawn skin	Al
Sangue dal naso (nose-bleed)	Nose-bleed	Al
Vermi ("worms")	Helminthiasis, weakness	Al

tomatoes (with dill, bay and horseradish leaves), consumed to recover from a drunken state.

Changes in the cultural and ethnomedical systems of Lucania continue, and only future studies in the following decades will tell us if any of these new (migrant-based) pharmaceutical uses will become integrated into the folk medical heritage of the autochthonous population.

4. Conclusions

Understanding the dominant medical-belief system of a community is essential to any ethnobotanical survey of medicinal plants. In this cross-cultural comparison of two communities sharing a similar terrain and socio-demographic character, we found that the influence of culture and ethnicity played a unique and important role in the utilization of local resources as medicinal products. While we found that a similar flora was utilized in both of the communities' pharmacopoeias, the number and variation of remedies was clearly linked to each respective medical belief system. In Ginestra/Zhurë, where aetiologies of various folk-illnesses were commonly linked to spiritual transmission, the treatments were often magical or psychotherapeutic in nature; whereas in Castelmezzano, where folk-illnesses were regarded as naturopathic in origin, plant and animal products were applied for treatment.

In both cases, community isolation – cultural for Ginestra/Zhurë and geographic for Castelmezzano – helped to form and conserve these two different CAM systems that still exist to some extent today. Transitory acculturation phases, however, have already begun to erase both communities of their rich history in TK of local medical practices. Further cross-cultural studies of CAM practices and health beliefs in majority and migrant minority populations are a necessity for the provision of pluralistic healthcare in today's global community of constant flux and migration.

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