

# Phytotherapy Management

## A New Intervention for Nursing Intervention Classification

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We present a new nurse intervention: "Phytotherapy Management," which has been accepted by the editorial board of the Nursing Interventions Classification for inclusion in the 7th edition of the *Nursing Intervention Classification*. This could have implications for nursing practice and research. Methodology: Content analysis, extensive search in the literature. **KEY WORDS:** *complementary therapies, medicinal, Nursing Interventions Classification, plants, phytotherapy* *Holist Nurs Pract* 2014;28(6):381–385

### BACKGROUND AND EVOLUTION OF THE USE OF COMPLEMENTARY AND NATURAL THERAPIES IN HEALTH CARE

The basic principle of complementary therapies (CT) is holism, a key aspect of nursing practice in health care.<sup>1</sup> This approach sees the person as a whole, including their thoughts, emotional state, lifestyle, and physical and social environment and guides them toward better health. According to Halcón et al,<sup>2</sup> this holistic perspective has formed part of the philosophy and practice of nursing since the early writings on nursing by Florence Nightingale. Based on this concept, the use of medicinal plants for therapeutic purposes on human health is a practice that dates back to 2100 BC in ancient China and India.<sup>3</sup>

More recently, at the end of the 19th century and the start of the 20th century, therapeutic knowledge and practice used to improve human health, including medicinal plants and other popular practices, were excluded from the official medicine because of the lack of scientific basis. Nevertheless, since the 1980s and 1990s, the changes that have occurred in politics, economy, and health have increased the use of the complementary therapies and popular practices

around the world for the treatment of various illnesses and they are beginning to be included in scientific terms as a complement to health care practice.<sup>4</sup>

The World Health Organization (WHO) recommends the use of natural therapies and distinguishes terminologically between traditional medicine and complementary and alternative medicine (TM/CAM).<sup>5</sup> The WHO refers the term *Traditional Medicine* to developing countries (in Africa, Latin America, Southeast Asia, and/or the Western Pacific), that is, indigenous medicine (Traditional Chinese Medicine, Hindu Ayurveda, Arab Unani, and various forms of indigenous medicine). These therapies are deeply rooted in history and sometimes the only affordable source of health care. The WHO uses the term *CAM* when referring to developed countries. They are becoming increasingly popular in these countries.<sup>5</sup>

Currently, studies carried out in Australia, Europe, and the United States have shown that the use of TM/CAM is widespread; specifically, herbal therapy (HT) is one of the most commonly used in the United States.<sup>6</sup> Furthermore, the growing number of TM/CAM research centers, such as the National Center for Complementary and Alternative Medicine, reflects the increasing importance of complementary therapies.

Recent progress in health care provision has involved an increased use of complementary therapies by health care professionals in hospitals and in the community.<sup>7</sup> According to the study by Lui,<sup>8</sup> the new findings on the understanding of some complementary therapies' action mechanisms, as well as their

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effectiveness, have increased their acceptance by health care providers. The acceptance of complementary therapies is also highlighted in clinical practice.<sup>9</sup>

In the field of scientific research, there has been a very significant increase in the amount of research carried out in the TM/CAM area, specifically in HT, included in many databases. If we type the descriptor “Phytotherapy” in MEDLINE, for example, the number of articles that appear is 28 500, including randomized controlled clinical trials, as well as studies related to evidence-based medicine. There are also specific databases such as HerbMed, AMED (EBSCO), Evidence-Based Complementary and Alternative Medicine, and other databases with a wide range of scientific material on TM/CAM among which appear Memorial Sloan-Kettering Cancer Center and the National Institute for Health and Care Excellence NHS Evidence.<sup>10</sup>

Research on the therapeutic value of medicinal plants for the treatment of certain diseases has been carried out for several decades through various studies on clinical safety and efficacy. While some reviews limit their effectiveness against pain,<sup>11</sup> other studies working on depression, anxiety, sleep disorders, and other adjuvants pain symptoms reveal the extensive psychotropic activity of herbal medicinal products, which is potentially beneficial for treating these disorders.<sup>12–14</sup> Furthermore, in laboratories, herbal extracts have shown various pharmacological effects, such as anti-inflammatory, vasodilatory, antimicrobial, anticonvulsant, sedative, and antipyretic effects.<sup>15,16</sup>

## INTEGRATION OF COMPLEMENTARY AND NATURAL THERAPIES IN NURSING PRACTICE

Many nurses have referred to the use of natural therapies as an innate part of nursing care and have contributed to the progress and development of nursing knowledge based on a holistic care concept; these nurses include the following<sup>17</sup>:

- *Florence Nightingale*: She said that only Nature cures and the nurse’s role is to assist in this curative process by giving the individual the best conditions in which Nature can act. She was the first nurse to speak about the concept of energy.
- *Martha Rogers*: Considered the Person and the Environment as energy fields that interact and exchange with one another.
- *Dolores Krieger*: An advanced disciple of the foregoing, she spread a holistic approach through ther-

apeutic touch, based on the method in which the vibratory force that monitors the body is in equilibrium and unobstructed when it has returned to normal and is in good health. Therapeutic touch allows the nursing professional to detect disturbances in the patient’s perturbed field and correct them with their hand movements, thus achieving a reorganization of the general energy in the body being treated.

- *Betty Neuman*: In her opinion, the environment interacts with the individual as an open system and the latter must be in equilibrium and harmony with the individual.
- *Marie-Françoise Collière*: She considers that herbs, oils, and massages have been used by women to care for people since the beginning of humanity to maintain life, look after individuals, relieve pain, develop and maintain abilities, stimulate, tone, relax, etc. This nurse has been particularly influential in HT.
- *Jean Watson*: She speaks about the need for a higher degree of harmony between mind, body, and soul that gives rise to processes of self-consciousness and self-healing.
- *Rosette Poletti*: General care and psychiatric nurse, who has had an influence on the care culture through positive visualization and the relaxation technique.

Furthermore, Madeleine Leininger, Margaret Newman, and other nursing theorists include aspects on natural or complementary therapies.

Complementary therapies have been a part of health care and have developed quickly over the last 10 years in terms of recognition, acceptance, and use. The integration of complementary therapies in conventional medicine is a challenge for all health care sectors, but particularly for nurses, who are at the cutting edge of patient health care provision, health education, and information.<sup>7</sup> Within the context of nursing care, some nurses call these therapies “instruments,” since they are a means or tool in our hands for providing health care.<sup>18</sup> In fact, the WHO report “Nursing Practice: Report of a WHO Expert Committee” in 1996<sup>19</sup> recommends that nurses use all the resources necessary to achieve health for all and among the resources it mentions traditional and complementary methods. However, there are gaps in the knowledge of nurses. It is necessary to modify the efficacy beliefs and learning needs of higher education to facilitate the integration of CAM in nursing practice.<sup>20</sup>

In the study by Titonelli et al<sup>4</sup> on the use of medicinal plants as a therapeutic resource, the results point to the need for progress in studies on nursing

diagnoses and the prescription of medicinal plants, in order that the patient may be properly cared for by nurses and that the extension of their clinical use may be justified, with shared and interdisciplinary action in health care. The Nursing Interventions Classification (NIC)<sup>21</sup> currently includes different complementary therapies such as music therapy, aromatherapy, acupuncture, massage, and animal-assisted therapy among others, and it is clear that these therapeutic modalities have already been included in nurses' areas of competence. The Center for Nursing Classification and Clinical Effectiveness has encouraged the inclusion of other therapies.<sup>22</sup>

## LEGAL REGULATIONS ON MEDICINAL PLANTS

With regard to regulations on medicinal plants, the WHO prepared the report "National Policy on Traditional Medicine and Regulation of Herbal Medicines: Report of a WHO Global Survey,"<sup>23</sup> which reflects the variety existing in terms of legal regulations on medicinal plants in the countries surveyed. According to this report, 90 countries allow the dispensation of medicinal plants with medical claims, 62 with health claims and 49 with nutrient content claims.

In the United States, herbs are classified as dietary supplements and are regulated, under different regulations than those that govern "conventional" food products and pharmaceutical products, by the US Food and Drug Administration, by virtue of the Dietary Supplement and Health Education Act (DSHEA), enacted in 1994 and by the Final Rule for Current Good Manufacturing Practices for Dietary Supplement, enacted in 2007.<sup>24</sup>

In the European Union, Directive 2004/24/EC of the European Parliament and of the Council of March 31, 2004, establishes a community code for traditional herbal medicinal products. The Committee for Herbal Medicinal Products, which is part of the European Agency for the Evaluation of Medicinal Products, carries out tasks concerning the simplified registration and authorization of medicinal products.<sup>25</sup>

## USE OF MEDICINAL PLANTS IN NURSING CARE

An herb may be any part of a plant including its leaves, stem, flowers, roots, and seeds.<sup>26</sup> Herbal products may be raw or commercial preparations used to treat

illnesses. Raw herbal products (leaves, seeds, or teas) are more commonly used in less developed countries and commercial herbal preparations (tablets or pills) are more commonly used in developed countries.<sup>3</sup>

Furthermore, the fact that herbs are plants means that they are perceived as natural and, therefore, safe.<sup>27</sup> Nevertheless, adverse effects have been reported that derive from active biological components in herbs caused by contaminants and interaction with other drugs,<sup>23</sup> which makes it essential to know if a person is taking any herbal product that may interfere with their pharmacological medical treatment. Ginkgo Biloba, for example, is commonly used to strengthen memory and concentration to treat cognitive disabilities and dementia and improve microcirculation in peripheral arterial diseases. Ginkgo Biloba preparations may cause antiplatelet effects that may interact with the action of platelet inhibitor medication or anticoagulants.<sup>28</sup> It is important that the nurse is aware of these details, many of which are set out in the document "WHO Guidelines on Good Agricultural and Collection Practices (GACP) for Medicinal Plants."<sup>15</sup>

Many herbal products can be obtained freely (without requiring recipe) or as dietary complements, with very little advice on their appropriate use. However, a lack of knowledge about the composition, regulation, safety, and efficacy of herbs means that it is necessary for nurses to advise patients on the use of these products. Surprisingly, 30% to 40% of patients admit that they do not inform health care professionals about the use of herbal supplements, which makes this group more susceptible to potential adverse effects.<sup>3</sup> As such, treatment with herbal products should be closely assessed by nurses to help identify the benefits or adverse effects and decide whether treatment should continue. Likewise, they should be used sensibly and there should be good communication between TM/CAM suppliers, allopathic physicians, and consumers.<sup>5</sup>

## OBJECTIVES

Our group's main aim was to develop a nursing intervention that covers the competencies of the profession in patient care through HT.

As secondary objectives, we established:

- Developing a label name and an intervention definition that describes HT from the nursing field of action.
- Developing a series of nursing activities that consider nursing action in medicinal plant therapy.

## METHODOLOGY

The proposal to include the intervention “Phytotherapy Management” in the NIC was carried out by members of the “Thinking and Nursing Languages in a Social Context” research group of the Faculty of Nursing at the Catholic University of San Antonio, Murcia (Spain). This research group is focused on nursing taxonomies and holistic care and includes nursing and anthropological researchers and an agricultural engineer-nurse, all experts in nursing methodology. The lead researcher did her doctoral thesis on the comparison and analysis of Spanish and Japanese health models in relation to complementary therapies.<sup>29</sup> On this occasion, the group collaborated with a renowned member of the expert committee in Natural Therapies of the General Nursing Council of Spain.

To achieve the objectives, an extensive search on the literature on nursing care using HT, between January and May 2013, was conducted in the following databases: Cochrane, PubMed, EBSCO HOST, ProQuest, CINAHL, and ISI Web of knowledge.

For the search, we used the following terms: “Herbal Therapy,” “Herb Therapy,” “Herbal Medicine,” “Medicinal Plant,” “Phytotherapy,” “Nursing care,” “Complementary Therapy,” “Therapies Complementary,” “Alternative Therapy,” and “Alternative Therapies.”

Once we reviewed the literature on nursing care using HT and, on observing the extent of its use and the requirement to be a part of the care offered by nurses, we worked in a nominal group with various proposals for labeling, definition, and activities for intervention, which was agreed between the group members. The group was composed of 6 experts in HT and in nursing taxonomies.

After the discussion and agreement on the proposals for the labeling, definition, and activities, we developed the final intervention proposal for “Phytotherapy Management,” its definition, and activities for inclusion in the NIC.

## DISCUSSION/CONCLUSIONS

The editorial board of the NIC accepted the submission for inclusion in the 7th edition of *Nursing Intervention Classification*. It will appear in the Drug Management class (Table 1).

This will be important for holistic nursing practice, especially for pain management. The use of HT is

**TABLE 1.** New Nursing Intervention “Phytotherapy Management”

Label name: Phytotherapy Management
Definition: Guidelines and/or administration of active ingredients or substances contained in medicinal plants in any of their pharmaceutical forms and presentations, with preventive and therapeutic purposes.
Activities
Use clinical history to access the suitability of herbal therapy.
Verify whether there is a medical history of allergies to medicines and/or to medicinal plants.
Select the kind/variety to use in relation to the individual's state of health.
Facilitate the acceptance, continuity, and/or interruption in the use of medicinal plants.
Prepare medicinal herbs (eg, gather, wash, cut, cook), if necessary.
Determine the form in which the medicinal herb is administered (eg, infusion, cooking or decoction, maceration).
Determine dose and guidelines for the administration of herbal products.
Instruct the patient on the correct use of herbal products (eg, preparation, time of administration).
Explain the effects of interaction with other prescribed medicines, if necessary.
Monitor whether the expected response has occurred or potential adverse effects of medicinal herbs.
Record in the clinical history the action and response to phytotherapy.

continually expanding throughout the world, making its inclusion in nursing studies as a nursing intervention indispensable for comprehensive care to be provided for the individual.

Research in the field of complementary therapies and specifically, on the efficacy of medicinal herbs, is growing through clinical and preclinical trials that indicate the efficacy of medicinal plants for certain health states.

Because of the free sale of medicinal herbs in many parts of the world, it is now necessary to ensure their reasonable use since proper use of TM/CAM is very important for reducing associated risks and limiting the long-term health care costs.

As nurses, we have a great responsibility to care for individuals, which makes it essential to be certain about the use of herbal products that may interfere with regular medicine. As such, our intervention in phytotherapy management is paramount for the maintenance of a good state of health. Natural and complementary therapies can significantly contribute to these aims to the extent in which they are integrated

as independent nursing interventions in the context of a humanistic paradigm that includes nursing thinking.

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