# **Medical Cannabis**

## The oncology nurse's role in patient education about the effects of marijuana on cancer palliation

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BACKGROUND: Cannabis, also known as marijuana, is legal either medicinally or recreationally in 29 states and the District of Columbia, with a majority of the U.S. adult population now living in states where cannabis is legal for medicinal use. As an advocate for patient autonomy and informed choice, the oncology nurse has an ethical responsibility to educate patients about and support their use of cannabis for palliation.

**OBJECTIVES:** This article aims to discuss the human endocannabinoid system as a basis for better understanding the palliative and curative nature of cannabis as a medicine, as well as review cannabis delivery methods and the emerging role of the oncology nurse in this realm.

**METHODS:** This article examines the literature and uses a theoretical-conceptual method to explore the oncology nurse's role in supporting the use of medicinal cannabis by patients with cancer.

**FINDINGS:** The oncology nurse can play a pivotal role in supporting patients' use of cannabis for palliation.

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CANNABIS, OR MARIJUANA, IS NOW LEGAL for adult recreational and/or medicinal use in most of the United States, with 60% of the United States population residing in these states (Kasai & Trumble, 2017). Oncology nurses may have a special interest in assisting patients with using cannabis as a palliative treatment, because patients with cancer should be offered early palliation in support of better cancer treatment outcomes (Howie & Peppercorn, 2013). However, most nurses have received minimal education on how cannabis works in the body and on the nature of the oncology nurse's emerging role in guiding patients' use of cannabis for palliation. This article will briefly review the body's endocannabinoid system (ECS), explore how the oncology nurse can support patient use of cannabis as a palliative option, discuss cannabis ingestion and delivery methods, and note the proper dosing of cannabis for patients with cancer.

### The Basics of the Endocannabinoid System: Cannabis as Medicine

Nurses are ethically obligated to ensure patients' autonomy, and the ethical standards for nurses require that high-quality care be provided to all patients, including those who use cannabis for palliation. To best advise patients with cancer about the use of cannabis as a palliative medicine, nurses must have basic knowledge of the body's ECS. Although the ECS was discovered in the mid-1990s by Raphael Mechoulam, an Israeli organic chemist and professor of medical chemistry, it is not standard content in nursing curricula.

## The Endocannabinoid System

The ECS is a central regulatory system of the body; it is thought to be the body's largest receptor system, and it facilitates the body's ability to maintain homeostasis (Abrams & Guzman, 2015). ECS receptors are found in the brain, organs (liver and pancreas), connective tissues, bones, adipose tissue, nervous system, and immune system. Humans produce their own cannabinoids (endocannabinoids) on demand, namely anandamide and 2-arachidonoylglycerol (2-AG) (Abrams & Guzman, 2015). These endocannabinoids are produced as needed, and they are not stored in the body (Grant & Cahn, 2005). Like endorphins, the human body produces endocannabinoids in response to activities such as exercise ("runner's high" is from endocannabinoids, not endorphins), and osteopathic manipulation and acupuncture can enhance the body's production of cannabinoids (Kendall & Yudowski, 2017; McPartland, Guy, & Di Marzo, 2014).