

PUBLISHERS NOTE

Many Questions Surround CBD

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Welcome to our first issue of *Beyond CBD*, a special supplement to *Alternative Therapies in Health and Medicine*. This special issue is focused on building a foundation to educate practitioners and resellers about hemp based dietary supplements. Although passing the 2018 Farm Bill has legalized growing hemp¹ there are a number of gray areas that need to be addressed. One major hurdle is that the hemp grown must contain less than .3% THC.² Therefore any cannabis plant that contains more than 0.3 percent THC would be considered non-hemp cannabis—or marijuana—under federal law and would thus face no legal protection under this new legislation.

As recently as April 2 congressional leaders were still sending letters that hemp products are legal.³ Financial institutions face difficulty in separating the hemp industry from the marijuana industry. We find healthcare practitioners have some of the same concerns. Our goal is clear. We want to educate on the difference between hemp and marijuana, why hemp derived products are legal, and finally the many benefits your patients can experience using hemp based CBD supplements.

One significant myth that exists about the Farm Bill is that CBD—a nonintoxicating compound found in cannabis—is legalized. It is true that §12619 of the Farm Bill removes hemp-derived products from its Schedule I status under the Controlled Substances Act, but the legislation does not legalize CBD generally. The Farm Bill ensures that any cannabinoid—a set of chemical compounds found in the cannabis plant—derived from hemp will be legal, only if that hemp is produced in a manner consistent with the Farm Bill, associated federal regulations, association state regulations, and by a licensed grower. All other cannabinoids, produced in any other setting remain a Schedule I substance under federal law and are, thus, illegal.⁴ Now that hemp can be legally grown in the United States, it is expected that the development and sales of CBD products will grow considerably. However, a cloud continues to hover over the legal status of these products. CBD is technically illegal according to the Drug Enforcement Association (DEA), and it remains unclear when hemp will be reclassified.

Numerous chemicals are produced with hemp through the secondary metabolism. They include cannabinoids,

terpenes, and phenolic compounds.⁵ Hemp is the primary source of the compound cannabidiol (CBD), one of the 113 known cannabinoids identified in hemp plants. Although delta-9-tetrahydrocannabinol (THC) is the major active ingredient, cannabidiol (CBD) can constitute approximately 40% of cannabis extracts, depending on the plant.⁶ The CBD market in the United States was estimated at \$600 million in 2018, with projections increasing to more than \$20 billion by 2022.⁷

The FDA requires a cannabis product (hemp-derived or otherwise) that is marketed with a claim of therapeutic benefit, or with any other disease claim, to be approved by the FDA for its intended use before it may be introduced into interstate commerce. This is the same standard to which we hold any product marketed as a drug for human or animal use. Cannabis and cannabis-derived products claiming in their marketing and promotional materials that they're intended for use in the diagnosis, cure, mitigation, treatment or prevention of diseases (such as cancer, Alzheimer's disease, psychiatric disorders and diabetes) are considered new drugs or new animal drugs and must go through the FDA drug approval process for human or animal use before they are marketed in the U.S. Does the Farm Bill change anything for the CBD market? Yes, it does, because CBD derived from hemp plants with less than 0.3% tetrahydrocannabinol (THC) is perfectly legal to produce. With more than 800 companies selling CBD products, it is important for practitioners to do their homework when selecting brands to recommend to their patients. When recommending, or buying CBD, practitioners should use the same guidelines as they would for recommending any other dietary supplement. They must choose a brand that they trust. Practitioners must also examine the label and look for a company that follows strict current Good Manufacturing Practices (GMPs). They should also buy hemp products from established companies that have been operating for a long period, and they should hold certifications from outside agencies such as National Science Foundation International.

As is the case with many supplements, governmental agencies have not established a recommended daily allowance (RDA) or a common dosage for CBD. When it comes to cannabinoids, keep in mind the one universal truth: Everyone

is different. Countless variables, such as weight, diet, metabolism, genetics, environment, and product consistency, make a one-size-fits all dosage an impossibility.

The field expects to see significant research regarding the effects that cannabis, especially CBD, can have on improving many health issues. Creating products that combine synergistically with CBD provides several opportunities for clinicians and their patients. Furthermore, many opportunistic people will take advantage of consumers and practitioners by marketing products with little efficacy. Clinicians must ensure that whatever products they recommend, they understand the research behind the products provided.

Finally we look for your feedback. We hope that you find the information in this special issue informative and useful in your practice. The hemp based supplement market will be growing substantially over the next few years. Like any growth market there will be some hiccups, but we do expect hemp supplements will be a significant product in years to come. (*Altern Ther Health Med.* 2019;25(S2):4-5.)

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