

Date: 3/14/2022

Bill Number: Senate Bill 560 (SB560)

Disposition: Proponent

WRITTEN-ONLY Testimony

Name: Matt Cascio, RN, CCFP, Cannabis Nurse, Head of Canna Nurse/Concierge program at BesaMe Wellness

Interest represented: Cannabis Care Team and BesaMe Wellness

My name Matt Cascio, I've been a registered Nurse for 23 and have been involved with Cannabis Education since 2014.

Cannabis Nurses Network – Member

The American Cannabis Nurses Network – Member

Cannabis Care Team – a nurse owned company in Missouri that has trained the staff of 16 dispensary groups with the focus on cannabis education and how cannabis can benefit us medicinally.

Head of Canna Nurse/Concierge Program - BesaMe Wellness is a dispensary group in Missouri with 9 dispensaries. They know the value of providing education to their staff and to their patients and are committed to helping people in our communities.

With my involvement in these organizations as well as my jobs, I've had the opportunity to educate so many people about cannabis and its benefits. I've also witnessed some amazing things happen to patients when they brought cannabis into their lives. Cannabis made them healthier, as well as improved the quality of how they live their lives. I worked as an RN in Kansas 13 years of my career in Kansas and I know the patients there would really benefit from being able to use cannabis medicinally.

Currently, we have limited research in the USA on cannabis because of the Schedule 1 class drug that cannabis is in right along with heroin and cocaine. With that being said, there are over 27,000 research studies posted in the Medical Library of Congress (PubMed). That are available to the public to view. The research that is available shows so many positive benefits from cannabis. The cannabis plant contains cannabinoids and terpenes that have all been studied and have been shown to have many medicinal properties. There is much more to cannabis than than THC and CBD the two most well-known components of cannabis.

Here's how the patients of Kansas could benefit from THC.

- Pain Relief - analgesic properties
- Eases Nausea & Vomiting – much better than the synthetic form of the called Dronabinol that is used in Kansas for patients suffering from cancer, cachexia and other long-term medical issues
- Effective Sleep Aid
- PTSD - improves, sleep, quality of life, frequency of nightmares, hyper-arousal syndrome
- Glaucoma - decreases intra-ocular pressure
- Increases Appetite
- Protects Brain Cells - A positive THC screen is associated with decreased mortality rates in adult patients that sustained a TBI

As you see above, so many patients in Kansas could benefit by having the choice to use cannabis. There are approximately 118,198 veterans in the state of Kansas; many of them suffer from the symptoms of PTSD and can benefit from using cannabis as well.

Let's look at another cannabinoid called CBN, a by-product from THC. Provided is research showing its benefits and how it could be beneficial for the patients in Kansas.

**CBN** is derived from THC decay caused by exposure to light, heat, and oxygen after being harvested. CBN has excellent sedative benefits and is the best sleep aid of all available cannabinoids.

- **CBN's** interaction with both the CB1 and CB2 receptors causes the most powerful sedative effect of any cannabinoid. CBN's sedation effect is often used as a sleep and relaxation aid. CBN is said to cause a mild psychoactive effect like THC, but only about 10% as strong.
- **CBN** has more powerful sedative effects that may benefit acute anxiety in a way that CBD cannot.

- **CBN's** fast-acting sedation effects may make CBN a better option in situations of immediate need like a panic attack.

Some of the medicinal benefits that CBN could help the patients of Kansas with are:

**Analgesic:** CBN appears to influence the activity of neurons that are sensitive to capsaicin an ingredient found in a lot of topical pain relivers and in chili peppers. These capsaicin-sensitive nerves are important to the body's pain signaling and our perception of it.

**Antibacterial:** CBN has antibiotic-like properties and has been shown to protect against strains of MRSA that are resistant to a lot of antibiotics.

**Anti-Convulsant:** research show that CBN does have some anti-convulsant properties, but it's not as strong as CBD or THC.

**Anti-Inflammatory:** Like CBD, CBN appears to have anti-inflammatory capabilities. Research is being done on how it works to regulate our immune system and decrease inflammation in the body.

**Sleep Aid:** CBN does have powerful sedative effects and research shows even more powerful sedative properties when combined with other cannabinoids and terpenes.

**Promotes Bone Growth:** activates stem cells to make new bone cells. Also, possibly helps heal fractured bones, prevent bone loss research for osteoporosis

As you can see, THC and CBN can really provide medicinal benefits to help the patients in Kansas. There is also research on other cannabinoids like CBD, CBG, THCV, and CBC, all with medicinal benefits as well.

As mentioned earlier, Terpenes found in cannabis have medicinal benefits as well. Terpenes are found in plants, and there are around 100 in the cannabis plant. There are several terpenes that are very common and dominant in many various strains of cannabis. Here is some medicinal research on these Terpenes.

**MYRCENE:** analgesic, antibiotic, anti-inflammatory, anti-cancer, muscle relaxant, sedative. When THC, CBD, and myrcene are combined, there has been shown to be neuro protective properties and anti-inflammatory properties as well.

**BETA-CARYOPHYLLENE:** analgesic, anti-inflammatory, antimicrobial, reduces anxiety, anti-depressive effects, gastro-protective, used for addiction treatment for alcohol and cocaine. THC paired with BCP has anti-nausea effects and CBD paired with BCP has anti-inflammatory effects

**LIMONENE:** anti-anxiety, anti-depressive, anti-tumor, effective for GERD, stress reduction, anti-bacterial, anti-carcinogenic, supports immune system. It also may decrease our appetite and help to regulate weight loss when paired with CBD and THCV

**ALPHA-PINENE:** antibiotic, anti-inflammatory, anti-proliferative, bronchodilator, increased focus

**LINALOOL:** anti-anxiety, sedative, anti-depressant, analgesic, anti-oxidant

**HUMULENE:** anti-inflammatory, anti-cancer, anti-tumor, antibacterial. Humulene alone, may inhibit cancer cell growth; when it's paired with BCP, there are suspected anti-tumor properties

Qualifying conditions really need to be well thought out. We don't treat these qualifying conditions; we treat the symptoms. Many Kansas with these qualifying conditions suffer from a lot of the same symptoms: pain, inflammation, anxiety, depression, insomnia, poor appetite, seizures, muscle spasms.....all which would benefit from patients using cannabis to manage these symptoms.

The information I have provided is substantial evidence that cannabis has medicinal benefits and Kansans should be able to choose how they want to medicate themselves. In states where there is adult use or medicinal cannabis, there are less people dying from opioid deaths and less prescriptions being written for opioids. The people of Kansas deserve better than the archaic medical options that are available for them to use to take care of themselves and their families. It's your duty to watch over the people of Kansas and as an RN it's my duty to advocate for my patients. That is why I am in support of passing the SB560.

Thanks so much for your time and please feel free to contact me anytime.

Sincerely,

Matt Cascio, RN, CCFP, Cannabis Nurse

## **SOURCES**

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