

Integrating Naturopathic Principles into Modern Pharmacy Practice: Opportunities and Challenges for Patient-Centered Care

Emil Arca DPA, RPh
Philippine Women's University

Abstract

The increasing global interest in complementary and integrative healthcare has prompted healthcare practitioners to investigate more holistic methods of patient care. This narrative review explores the incorporation of naturopathic principles into modern pharmacy practice, emphasizing the related opportunities, challenges, and policy ramifications. An examination of pertinent academic literature on alternative medicine, integrative healthcare, and pharmacy practice was conducted to explore the conceptual connection between naturopathic philosophy and pharmaceutical care. The findings indicate that incorporating naturopathic concepts into pharmacy practice could improve patient-centered care by fostering preventative health practices, lifestyle modifications, and holistic treatment methods. Nonetheless, several hurdles persist, such as inadequate formal education in alternative medicine for pharmacists, regulatory impediments, and possible drug-herb interactions. The analysis highlights the necessity for evidence-based integration, interdisciplinary collaboration, and enhanced training frameworks to facilitate the prudent incorporation of naturopathic principles into modern pharmacy practice.

Keywords: Naturopathy; Integrative Pharmacy; Complementary Medicine; Pharmaceutical Care; Patient-Centered Care

1. Introduction

The increasing global interest in Complementary and Alternative Medicine (CAM) indicates a broader shift towards holistic and patient-centered healthcare approaches (World Health Organization, 2019). Herbal remedies, nutritional supplements, and other alternative health products are used alongside conventional medicine globally (Barnes, Bloom, & Nahin, 2008). Interest in lifestyle modification, preventive care, and patient-centered healthcare has grown significantly in recent years. Naturopathy is a prominent form of Complementary and Alternative Medicine (CAM). Natural healing, disease prevention, and treating causes rather than symptoms are its focus (Steel et al., 2018b). Naturopathy stresses lifestyle modification, holistic care, and natural remedies. The function of pharmacists has also grown. Pharmacists

*Corresponding Author Email: emilarca2@gmail.com

Published: 07 March 2026

DOI: <https://doi.org/10.70558/IJSSR.2026.v3.i2.30904>

Copyright © 2026 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

increasingly oversee drug therapy, patient education, chronic illness management, and preventative healthcare (Gregory & Austin, 2021).

Pharmacists often advise patients on herbal medicines and food supplements; thus, naturopathic principles may improve patient care. Naturopathic medicine is a prominent form of Complementary and Alternative Medicine (CAM) that emphasizes natural healing, preventive care, and the identification of the underlying causes of disease (Wardle & Adams, 2014). Pharmacy has undergone substantial transformation in recent decades. Patient-centered care has supplanted product-centered drug delivery in contemporary pharmacy practice. Pharmacists, as accessible healthcare experts, aid patients in making informed decisions regarding pharmaceutical and non-pharmaceutical therapies. Research indicates that numerous individuals fail to inform their physicians about their usage of complementary therapies unless prompted. This may jeopardize patient safety and medication management (Kennedy, Wang, & Wu, 2008).

Healthcare organizations using integrated care models ideally position pharmacists to facilitate the integration of traditional pharmacotherapy and natural health methodologies. Integrative healthcare methodologies employ evidence-based conventional medicine alongside suitable complementary therapies to enhance patient outcomes and healthcare delivery (Maizes, Rakel, & Niemiec, 2009). Employing naturopathic principles in pharmacy may enable pharmacists to advocate for holistic, patient-centered care while upholding scientific integrity and professional accountability. The study examines the incorporation of naturopathic approaches by pharmacists within the context of evidence-based practice, pharmaceutical safety, and patient-centered care.

Recent studies demonstrate the expanding global use of Complementary and Alternative Medicine (CAM) and the necessity for safe integration into healthcare systems. Herbal and alternative medicine use is rising across varied patient populations, often alongside conventional therapies, creating herb–drug interactions and patient safety issues (Al-Masri et al., 2025). Due to growing usage of natural and pharmaceutical medicines, ongoing research highlights drug-herb interactions as a major clinical problem in primary care (M et al., 2025). Studies reveal that evidence-based complementary medicine offers potential treatment effects, but clinical integration and standardization are lacking (Mortada et al., 2024). Many patients acknowledge the importance of herb–drug interactions, but many lack adequate knowledge and expert guidance (Albassam et al., 2025). These findings underline the importance of pharmacists in ensuring safe, evidence-based complementary therapy use in modern healthcare systems.

The scholarly literature has not thoroughly investigated pharmacists' potential role in incorporating naturopathic concepts into current pharmacy practice, despite the expanding global interest in complementary and integrative care. Most modern research focuses on herbal medicine, patient disclosure of complementary therapy use, or integrative healthcare paradigms. However, little research has studied how naturopathic principles may affect patient-centered pharmacological therapy and preventative health measures in pharmacies. This gap calls for scholarly research into the conceptual relationship between naturopathic philosophy and modern pharmacology. Furthermore, new clinical and pharmacological

studies indicate that herbal remedies are often taken with prescription drugs, which can lead to pharmacodynamic and pharmacokinetic interactions and potentially dangerous side effects (Spanakis et al., 2025). The results of this study highlight the importance of pharmacists and other healthcare providers being more vigilant in their efforts to detect and manage herb-drug interactions for the benefit of their patients.

This narrative review examines the potential integration of naturopathic principles into modern pharmacy practice, focusing on opportunities, challenges, and policy implications. The growing overlap between traditional pharmacotherapy and complementary medicine highlights the pressing necessity for pharmacists to implement integrative, evidence-based methodologies in patient care.

2. Methodology

The search included 2000–2025 publications on “naturopathy,” “herbal medicine,” “integrative pharmacy,” and “herb–drug interactions.” This study synthesizes existing literature on naturopathy, supplementary medicine, and modern pharmacy. Narrative reviews, unlike systematic reviews with strict inclusion criteria and statistical synthesis, allow researchers to combine theoretical frameworks, policy dialogues, and empirical evidence to better understand complex healthcare phenomena. Preference was given to peer-reviewed English-language sources with relevance to pharmacy practice, integrative healthcare, and herb–drug safety.

Peer-reviewed journal papers, public health reports, and academic publications on naturopathy, herbal medicine, CAM, and pharmaceutical care were examined for this study. Sources were identified using Google Scholar, PubMed, and other academic indexing platforms.

3. Conceptual Framework

The conceptual framework of this study is based on an integrative healthcare approach that connects naturopathic principles with pharmaceutical care.

The framework highlights three primary components:

Naturopathic Principles

- Natural healing
- Herbal medicine and natural therapies
- Lifestyle and nutritional interventions
- Preventive healthcare

Pharmaceutical Care

- Medication safety
- Patient counseling
- Therapeutic monitoring
- Evidence-based practice

Healthcare Outcomes

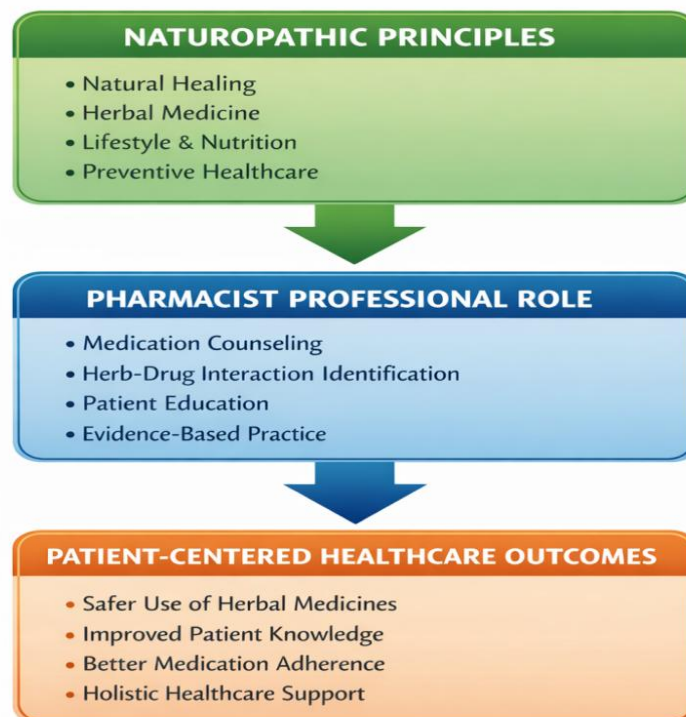
- Safer use of herbal medicines
- Improved patient education
- Reduced herb–drug interactions
- Enhanced patient-centered care

Within this framework, pharmacists serve as intermediaries between conventional pharmacotherapy and naturopathic approaches, ensuring that natural therapies are used safely and responsibly.

Figure 1. Integrative Pharmacy Framework

Conceptual framework illustrating the relationship between naturopathic principles, pharmacist professional roles, and patient-centered healthcare outcomes.

Figure 1. Integrative Pharmacy Framework



Conceptual framework illustrating the relationship between naturopathic principles, pharmacist professional roles, and patient-centered healthcare outcomes.

The framework demonstrates the interconnection among the Integrative Pharmacy Framework, naturopathic principles, the professional responsibilities of pharmacists, and patient-centered healthcare outcomes. The framework asserts that incorporating naturopathic

awareness into pharmaceutical care improves pharmacists' capacity to advocate for safe, holistic, and patient-centered healthcare practices.

- The first part of the framework is based on naturopathic principles that put a lot of emphasis on natural healing, preventive healthcare, changing one's lifestyle, and using herbal or natural therapies. These principles represent the fundamental philosophy of naturopathy, focusing on the augmentation of the body's inherent ability to maintain and restore health through natural and preventative approaches (Sarris, 2012). There has been a significant rise in patient interest in herbal medicine and natural health products, underscoring the importance of naturopathic principles in contemporary healthcare systems (Barnes, Bloom, & Nahin, 2008).
- The second part of the framework stresses that pharmacists are professionals who act as intermediaries between traditional pharmacotherapy and complementary health practices. Pharmacists are experts in pharmacology, drug safety, and medication management. This means they can help patients use both natural and pharmaceutical health products safely. In this context, pharmacists provide medication counseling, identify interactions between herbs and drugs, and teach patients how to use herbal medicines based on the best available evidence (Izzo & Ernst, 2009). Their presence in community healthcare settings solidifies their role as vital healthcare consultants for patients seeking information on natural therapies (Kwan, Hirschhorn, & Boon, 2006).
- The third part of the framework stands for patient-centered healthcare outcomes that come from successfully combining naturopathic knowledge with pharmaceutical care. These results include more knowledge for patients, safer use of herbal medicines, better adherence to medication, and more support for holistic healthcare practices. The focus of patient-centered care is on including each patient's preferences, beliefs, and health behaviors in clinical decision-making, especially when patients use both conventional and complementary and alternative medicine (Maizes, Rakel, & Niemiec, 2009).

The framework shows that pharmacists can better advocate for safe, informed, and holistic healthcare by responsibly incorporating naturopathic principles into modern pharmacy practice. Pharmacists can help patients make smart health care decisions by combining evidence-based pharmaceutical care with knowledge of complementary health practices. This can also lower the risks of herb-drug interactions or taking the wrong medication on your own.

4. Principles of Naturopathy

Naturopathy is a healthcare philosophy that emphasizes the body's inherent capacity to maintain and restore health through natural and preventive approaches. This perspective prioritizes the use of natural therapies and lifestyle interventions that support physiological balance and long-term wellness. Core principles of naturopathic medicine include the healing power of nature (*vis medicatrix naturae*), the identification and treatment of underlying

causes of illness, and a holistic approach that considers the physical, psychological, and environmental factors affecting an individual's health (Wardle & Adams, 2014). Rather than focusing solely on symptom management, naturopathy seeks to promote overall well-being by addressing the root causes of disease and encouraging preventive healthcare strategies. Natural therapies such as herbal medicine, nutritional supplementation, and lifestyle modification have been widely used in traditional healthcare systems and continue to attract growing scientific interest in contemporary medical research.

When used responsibly and with evidence, these therapies may complement traditional treatment (Sarris et al., 2012). Many healthcare systems, especially those using Complementary and Alternative Medicine (CAM), use natural health products for health promotion, chronic illness treatment, and preventative care. Herbal medicines, however natural, have risks. If misused, herbal supplements can interact with prescription drugs, change pharmacological effects, or cause side effects.

Herb–drug interactions show that individuals taking herbal supplements with conventional medication need professional monitoring (Posadzki et al., 2013). Thus, pharmacists and other healthcare professionals must carefully assess natural remedies' safety, efficacy, and potential interactions to provide responsible patient care and reduce health risks. Naturopathic lifestyle changes such as balanced nutrition, exercise, and stress management enhance long-term health.

5. Role of Pharmacists in Integrative Healthcare

Modern healthcare systems depend on pharmacists as accessible medication specialists who ensure safe and effective drug use. Increasingly, pharmacists advise patients on the proper use of prescription and non-prescription drugs. The rise of Complementary and Alternative Medicine (CAM), including herbal medicines and natural health supplements, has increased pharmacists' community and clinical duties. Many patients buy herbal and dietary supplements from pharmacies or health stores, feeling they are safe because they are natural. However, herbal medications may interact with conventional treatments and change their pharmacological properties, raising the risk of unpleasant reactions or therapeutic failure (Izzo & Ernst, 2009).

Thus, pharmacists can identify herb–drug interactions and advise complementary therapy patients using evidence. In community healthcare settings, they can provide authoritative information on safe and responsible herbal medicine and natural health product use (Kwan, Hirschhorn, & Boon, 2006). Pharmacists can reduce self-medication risks and help patients make health decisions by incorporating complementary medicine into pharmaceutical care.

Pharmacy schools and other professional training programs recognize the necessity for students to learn how to respond to patients' questions regarding Complementary and Alternative Medicine (CAM). Pharmacy programs must place increasing focus on integrative medicine, natural health products, and herbal medicine to adequately prepare students for the expanding clinical responsibilities of pharmacists (Harris et al., 2006). A recent study indicates that customer expectations and satisfaction are crucial for improving the role of community pharmacists in promoting the safe use of Complementary and Alternative Medicine (CAM) (Hijazi et al., 2021). Contemporary healthcare systems may leverage

pharmacists' knowledge in patient counseling, medication safety, and the appropriate integration of complementary medicines. Patient expectations and satisfaction are essential for enhancing the role of community pharmacists in advocating the safe utilization of Complementary and Alternative Medicine (CAM).

6. Advancement in Contemporary Pharmaceutical Practice

In recent years, the practice of pharmacy has seen a remarkable transformation, shifting its focus from products to patients (Kauser et al., 2025). Drug therapy management, chronic illness monitoring, and patient counseling are three areas where pharmacists are playing an increasingly active role (Gregory & Austin, 2021). Recent research highlights the growing role of pharmacists in healthcare prevention, public health initiatives, and multidisciplinary teams (Cadogan & Hughes, 2021). With these expanded roles, pharmacists play a crucial role in providing patient-centered healthcare.

With more and more people turning to Complementary and Alternative Medicine (CAM), pharmacists are playing an important role in informing patients about herbal remedies and other natural health products.

7. Opportunities for the Integration of Naturopathic Principles and Challenges

Complementary and Alternative Medicine (CAM) is a significant yet frequently undervalued health resource, particularly in the prevention and management of lifestyle-related chronic diseases and in addressing the health requirements of aging populations (WHO, 2019). Integrating naturopathic principles into pharmacy may have several benefits. Pharmacists can guide patients in the safe use of herbal medicines and nutritional supplements. This role is significant since many patients combine natural and conventional medications without professional supervision. Preventative healthcare can be promoted by pharmacists through healthy lifestyle advice, nutritional education, and patient education. These efforts align with naturopathic preventative medicine and pharmaceutical patient-centered care. Pharmacists can also improve integrative healthcare safety by identifying supplementary therapy risks and coordinating natural and conventional treatments.

Integrative healthcare uses evidence-based conventional medicine with appropriate complementary practices to improve health outcomes and patient satisfaction (Maizes, Rakel, & Niemiec, 2009). Studies show that pharmacists are the most accessible healthcare professionals and can advise patients on natural health product safety (Kwan, Hirschhorn, & Boon, 2006). Pharmacists can help patients avoid drug-herb interactions and promote holistic health.

However, incorporating naturopathic concepts into pharmaceutical practice presents various problems. The heterogeneity in scientific data regarding herbal medications and natural therapies' safety and efficacy is a major concern. Certain complementary medications may be difficult to integrate into conventional healthcare systems due to a lack of clinical evidence (Frass et al., 2021).

Drug-herb interactions may endanger individuals taking many medications. Pharmacists must carefully evaluate these interactions to ensure patient safety. Additionally, many

pharmacy programs provide little complementary medicine training. This training gap may hinder pharmacists' ability to confidently advise patients on naturopathic therapy. Many countries and healthcare systems regulate herbal medications and complementary health practices differently, causing regulatory issues.

8. Ethical and Professional Considerations

For ethical and professional reasons, pharmacists must provide evidence-based medical advice. As medication specialists, pharmacists must consider both mainstream and alternative treatments to keep patients healthy. Herbal remedies can help individuals stay well and avoid illness, but they must be carefully reviewed to avoid herb-drug combinations, adverse effects, and unproven products (Izzo & Ernst, 2009).

As more natural health items become available in supermarkets and pharmacies, pharmacists must provide accurate health information. Many people believe natural products are safe, yet research reveals that some herbal supplements might alter how prescribed medications act in the body, causing unforeseen clinical effects (Ekor, 2014). Thus, pharmacists must use professional judgment and evidence-based evaluation to advise patients on safe complementary therapy implementation. Pharmacists may teach consumers and make healthcare safer by providing fair, evidence-based, and scientifically sound natural health product guidance.

Pharmacists can help patients make informed health care choices and reduce self-medication risks by explaining natural therapy advantages, dangers, and interactions. Pharmacists can help modern healthcare systems employ supplementary medicine more thoughtfully.

9. Implications for Pharmacy Practice and Future Research

The incorporation of naturopathic awareness into pharmacy practice has profound implications for professional ethics, clinical practice, and future research. As the global population increasingly utilizes Complementary and Alternative Medicine (CAM), patients anticipate that pharmacists will assist them not only with prescription medications but also with herbal remedies, dietary supplements, and other natural health products. This developing expectation highlights the increasing function of pharmacists as readily available healthcare professionals who promote safe and informed medication utilization within integrative healthcare settings (Kwan, Hirschhorn, & Boon, 2006). Integrating naturopathic concepts into pharmacy practice may require further training. Continuing professional development programs may help pharmacists learn alternative medicine counseling skills. Interprofessional collaboration between pharmacists and other healthcare professionals may improve integrative healthcare patient outcomes (Bandiera et al., 2025).

Improving education and professional training in complementary and alternative medicine may enable pharmacists to respond to patient inquiries about herbal medicine and natural therapies more proficiently. Studies indicate that pharmacy students and professionals frequently desire enhanced educational exposure to complementary medicine to improve their proficiency in counseling patients regarding natural health products and possible herb-drug interactions (Harris et al., 2006). Consequently, augmenting curricular content pertaining to

integrative healthcare may enhance pharmacists' competencies in providing balanced, evidence-based counseling.

Future studies should investigate the impact of pharmacist-led counseling programs on patient safety and healthcare outcomes (Al, 2024). Empirical studies in community pharmacy settings could investigate the impact of pharmacist interventions on patient knowledge, medication adherence, and the prevention of herb-drug interactions. This research may facilitate the development of more effective integrative healthcare strategies and promote the judicious integration of complementary therapies into pharmaceutical care (Izzo & Ernst, 2009), ultimately leading to improved patient outcomes and enhanced safety in medication management.

10. Limitations of the Research

This study highlights the understanding of the potential integration of naturopathic concepts into contemporary pharmacy practice, however, it has numerous limitations. The study employs a narrative review approach, concentrating on the interpretation and synthesis of existing literature rather than direct empirical evidence. While naturopathic and herbal remedies are extensively utilized worldwide, the scientific proof substantiating the safety and efficacy of certain natural health items remains inconsistent. Although several herbal treatments have been subjected to comprehensive study, others are devoid of stringent clinical trials or standardized assessment processes.

This diversity may constrain the dependability of conclusions concerning the therapeutic efficacy of particular naturopathic therapies (Tilburt & Kaptchuk, 2008). The regulations governing herbal medicines and natural health products vary significantly across countries (Integrated Health Services (IHS), 2019). These distinctions may alter the manner in which pharmacists implement naturopathic approaches in their practice. Divergences in healthcare policies, product regulation, and pharmacy education can influence the integration of complementary medicine into conventional healthcare systems (Bodeker & Kronenberg, 2002), potentially resulting in disparate levels of acceptance and utilization of these practices by pharmacists across various regions. The study ultimately lacks direct information from pharmacists or patients concerning their experiences with naturopathic or integrative healthcare methods.

Future research may gain from empirical studies utilizing surveys or interviews with healthcare professionals and patients to enhance comprehension of real experiences with naturopathic approaches in pharmacy practice (Kwan, Hirschhorn, & Boon, 2006).

11. Conclusion

The increasing interest in natural and holistic healthcare methods offers new opportunities for incorporating naturopathic concepts into contemporary pharmacy practice. Pharmacists are distinctly qualified to facilitate patient-centered care that encompasses both pharmaceutical and complementary therapy modalities. Pharmacists can foster a more holistic and collaborative healthcare environment by advocating for the responsible use of natural remedies and providing suitable patient assistance. Pharmacists can assist patients in making

informed decisions about using natural health products and prescribed treatments at the same time by giving them medication counseling, teaching them about drugs, and finding possible interactions between herbs and drugs (Izzo & Ernst, 2009). Their role in pharmaceutical care uniquely allows them to integrate conventional medicine with complementary therapies while maintaining professional standards of evidence-based practice.

However, integrating naturopathic awareness into pharmacy practice requires a careful strategy based on scientific research, professional training, and appropriate regulatory oversight. This is necessary to ensure that pharmacists can properly assess the safety and effectiveness of these products for their patients. The inconsistency in the quality of evidence about specific herbal medications and natural therapies underscores the necessity for ongoing study and rigorous assessment of supplementary healthcare methods. Improving pharmacy school education in integrative healthcare could help pharmacists give more balanced and trustworthy information about natural health products.

Integrating naturopathic awareness into modern pharmacy practice could improve patient education, encourage safer medication use, and support a more comprehensive approach to healthcare delivery. An evidence-based and balanced approach to integrative pharmacy practice may enhance patient-centered healthcare outcomes. This study contributes to the growing discourse on integrative healthcare by highlighting the emerging role of pharmacists in ensuring the safe and evidence-based use of complementary therapies.

Policymakers and pharmacy education institutions should enhance professional training programs by integrating integrative healthcare perspectives into pharmacy education, better equipping pharmacists to address patient concerns about herbal medicines and complementary therapies. In the Philippines, Southeast Asia, traditional herbal medicine remains widely used in community health care systems. Pharmacists may thus assume a significant role in advising patients on the safe incorporation of natural medicines and pharmaceutical therapies.

References

- Al, I. a. H. a. B. E. (2024, February 4). The Impact of Clinical pharmacy services on patient safety and healthcare Quality: a Systematic review. <https://lettersinhighenergyphysics.com/index.php/LHEP/article/view/863>
- Albassam AA, Ahmed NJ, Alahmari AK. Public knowledge and awareness of drug-herb interactions: A cross-sectional study in Saudi Arabia. *Journal of Public Health Research*. 2025;14(4). doi:[10.1177/22799036251390939](https://doi.org/10.1177/22799036251390939)
- Al-Masri, M., Darwish, R., Safi, Y., Mustafa, A., Alzyoud, D., Almasri, M., Kahhaleh, B., & Khader, M. (2025). Herbal and alternative medicine use: A cross-sectional study to evaluate prevalence and predictors among cancer patients. *Frontiers in Pharmacology*. <https://doi.org/10.3389/fphar.2025.1535795>
- Bandiera, C., Ng, R., Mistry, S. K., Harris, E., Harris, M. F., & Aslani, P. (2025). The impact of interprofessional collaboration between pharmacists and community health workers on medication adherence: a systematic review. *International Journal for Equity in*

Health, 24(1), 58. <https://doi.org/10.1186/s12939-025-02415-4>

Barnes, P. M., Bloom, B., & Nahin, R. L. (2008). Complementary and alternative medicine use among adults and children in the United States. *National Health Statistics Reports*, (12), 1–23.

<https://www.cdc.gov/nchs/data/nhsr/nhsr012.pdf>

Bent, S. (2008). Herbal medicine in the United States: Review of efficacy, safety, and regulation. *Journal of General Internal Medicine*, 23(6), 854–859.

<https://doi.org/10.1007/s11606-008-0632-y>

Bodeker, G., & Kronenberg, F. (2002). A public health agenda for traditional, complementary, and alternative medicine. *American Journal of Public Health*, 92(10), 1582–1591.

<https://doi.org/10.2105/AJPH.92.10.1582>

Cadogan, C. A., & Hughes, C. M. (2021). On the frontline against COVID-19: Community pharmacists' contribution during a public health crisis. *Research in Social and Administrative Pharmacy*.

<https://doi.org/10.1016/j.sapharm.2020.03.015>

Ekor, M. (2014). The growing use of herbal medicines: Issues relating to adverse reactions and challenges in monitoring safety. *Frontiers in Pharmacology*, 4, 177.

<https://doi.org/10.3389/fphar.2013.00177>

Gregory, P. A. M., & Austin, Z. (2021). Trust in community pharmacists: A systematic review. *Research in Social and Administrative Pharmacy*.

<https://doi.org/10.1016/j.sapharm.2020.07.023>

Harris, I. M., Kingston, R. L., Rodriguez, R., & Choudary, V. (2006). Attitudes toward complementary and alternative medicine among pharmacy faculty and students. *American Journal of Pharmaceutical Education*, 70(6), 129.

<https://doi.org/10.5688/aj7006129>

Hijazi, M. A., Shatila, H., Omeich, Z., El-Lakany, A., Ela, M. A., & Naja, F. (2021). The role of pharmacists in complementary and alternative medicine in Lebanon: users' perspectives. *BMC Complementary Medicine and Therapies*, 21(1), 81. <https://doi.org/10.1186/s12906-021-03256-8>

Izzo, A. A., & Ernst, E. (2009). Interactions between herbal medicines and prescribed drugs: A systematic review. *Drugs*, 69(13), 1777–1798.

<https://doi.org/10.2165/11317010-000000000-00000>

Kauser, M. S., Syamala, P. R., Pushpalatha, M., & Harshini, K. (2025). Emerging paradigms in pharmaceutical care. *Journal of Pharmaceutical and Biological Sciences*, 13(1), 39–44. <https://doi.org/10.18231/j.jpbs.2025.007>

Kennedy, J., Wang, C., & Wu, C. (2008). Patient disclosure about herb and supplement use among adults in the United States. *Evidence-Based Complementary and Alternative*

Medicine, 5(4), 451–456.

<https://doi.org/10.1093/ecam/nem045>

- Kwan D, Hirschhorn K, Boon H. U.S. and Canadian pharmacists' attitudes, knowledge, and professional practice behaviors toward dietary supplements: a systematic review. *BMC Complement Altern Med*. 2006 Sep 19;6:31. <https://doi.org/10.1186/1472-6882-6-31>. PMID: 16984649; PMCID: PMC1586212.
- Maizes, V., Rakel, D., & Niemiec, C. (2009). Integrative medicine and patient-centered care. *Explore: The Journal of Science and Healing*, 5(5), 277–289. <https://doi.org/10.1016/j.explore.2009.06.008>
- M, S., Puthiyedath, R., & Pillai, Z. S. (2025). Drug–herb interactions: a challenge and clinical concern in primary healthcare. *Frontiers in Medicine*, 12, 1657005. <https://doi.org/10.3389/fmed.2025.1657005>
- Mortada, E. M., et al. (2024). Evidence-based complementary and alternative medicine in modern healthcare. *Frontiers in Medicine*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10857488/>
- Posadzki, P., Watson, L. and Ernst, E. (2013), Herb–drug interactions: an overview of systematic reviews. *British Journal of Clinical Pharmacology*, 75: 603-618. <https://doi.org/10.1111/j.1365-2125.2012.04350.x>
- Sarris, J. (2012). Current challenges in appraising complementary medicine evidence. *The Medical Journal of Australia*, 196(5), 310–311. <https://doi.org/10.5694/mja11.10751>
- Spanakis, M., et al. (2025). Pharmacoepidemiological data on drug–herb interactions and associated risks. *Pharmaceuticals*, 4(4), 22. <https://www.mdpi.com/2813-0618/4/4/22>
- Steel, A., McIntyre, E., Harnett, J., Foley, H., Adams, J., Sibbritt, D., Wardle, J., & Frawley, J. (2018b). Complementary medicine use in the Australian population: Results of a nationally-representative cross-sectional survey. *Scientific Reports*, 8(1), 17325. <https://doi.org/10.1038/s41598-018-35508-y>
- Wardle, J. L., & Adams, J. (2014). Indirect and non-health risks associated with complementary and alternative medicine use: An integrative review. *European Journal of Integrative Medicine*, 6(4), 409–422. <https://doi.org/10.1016/j.eujim.2014.01.001>
- World Health Organization. (2019). *WHO Global Report on Traditional and Complementary Medicine 2019*. <https://oialliance.org/wp-content/uploads/2019/06/WHO-GLOBAL-REPORT-ON-TRADITIONAL-AND-COMPLEMENTARY-MEDICINE-2019-2.pdf>