FROM OPIOID REPLACEMENT TO MANAGING CHRONIC PAIN

November 8th, 2017

Presenters:

Shayne Lynn Executive Director, Champlain Valley Dispensary/Southern Vermont Wellness

Bridget Conry Operations Director, Champlain Valley Dispensary/Southern Vermont Wellness
DISCLOSURES

Shayne Lynn is Executive Director of Champlain Valley Dispensary and Southern Vermont Wellness

Bridget Conry is Operations Director of Champlain Valley Dispensary and Southern Vermont Wellness
CBD or Cannabidiol is one of the chemical compounds found in both Cannabis and Hemp

- Hemp is a variety of the plant species Cannabis Sativa
- Non-intoxicating
- Holds therapeutic properties
- Can work synergistically with THC
- Considered Schedule 1- high potential for abuse and no accepted medical treatment use in the US
- Currently can be purchased without a medical card if it is hemp-derived and contains less than 0.3% THC (Farm Bill 2014)
- VT authorized hemp growing since 2013 & requires registration with the state
CONDITIONS

List of all conditions that CBD may help, complied by Project CBD:

Acne
ADD and ADHD
Addiction
AIDS
ALS
Alzheimer’s Disease
Anorexia
Antibiotic Resistance
Anxiety
Atherosclerosis
Arthritis
Asthma
Autism
Bipolar
Cancer
Digestive Issues
Depression
Diabetes
Endocrine Disorders
Epilepsy and Seizures
Fibromyalgia
Glaucoma
Heart Disease
Huntington’s Disease
Inflammation
Irritable Bowel Syndrome
Kidney Disease
Liver Disease
Metabolic Syndrome
Migraine
Mood Disorders
Motion Sickness
Multiple Sclerosis (MS)
Nausea
Neurodegeneration
Chronic Pain
Obesity
OCD
Osteoporosis/Bone Health
Parkinson’s Disease
Prion/Mad Cow disease
PTSD
Rheumatism
Schizophrenia
Sickle Cell Anemia
Skin Conditions
Sleep Disorders
Spinal Cord Injury
Stress
Stroke and TBI
**CB1 Present:**
- Central nervous system (brain & spine)
- Lungs
- Vascular system
- Muscles
- Gastrointestinal tract
- Reproductive organs

**CB2 Present:**
- Spleen
- Bones
- Skin

**CB1 + CB2 Present:**
- Immune system
- Liver
- Bone Marrow
- Pancreas
MEDICAL PROPERTIES OF CANNABINOIDS

*Antiemetic*- Reduces nausea and vomiting
*Anticonvulsant* – Suppresses seizure activity
*Antipsychotic* – Combats psychosis disorders
*Anxiolytic/Anti-depressant* – Combats anxiety and depression
*Anti-tumoral/Anti-cancer* – Combats tumor and cancer cells
*Antioxidant* – Combats free-radical damage
*Anti-inflammatory* – Combats inflammatory disorders

British Journal of Clinical Pharmacology, 2013
SAFETY & DRUG INTERACTIONS

Department of Health and Human Services states “no signs of toxicity or serious side effects have been observed following chronic administration of cannabidiol to healthy volunteers – even in acute doses of 700mg/day.”

- CBD is non-toxic with no known lethal overdoses
- At sufficient dosages, CBD will temporarily deactivate cytochrome P450 enzymes
- Cytochrome P450 enzymes metabolize more than 60% of pharmaceutical medications
- Check with a health care provider about drug interaction
CHRONIC PAIN

- “Use of marijuana for chronic pain, neuropathic pain, and spasticity due to multiple sclerosis is supported by high quality evidence.” - Harvard-led review, 2015-16

- Conclusive or substantial evidence found that patients who were treated with cannabinoids were more likely to experience a significant reduction in chronic pain symptoms. - National Academy of Science, Engineering and Medicine, January 2017

- A total of 1,248 (46%) of respondents reported using cannabinoids as a substitute for prescription drugs. - Journal of Pain Research, February 2017
CBD & THE OPIOID

Prepared by Adrianne Wilson-Poe, PhD, Washington University in St. Louis, School of Medicine - Department of Anesthesiology
Distributed by Congressman Earl Blumenauer

* Cannabis reduces opioid overdose mortality
* Cannabis reduces opioid consumption
* Cannabis can prevent dose escalation and the development of opioid tolerance
* Cannabis, alone or in combination with opioids, could be a first-line analgesic
* Cannabis may be a viable tool in medication-assisted relapse prevention
* CBD alleviates the anxiety that leads to drug craving
  - In human studies, CBD administration is sufficient to prevent heroin craving for at least seven days

Specific study citations can be found on cvdvt.org
DECREASE IN OPIOID DEATHS, PRESCRIPTION PAINKILLERS & HOSPITALIZATIONS

- States with medical cannabis had lower opioid-related mortality rates – a decrease of approximately 25% - JAMA Internal Medicine, 2014

- Doctors in medical marijuana states prescribed 1800 fewer painkiller prescriptions for patients a year - Health Affairs journal, 2016

- Hospitalization rates for opioid painkiller dependence and abuse dropped on average 23% after marijuana was permitted for medical purposes - Drug and Alcohol Dependence journal, April 2017
2016 Facts and Figures:

- Drug overdose is the leading cause of accidental death in the US, with 52404 lethal drug overdoses in 2015

- Opioid addiction is driving this epidemic, with 20,101 overdose deaths related to prescription pain relievers, and 12,990 deaths related to heroin in 2015

The U.S. DEA fact sheet for marijuana reports no deaths from marijuana overdose have ever been reported
Onset and duration of effects vary depending on the method of administration and the individual.
CVD/Ceres has its own in-house QC laboratory.
We have a UHPLC, Molecular Plant Sex and Pathogen testing instrumentation, moisture balance.
All Cannabinoid products including CBD are formulated and tested for potency before distribution.
DOSING

- Personalized medicine, no single ratio or product that’s right for everyone
- Experimentation is the best method
- Get to know your products and administer consistent, measurable doses
- No known adverse side effects
- Excessive amounts could be less effective than a moderate dose
Charlotte Figi:
- Child who began having seizures at three months from the intractable Dravet Syndrome (2006)
- Family eventually began treating daughter with a high CBD/low-THC strain of cannabis
- Developed by the Stanley Brothers in Colorado and now a cannabis strain and product line known as Charlotte's Web
- Story is covered in detail in Sanjay Gupta's (CNN Chief Medical Officer) three-part documentary, "Weed" (2013-2015)

GW Pharmaceuticals
- British pharmaceutical company developing primarily CBD-based products for muscle spasticity in MS (Sativex), and seizures due to treatment-resistant epilepsy syndromes including Dravet syndrome, Lennox-Gastaut syndrome (LGS), Tuberous Sclerosis Complex (TSC) and Infantile Spasms (IS) (Epidiolex)
- None are approved for the U.S. Market - though they are in Phase 3 trials for certain of the seizure disorder medications with the FDA (2017)
SHORT SELECTED HISTORY OF CANNABINOIDS

8000 BCE – Carbon tests date the use of wild hemp

2737 BCE – First recorded use of cannabis as medicine by Emperor Shen Neng of China

200 BCE – Medical cannabis used in ancient Greece as a remedy for earache, edema and inflammation

1840 CE – Queen Victoria reportedly used a hemp tincture for menstrual cramps

1850 CE – Marijuana added to the US Pharmacopeia for a long list of ailments

1889 CE – Article in The Lancet outlines use of cannabis for opium withdrawal

1970 CE – Controlled Substances Act passed - cannabis was ultimately added as Schedule 1

1996 CE – California was first state to create a medical cannabis program

2004 CE – Vermont legalizes medical cannabis
For more practitioner education information, contact Ada Puches ada@cvdvt.org