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Tradition as Economic Value: The Role of Medicinal Herbs in Emerging Green Health Markets

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ABSTRACT

This study examines the cultural, social, and economic contexts of herbal medicine use in Hungary, as well as in the Carpathian Basin and Hungarian-populated regions of Europe. Its aim is to explore how traditional plant knowledge lives on and is utilized in 21st-century health and economic systems, with particular regard to the growing demand for phytotherapeutic products and the development of natural-based industries. Ethnobotanical heritage has survived in Hungarian and cross-border communities—especially in the Csángó, Székely, and Transdanubian regions—not only as an element of cultural identity but also as a local economic resource (Papp & Birkás-Frendl, 2013; Pinke & Kapcsándi, 2022). The research is based on semi-structured interviews, field observations, and international comparisons, with a particular focus on market and social trends that strengthen the economic embeddedness of the alternative health industry and natural products. The results identified three main attitude types: traditional (based on local knowledge and community self-sufficiency), conscious modern (digital and eco-oriented consumer behavior), and spiritual-ritual (identity- and community-forming). The use of medicinal herbs is therefore not merely a health-preserving practice, but also a value-creating economic activity that bridges local knowledge and the global market. The study highlights that the future of phytotherapy lies in the synergy of traditional knowledge, scientific validation, and innovative value chains. This connection can contribute to the diversification of rural economies, the development of a sustainable health industry, and the long-term competitiveness of the green economy.

Keywords: Economic Embeddedness, Green Health Industry, Natural Product Economy, Local Resource Utilization, Phytotherapy

INTRODUCTION

The use of medicinal plants is one of the oldest and most versatile knowledge systems in European folk culture, which in recent decades has returned to the center of attention not only from a cultural and health perspective, but also from an economic point of view. Traditional plant knowledge can be interpreted not only as heritage, but also as a natural knowledge base on which sustainable business models, health industry innovations, and local economic development strategies can be built (Quave et al., 2012; Petran et al., 2020). The rediscovery of plants used in folk medicine can contribute to the expansion of the phytotherapy market, product diversification, and the development of new, cost-effective alternatives for health maintenance, especially in systems focused on prevention. While globalization and the rise of the modern pharmaceutical industry have pushed the practical application of traditional knowledge into the background, the WHO's traditional medicine strategy for 2014–2023 also points out that the protection, validation, and integration of local herbal knowledge is not only important for health policy but also for economic strategy (WHO, 2013; Keller & Gombos, 2025; Horváth et al., 2025; Balassa et al., 2024). The growing global demand for natural remedies, eco-conscious consumer behavior, and support for green innovations all contribute to making the use of folk medicinal plants marketable and competitive again. Especially in rural areas, this can be a local income-generating alternative, a tourist attraction, or even a direction for exportable product development.

Traditional phytotherapy is therefore not only a symbolic cultural value, but can also be an innovative economic resource if knowledge is properly systematized, digitized, and integrated into education and business (Sõukand et al., 2024; Quave et al., 2012; Happ & Nemes, 2025). Plant use practices documented through ethnobotanical research and community programs are suitable for building bridges between tradition and market utilization, natural resources and the modern health industry, and local knowledge and global sustainability goals. The aim of our research is to explore the social, identity, and economic factors that support or hinder the repositioning of traditional herbal medicine today, with a particular focus on the role of phytotherapy in health awareness and sustainable economics. The study seeks to answer the question of how traditional herbal knowledge can be utilized in the context of the modern economy and health policy in a way that preserves its cultural authenticity while contributing to local development, sustainable healthcare, and the green economy.

LITERATURE REVIEW

Active Ingredients of Medicinal Plants and their Role in Health Preservation

Herbs were already known and used by our ancestors, based on knowledge gained through experience. The Hungarians also used the healing power of plants during the conquest of the Carpathian Basin, and the cultivation of medicinal herbs gained new momentum in the 19th century through monastery gardens. These plants later appeared in home gardens and then in agricultural production, which laid the foundation for the development of medicinal plant research and education. Hungary's favorable climate allows for the cultivation of many medicinal plants rich in active ingredients, which have significant industrial and medicinal uses. The anti-inflammatory effects of common yarrow (Achillea millefolium) are primarily due to its flavonoid and sesquiterpene lactone content (Benedek & Kopp, 2007). The antimicrobial, blood pressure-lowering, and cholesterol-lowering properties of garlic (Allium sativum) are provided by allicin, alliin, and other sulfur compounds (Bayan et al., 2014). The immune-boosting effect of purple coneflower (Echinacea purpurea) is provided by polysaccharides, caffeic acid derivatives, and alkylamides (Woelkart & Bauer, 2007). Safflower (Carthamus tinctorius) contains flavonoids, vitamin E, and polyunsaturated fatty acids, which help improve circulation and reduce inflammation (Asgarpanah & Kazemivash, 2013). Chamomile (Matricaria chamomilla) is rich in sesquiterpenes (e.g., chamazulene), flavonoids, and essential oils, which give it anti-inflammatory, antispasmodic, and sedative effects (Srivastava et al., 2010). Due to its antioxidant and neuroprotective properties, medicinal sage (*Salvia officinalis)* may not only have anti-inflammatory effects, but also support cognitive functions (Perry et al., 2003).

Medicinal or Aromatic Plant

There are many plants that we use as spices in everyday cooking, but their active ingredients also give them medically proven healing properties. These medicinal plants cross the line between spice and medicine and play a key role in health-conscious nutrition, prevention, and even, in some cases, complementary therapy.
With its yellow color and earthy, slightly pungent aroma, turmeric (*Curcuma longa*) is a staple spice in South Asian cuisine. At the same time, its active ingredient, curcumin, has scientifically documented anti-inflammatory, antioxidant, and liver-protective effects, and its role in metabolic syndrome and neurodegenerative diseases is also being investigated (Hewlings & Kalman, 2017). Ginger (*Zingiber officinale) is* a popular spice in both fresh and dried form due to its distinctive, pungent flavor. In addition, its active ingredients, such as gingerols, have anti-nausea, anti-inflammatory, and digestive properties, which have been confirmed in human trials (Senapati et al., 2025). Peppermint (*Mentha piperita)* is not only a refreshing-tasting, popular tea ingredient, but is also known for its antispasmodic, digestive, and antimicrobial effects. Essential oils, especially menthol, are responsible for its pharmacological effects (Senapati et al., 2025). The aromatic leaves of thyme (*Thymus vulgaris)* are excellent for flavoring meat dishes, but its essential oils also have antimicrobial, expectorant, and immunomodulatory effects. It is used in folk medicine to clear the respiratory tract, and modern research supports this use (Acharya et al., 2024). The fresh leaves of basil (*Ocimum basilicum)* are an essential ingredient in many cuisines, but its leaves also contain carvacrol and eugenol, which have anti-inflammatory and antibacterial effects. These properties may also contribute to its medical applications (Cozzolino et al., 2024). The aromatic fruits of fennel (*Foeniculum vulgare)* are used to flavor baked goods and beverages, while their digestive, antispasmodic, and carminative effects are also supported by phytotherapeutic sources (Cozzolino et al., 2024).

New faces of Phytotherapy: Self-Care, Tradition, and Social Resilience

Over the past decade, herbal-based therapies have undergone a significant reinterpretation in the context of global health awareness and an aging population. Phytotherapy is increasingly moving beyond the concept of complementary treatment: in social and clinical discourse, it has become a preventive alternative for the treatment of chronic but non-acute complaints such as sleep disorders, mild joint pain, or cardiovascular discomfort (Wayal et al., 2025). The growing interest in natural therapies can be explained not only by the rise of the idea of self-care, but also by the fact that the population is becoming increasingly conscious of reducing the risks of drug dependence and drug interactions, especially among the older age groups, where the risk of polypharmacy is significant (Huang et al., 2024).
The use of medicinal plants is not only a pharmacological issue, but also a deeply cultural one. The social embeddedness of phytotherapy is linked to health beliefs, cultural practices, and lifestyle preferences. In many communities, the use of medicinal plants is a means of transmitting traditional knowledge: not only trust in the active ingredients, but also their natural origin, local collection methods, and the possibility of self-treatment contribute to their social acceptance (Guo et al., 2021; Lee et al., 2020). The COVID-19 pandemic has led to increased interest in self-care practices worldwide, particularly in the use of medicinal plants. According to a Vietnamese cross-sectional study, a significant proportion of the population turned to phytotherapeutic solutions during the pandemic, emphasizing the importance of trust in medicinal plants, accessibility, and natural origin (Nguyen et al., 2021). Similar results were found in a European study that analyzed the use of complementary medicine for self-care and lifestyle during the pandemic. The research pointed out that these practices not only served health protection purposes but also became tools for rebuilding community cohesion and social trust (Jeitler et al., 2023).. Furthermore, a community-based survey in the United Kingdom and Italy found that the home preparation of herbal foods and beverages during the pandemic not only served to maintain health, but also served to strengthen social support, preserving traditions, and strengthening shared experiences (Pieroni et al., 2020; Darabos et al., 2024). In this context, phytotherapy can be interpreted not only as a health-related act, but also as an identity-building and symbolic practice, especially in marginalized or traditional communities (Gyurián Nagy, 2025).

Medicinal Plants in Hungarian and Global Folklore

Medicinal plants in folklore go far beyond their medicinal function: they are fundamental motifs of community identity, female knowledge, and symbolic worldviews. In the traditions of many peoples, plants are associated with the cycles of birth, death, love, and fertility, while also having spiritual significance. In Hungarian folk tradition, rosemary, elderberry, lavender, and yarrow play a prominent role in rituals related to women's life cycles and mourning. Rosemary was the plant of fidelity and remembrance: a symbolic accessory in bridal wreaths, wedding songs, and funeral ceremonies (Pinke & Kapcsándi, 2022). Yarrow and elderberry were associated with the knowledge of healing women and childbirth rituals, while lavender appeared as a metaphor for purity, protection, and female space. Plant symbolism is common in Hungarian folk ornamentation—on ceiling panels, painted

furniture, and dowry chests—with tulip, tree of life, and rosemary motifs symbolizing female roles and the cycle of family life (Babai & Szépligeti, 2021). These motifs also marked the spiritual boundaries of women's spaces, where nature and the transcendent world were connected.

According to ethnobotanical research, knowledge of plant use has been passed down as a living tradition, especially in Hungarian communities across the border, such as in the Csángó and Székely villages, where knowledge related to plants also had an identity-forming power (Papp & Birkás-Frendl, 2013; Papp & Bencsik, 2014). Hungarian traditions fit well with the symbolism of medicinal plants in European folklore. Rue, mint, sage, and rosemary were symbols of female purity, fertility, and death in Eastern and Central Europe (Kujawska & Łuczaj, 2017).

In Lithuanian culture, rue is a plant used in bridal wreaths and mourning rituals, while rosemary appeared as a scent of fidelity and remembrance. In Romanian folklore, sage and mountain tea (Sideritis) are part of funeral and religious rites in which women's communities actively participated (Petran & Dragos, 2020). Along the Carpathians, the symbolism of medicinal and sacred plants carried meanings that transcended cultures (Kozlowska & Wagner, 2018). In Scandinavian and Germanic mythology, basil, thyme, and rosemary fit into the cosmology of the "tree of life" as protectors of the home or plants of remembrance after death (Svanberg & Łuczaj, 2011).

In the Mediterranean region, especially in Sicily and Spain, lavender, basil, and mint are ritual elements of women's processions, symbols of purity and blessing (Buttitta, 2023). Medicinal plants are rooted in the depths of human culture, where the intertwined dimensions of health, spirituality, and community identity appear. In modernity, these traditions take on new meaning: they become key concepts of eco-identity, sustainability, and self-managed health. Today, phytotherapy is not only a medical practice but also a form of cultural self-expression, where traditional plant use and digital knowledge sources meet. The following chapter examines the process of this modern transformation: how ancient knowledge of medicinal plants fits into the new world of urban, ecological life strategies.

The economic significance and innovation potential of herbal use

The economic evaluation of phytotherapy has become increasingly important in recent years, as herbal products and services have emerged not only as an alternative to conventional healthcare, but also as a growing market segment in the global and domestic health industry. The use of medicinal plants is thus not merely a cultural or health practice, but can increasingly be interpreted as a sustainable economic resource, especially in rural and ecotourism areas. The WHO's Traditional Medicine Strategy 2014–2023 also emphasizes that the economic exploitation of traditional knowledge can not only serve to optimize healthcare costs, but also create opportunities for the development of local income-generating sectors (World Health Organization, 2013). The production, distribution, and certification of phytotherapeutic products—from cultivation to processing—can contribute significantly to local value creation, especially if the scientifically proven therapeutic potential of domestic plant species is also exploited (Pieroni et al., 2020; Quave & Pieroni, 2015; Berde et al., 2025; Kozma et al., 2025). The growing global demand for natural health products (Huang et al., 2024; Nguyen et al., 2021; Szabó-Szentgróti et al., 2025; Kőmíves et al., 2024) points to the fact that herbal-based solutions not only play a role in prevention and the alleviation of psychosomatic complaints, but also offer a marketable alternative to or supplement for the pharmaceutical industry. This trend is particularly relevant among the middle class, which struggles with high drug costs, and eco-conscious consumers, where the "natural = safe" narrative can also be interpreted as a form of economic rationality (Cuzzolin, Benoni, & Donati, 2005). Local industries based on medicinal plants—cultivation, processing, product development, quality certification—can promote the diversification of rural employment, especially in disadvantaged areas. The systematization and digitization of ethnobotanical knowledge can support not only cultural preservation but also innovation in the health industry (Petran et al., 2020).

The spread of home herbal medicine use also highlights the economic role of self-sufficiency and self-care, which can reduce the burden on the public health system, especially in health policies focused on prevention (Jeitler et al., 2023; Wayal et al., 2025; Keller & Gombos, 2025). Phytotherapy can thus be interpreted as part of a "green economic transition," where health, nature conservation, and local economic development are linked in mutually reinforcing dimensions. This is reinforced by research examining the economic and social impacts of herbal self-care during the pandemic (Pieroni et al., 2020; Jeitler et al., 2023).

Overall, the economic potential of herbal use can be interpreted on three levels:

- **Micro level**: household cost reduction, personal health investment, independent health management;
- **Mesolevel**: SME sector development, employment expansion, local product diversification;
- **Macro level**: sustainability of the healthcare system, national heritage-based economic development, strengthening export capacity.

Our research aims to further break down this complex framework: how can traditional herbal medicine become an economically competitive and culturally authentic element of a sustainable health industry ecosystem?

Methodology

The research is qualitative in nature and is based on semi-structured in-depth interviews aimed at exploring personal experiences, beliefs, and cultural patterns related to the use of medicinal plants. The method provided an opportunity for participants to talk about their relationship with natural therapies, their sources of trust, and the socio-cultural factors that influence the maintenance or rejection of this practice, based on their own life situations. The three interviewees were selected specifically to ensure diversity:

- the first subject represents traditional knowledge of folk herbal medicine, which has been passed down through generations within the family;
- the second subject is a conscious, urban woman who, despite her modern lifestyle, strives to return to natural solutions,
- the third subject is a male manager who rejects the use of medication but feels a strong affinity for Eastern, especially Chinese, medical philosophy and considers it key to maintaining modern vitality.

The conversations took place in a semi-structured format, based on predetermined but flexible questions. The focus was on the purposes of herbal medicine use, sources of trust and credibility, methods of obtaining information, accessibility, and opportunities for institutional integration.
The qualitative research seeks answers **to** the following **research questions (RQ)**:
RQ1: What role does the use of medicinal herbs play in individuals' everyday lives, and how is this related to personal or family traditions?
RQ2: What are the sources of trust in natural therapies, and how does the assessment of credibility vary among subjects with different social and educational backgrounds?
RQ3: How does the search for balance between natural remedies and modern lifestyles manifest itself, especially among subjects with a conscious consumer and managerial mindset?
RQ4: What impact do Eastern philosophies and healing traditions (e.g., Chinese phytotherapy) have on Western and Hungarian ideas about natural health preservation?
RQ5: What factors influence the social acceptance of herbal medicine use, and how do subjects see its place in future health preservation models?

QUALITATIVE EXPLORATION OF ATTITUDES TOWARD HERBAL MEDICINE USE

Traditional knowledge: Family heritage and closeness to nature

Based on the accounts of an interviewee in his seventies living in a village in western Hungary, a deeply rooted, traditional attitude towards the use of medicinal herbs emerges, which is closely linked to family heritage and closeness to nature. Since childhood, he has experienced the presence of medicinal herbs as a natural environment: his mother and grandmother also used various "herbs" to alleviate everyday ailments. According to her, "when we were children, we didn't rush to the doctor if something was wrong. If our throats hurt, my mother would steam them with chamomile, and if we caught a cold, we would get linden tea, and that was natural." She therefore did not experience the use of medicinal herbs as a conscious decision, but as an integral part of life – this fits well with the question posed in RQ1 about the role of medicinal herbs in everyday life and how they relate to tradition. During our conversation, she repeatedly returned to the idea that "nature has everything, you just have to know where to look for it" and that her relationship with medicinal herbs is largely determined by her mother's legacy and her own life experience. She says she still likes to use natural remedies for colds, digestive problems, and sleep issues, but she's worried that "young people rarely recognize plants anymore and often choose store-bought filters over wild mint."
For her, the main sources of trust are experience and family certainty—this is a direct response to the question asked in RQ2, which focused on the assessment of credibility and sources of trust. "I don't believe in advertising, but in what I've already tried," she says. She sees the relationship between medicine and the use of medicinal herbs not as exclusive, but as complementary: she first looks for a natural solution, and only if that doesn't work does she turn to a doctor. She considers it important that "herbal medicine should not be a fad, but knowledge," thus emphasizing the importance of credibility and the transfer of knowledge across generations. The theme of balance between natural remedies and modern lifestyles, which is at the heart of question RQ3, also features prominently. Although she lives in the countryside, she says that the old fields have been built up and the areas sprayed, making it increasingly difficult to obtain plants she has collected herself. For this reason, she is often forced to buy at the market or in organic shops, but she has reservations: "I don't know where they are harvested from and whether

they are really clean." Nevertheless, she consciously strives to pass on her knowledge: every summer, she holds a "herbal day" for her grandchildren, where she teaches them to recognize lemon balm, nettles, and yarrow.
She is rather reserved, though not dismissive, in her attitude toward Eastern medicinal traditions, which is also examined in question RQ4. According to her, "she has heard about it, and there must be some truth in it," but she prefers local nature: "I don't need Chinese tea when mint grows here too." At the same time, she notes that city dwellers may turn to Eastern approaches precisely because they have lost touch with their own traditions. Regarding the social acceptance and future of herbal medicine—in connection with the theme of RQ5—she believes that although "herbal medicine has become fashionable," it often appears in a superficial form. She thinks that knowledge of the basics is key: "Not everyone needs to be a herbalist, but it would be good if children knew what elderberry or chamomile is." She emphasizes that folk knowledge is not opposed to modern medicine, but can complement it – and the two "could be a force together."

Conscious Urban Consumer: The search for Authentic Sources and Balance

The second interviewee is a woman in her early forties with two children who works in an office and lives in a big city. Although she does not consider herself a "gatherer type," it is important to her to know the origin and effects of medicinal herbs: "I'm not the type to gather herbs myself, but I like to know what I'm putting on myself or drinking." This conscious but urban attitude highlights how herbal medicine is used in modern city life—which is directly related to the question posed in RQ3: how does natural medicine fit into today's lifestyle? She uses herbs primarily for muscle pain, colds, and stress relief: "Because of my sedentary job, I sometimes feel like I'm carrying stones in my back. When that happens, I rub rosemary or black comfrey cream on it, and it really feels better by evening." Linden tea, elderberry syrup, and honey thyme tea are mainly used for children. This is where the answer to RQ1 comes in: the use of medicinal herbs is integrated into everyday life not only as a tradition but also as a conscious decision. Although her childhood memories are connected to her grandmother, she says that her current knowledge is not derived from family heritage but from internet sources, books, and pharmacy information.
RQ2, which concerns sources of trust and the assessment of credibility, also features prominently. Her favorite brands are Herbária and Naturland, which she prefers because of their "domestic origin and known quality." Medical background is important to her, especially when it comes to children: "I like it when something has a medical background, or at least has been tested in a laboratory." At the same time, she rejects products from unreliable internet sources. With this attitude, she tries to find a balance between "naturalness" and "safety," emphasizing: "Something may be natural, but it still matters where it comes from. I think quality is the key."
Herbs also have ritual significance in the management of everyday stress. For her, drinking lemon balm, lavender, or valerian tea has not only a physiological but also a psychological balancing effect. "This is not always because of the active ingredient, but because it slows you down. While the tea is brewing, there is a moment of silence." This approach fits in with the question examined in RQ3, namely that natural remedies often serve not only a healing function, but also a lifestyle balancing function. Her attitude toward Eastern medical traditions is nuanced: she is both open-minded and cautious. Although she has tried Chinese teas, she has not made them a habit, mainly because of their taste. At the same time, she appreciates the holistic approach of Eastern philosophy: "I like the philosophy—that everything is connected and the body cannot be broken down into parts." The need to combine Western and Eastern medicine ("medicine, but naturally") highlights the interviewee's desire to strike a balance between cultural traditions – which echoes question RQ4: what role do non-Western medical traditions play in the attitudes of Hungarian consumers? Finally, he also reflects on the social context: in his opinion, the use of medicinal herbs is now "fashionable, but changing in a good direction." He believes that natural products are increasingly seen as a sign of awareness in society, for example through changes in tea drinking habits at work. The question posed by RQ5—how consumers view the social acceptance and future of herbal medicine use—indicates a positive shift in this narrative. At the same time, she takes a critical view of the current information environment: "What I find lacking now is reliable information. If there were an independent system that certified these products, perhaps even more people would use them." According to the interview, among urban working women, herbal medicine use is not a traditional practice, but a relearned and conscious decision, in which credible sources, personal experiences, and lifestyle needs all play a role.

Hidden naturalness: Men's experiences in the shadow of performance pressure

The following interview was conducted with a man in his fifties who holds a middle management position in a multinational company. His daily life is defined by tight deadlines and the constant pressure to perform. In his own words, "you can't afford to be sick" because "fatigue is not an excuse; energy is expected." Although he had not used medicinal herbs before, in recent years he has become increasingly conscious of seeking natural alternatives to relieve stress and exhaustion. As he put it, "my colleagues start the day with coffee, but I prefer to drink ginseng tea. It works better for me." In this case, the use of medicinal herbs does not stem from family traditions, but

rather appears as a kind of personal, pragmatic decision, answering the question of what role natural remedies can play in a modern, performance-oriented lifestyle (RQ1). She does not consider herself a traditionalist, but her relationship with herbs is deeply practical: "For me, herbs are not museum pieces, but tools." She seeks authenticity not in tradition, but in experience and personal logic: "My grandmother doesn't have to know about it, it's enough for me to feel its effects." With this approach, he points out that the source of trust is not necessarily collective cultural memory, but rather individual experience, which refers to the contemporary interpretation of authenticity (RQ2). Nevertheless, he chooses carefully: he does not buy from unknown sources, but rather follows the recommendations of experts, in this case a Chinese healer.

The man's experiences clearly show how natural remedies can be integrated into a lifestyle where workplace expectations take precedence over physical and mental regeneration. Despite regular sleep disturbances, digestive complaints, and neck muscle tension, he does not resort to medication. Instead, he tries to prevent them with exercise, breathing exercises, and herbal remedies. "If I start taking medication, I'll get stuck in it. I'd rather prevent it." He keeps essential oils at the office and uses sleep-aid extracts at home—all in complete secrecy, even from his family. This secrecy highlights the difficulties of integrating natural remedies into a modern, masculine lifestyle (RQ3). His interest has turned to Eastern medicine: he regularly attends acupuncture treatments and considers it particularly important that there, "they look at the person as a whole, not just the symptom." He feels that the Chinese medical system is better suited to the life he wants to live: disciplined, but not artificial. At the same time, he emphasized that it is difficult to talk openly about these experiences in Hungary, especially in a doctor's office or workplace. This experience confirms that the influence of Eastern and other alternative medical traditions is present, but often hidden, outside of public discourse (RQ4). In his view, society still associates natural remedies more with female roles. They are less acceptable for men, especially in an open form. "Men should be tough, not smearing themselves with cream," he says. He believes that in the future, discreet but credible communication that specifically addresses men could help. This highlights how social acceptance, or lack thereof, can limit the spread of natural remedies and how their future potential could be expanded through appropriate information and targeted communication (RQ5).

DISCUSSION

Based on qualitative interviews, we identified three different patterns of attitudes among herbal medicine users, which took shape in the following types: (1) traditionalists seeking to revive old customs, (2) conscious consumers, and (3) secretly natural, modern men. This typology is not based on exclusive categories, but rather on representative patterns that can be interpreted in social and economic terms, providing insight into the cultural embeddedness of attitudes toward natural remedies and consumer decisions. The research did not aim to create a closed cluster system, but rather to explore attitudes arising from different life situations and social environments, interwoven with economic rationality. Taking into account the different social statuses, access, and consumption motivations of the three actors, it became clear that the use of medicinal herbs can be interpreted not only as a health or cultural decision, but also as an economic one. Trust in naturalness—which overrides fears of side effects—is fueled not only by cultural traditions, but also by the interaction between access to healthcare, drug prices, and demands for sustainable consumption. All participants considered herbal preparations to be safer than synthetic drugs, in line with the European trend that the "natural = safe" narrative is one of the main bases for the legitimacy of phytotherapy (Cuzzolin, Benoni, & Donati, 2005). In contrast, the literature increasingly draws attention to the potential side effects of medicinal plants and the risks of interaction (Posadzki et al., 2013; Bonilla et al., 2023), suggesting that there may be a gap between lay consumer confidence and scientific risk assessment.

At the same time, the use of medicinal plants goes beyond health indications. The participants' reports showed that plant products also play a preventive, psychological, and lifestyle-stabilizing role, such as stress management, energy level maintenance, or the need to connect with nature. This holistic approach fits well with global trends in the wellness and health industry, which increasingly interpret consumer decisions aimed at physical and mental balance as "health investments" (Berkman, 2017; Terry, 2011). The purchase of natural products is therefore not merely a matter of satisfying a need, but can also be an identity-building economic act linked to social status.

Multi-source knowledge acquisition—that is, combining personal, family, community, medical, and online knowledge—also has economic implications. This diversification of knowledge reduces information asymmetry and enables independent health management based on value for money, which is particularly relevant among middle-class or distrustful segments of the population (Posadzki et al., 2013). Consumers thus employ a kind of "hybrid knowledge management" strategy, in which economic rationality (availability, price, long-term cost-effectiveness) and emotional identification (tradition, trust, naturalness) both play a role. In the case of the third type, identified as the hidden natural modern man, the use of medicinal herbs becomes a hidden, intimate practice that does not fit closely with Western concepts of masculinity. However, his motivation can also be interpreted

from an economic perspective: openness to holistic health concepts, interest in Eastern medicine, and the search for alternative therapies all point to a growing market segment for individualized, premium-segment consumption (Arena, 2025). In this segment, naturalness is not necessarily seen as a preservation of tradition, but as a conscious, spiritual investment in health. Overall, it can be said that the economic dimensions of herbal medicine use—whether in terms of optimizing healthcare spending, market demand for natural products, or knowledge management for independent health management—can be well captured through qualitative attitude patterns. The results suggest that phytotherapy is a practice that is deeply embedded not only culturally but also economically, and its analysis can contribute to a complex understanding of the green health industry and sustainable consumption.

CONCLUSION

Based on the types and common patterns identified in the research, it is clear that the use of medicinal herbs can be interpreted not only as a health factor, but also as an identity, cultural, and lifestyle factor, which also has indirect economic significance. The spread of phytotherapy is not just a medical issue, but is embedded in consumer attitudes related to naturalness, independence, and safety—dimensions that can directly influence demand for natural health products and services. Effective promotion and market education cannot be reduced to traditional information campaigns. Rather, it is necessary to develop comprehensive communication and training strategies that respect the role of lay knowledge while promoting professionally sound, responsible consumer decision-making. In the long term, this can contribute to the transparency and sustainable growth of the herbal medicine market, especially if traditional knowledge is not displaced but integrated into modern practices.

Cultural heritage—especially the plant knowledge passed down through generations in rural communities—not only strengthens identity but can also be a source of consumer confidence in natural therapies. The preference for domestic medicinal plant species – provided their therapeutic effects can be validated – not only offers ecological and sustainability benefits, but also brings economic benefits by replacing imports. This also strengthens the competitiveness of domestic small producers, family businesses, and the medicinal herb industry, while contributing to the protection of local ecosystems and the preservation of national values. This synergistic approach justifies the integration of the practical and cultural aspects of phytotherapy into the training of healthcare professionals, reducing the gap between alternative and conventional medicine. The spread of natural therapies may become a key factor in the health culture of the future, not only from a health perspective, but also in terms of economic sustainability and social cohesion. Although this study does not include an economic assessment or statistical summary, the qualitative validity of the results provides a basis for further action. The next phase of the research will involve a supplementary analysis based on quantitative data collection, which will examine the economic motivations, prevalence, and potential market impacts of decisions related to the use of medicinal herbs.

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