

January 19, 2015

To: Members of the Committee on Public Health and Welfare
Kansas State Senate

From: Eric Fry, MD, president
Garden City

Re: Statement Concerning the Medical Use of Cannabis
SB 9 and HB 2011

Madame Chair and members of the Committee –

On behalf of the members of the Kansas Society of Eye Physicians & Surgeons (KSEPS), we are grateful to share with you the views of ophthalmologists concerning the medical use of cannabis for certain “debilitating” conditions, including glaucoma.

KSEPS is opposed to passage of legislation permitting use of cannabis for treatment of medical conditions. In particular, there simply is no evidence to support the notion that treatment of glaucoma with cannabis is effective. Indeed, we are concerned that individuals who attempt to control their glaucoma with cannabis may actually be harmed by progression of the disease which could have been managed effectively with proven therapies.

Glaucoma is a potentially blinding condition caused by elevated intraocular pressure (pressure in the eye) and associated damage to the optic nerve. Intraocular pressure varies depending on time of day, along with various activities and risk factors. Vision lost from glaucoma *cannot* be restored, so early and effective management of the disease is critical. Treatment to prevent progression of glaucoma currently exists in many formats, including: eye drops (several different kinds), laser surgery, and other intraocular surgeries to alter the eye drainage system in the effort to preserve vision. These therapies have been studied extensively and are proven to work in both the short term and long term treatment of glaucoma.

Limited studies have shown that cannabis may *temporarily* reduce intraocular pressure in up to 65% of humans, with an average reduction of intraocular pressure of 25% for a period of only a few minutes to up to three hours. This level of efficacy (regarding time) is insignificant when compared to the eye drops used to treat glaucoma which are effective at reducing eye pressure for periods of up to 24 hours.

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The American Academy of Ophthalmology's Committee on Drugs concluded that there was no scientifically verifiable evidence that the use of marijuana is safe and effective in the treatment of glaucoma. The American Glaucoma Society also has adopted a position in which it declines to endorse use of marijuana for treatment of glaucoma.

In summary, the eye physicians and surgeons of Kansas are opposed to the medical use of cannabis – as proposed in SB 9 and HB 2011 – especially for treatment of glaucoma, because:

- Cannabis is not better or safer than other proven medical and surgical options currently available to glaucoma patients;
- According to limited studies, the effects of smoked cannabis on intraocular pressure (IOP) last only up to about 3 hours, necessitating using inhaled cannabis 4 - 10 times per day, which can cause long term systemic and other side effects. Plus, there are numerous *ocular* side effects in smoking cannabis routinely throughout the day, including: conjunctival hyperemia, decreased lacrimation, double vision, etc.;
- Use of eye drops containing THC (the active ingredient in cannabis) has not been successful for a variety of reasons, and pills containing THC have significant side effects;
- Intraocular pressure is only one factor that contributes to damage to the optic nerve. There is a growing body of evidence that suggests that inadequate blood supply to the optic nerve may contribute to glaucoma damage. Since marijuana given systemically is known to *lower* blood pressure, it is possible that such an effect could be deleterious to the optic nerve in glaucoma, possibly reducing or eliminating whatever beneficial effect that may be conferred by lowering IOP through use of marijuana;
- There are many treatment regimens currently available that are proven safe and effective in the management of glaucoma. A patient using cannabis to treat glaucoma potentially may have long-term loss of vision because it is not effective in managing intraocular pressure.

Thank you for your consideration.

Members of the Kansas Society of Eye Physicians & Surgeons are ophthalmologists, medical doctors who have completed medical school, internship and a residency in ophthalmology. They are licensed under the Medical Practice Act and provide medical and surgical diagnosis and treatment of eye diseases, as well as routine vision care such as basic eye exams and prescription of eye glasses and contact lenses.