From:	Jennifer Alexander
To:	Sen Knopp; Sen Shields; Sen Steiner Hayward; Rockowitz Zena; Sennes Derek
Subject:	FW: Senate Bill 445 Testimony
Date:	Wednesday, March 11, 2015 1:29:04 PM

Senate Committee on Health Care,

I forwarded the below testimony to the M91 Joint Committee on Implementing Measure 91, but wanted to be sure you all had it for today's meeting in your committee.

Thank you,

Jennifer Alexander

From: Jennifer Alexander [mailto:mook2357@hotmail.com]
Sent: Wednesday, March 11, 2015 4:28 AM
To: Sen.LaurieMonnesAnderson@state.or.us
Cc: Sen.floydprozanski@state.or.us; sen.leebeyer@state.or.us; sen.ginnyburdick@state.or.us; sen.jeffkruse@state.or.us; Rep.kenhelm@state.or.us; Rep.andyolson@state.or.us; Sen.tedferrioli@state.or.us; Rep.annlininger@state.or.us; Rep.carlwilson@state.or.us; Rep.peterbuckley@state.or.us; adam.crawford@state.or.us; joshua.flamm@state.or.us
Subject: Senate Bill 445 Testimony

Senator MONNES ANDERSON

CC: Joint Committee on Implementing Measure 91

RE: Proposed Senate Bill 445: Required postings regarding marijuana use during pregnancy

As a mother of four children (ages 11, 15, 17 and 19), and an advocate for marijuana law reform, I feel compelled to speak up regarding the issue of required posted warnings against cannabis use during pregnancy. The specific text I take issue with is this:

> **SECTION 1. (1) A medical marijuana facility registered under ORS 475.314, and a marijuana retailer licensed under section 22, chapter 1, Oregon Laws 2015, must post at the facility or on the premises of the retail location notice of:**
>
> **(a) The harmful effects of marijuana on pregnant women; and**
>
> **(b) The potential for marijuana to cause birth defects.**

I believe strongly in education and knowledge, and I appreciate the intent of this particular bill to provide information to marijuana consumers. However, the bill intends to codify harms that are not scientifically founded. As we evolve the legal status of marijuana, we need to ensure that we maintain a firm grasp on what we know and what we still have yet to learn. I am strongly opposed to codifying a regulation that requires outlets for commercial marijuana to post unscientific claims for political purposes. It is precisely that sort of fear-based legislation that resulted in the failed policy of marijuana prohibition that has endured for decades in the first place.

I have researched the science on cannabis and pregnancy in depth, both because I am a cannabis consumer who has been pregnant four times and therefore sought my own knowledge on the subject, and because many women have contacted me privately asking for information on this subject as a result of my advocacy efforts and journalism at Examiner.com on the subject of marijuana in Oregon and beyond.

My research into this topic has demonstrated to me that many pregnant and nursing women have suffered significant societal harms as a result of their cannabis use. Many women nationwide have

lost custody of their children at birth, after their newborn child tested positive for THC, even if the mother hadn't used marijuana in months. This is because the newborn's meconium is tested for drug use and can reveal marijuana use that terminated as early as the fourth or fifth month of pregnancy – far longer than most people believe cannabis to be detectable – and often new mothers are unaware that the baby could even test positive so long after their use of marijuana was terminated or that the baby would even be tested for such use (although many hospitals do test for cannabis use as standard procedure, along with other drugs, without the knowledge of the parents).

Other women have lost custody of their healthy and happy children when circumstances have revealed that the cannabis-using mother was nursing a child who then tested positive for THC because the THC is passed through the mother's milk to the baby. Daisy Bram in California is one such well-known case, although countless other mothers face this consequence without the publicity that Daisy's case has received. And other parents find themselves in jail on charges such as criminal endangerment as a result of the belief that cannabis is harmful to the child simply because it is illegal in most of the country, regardless of any credible science to back up those claims of "endangerment" or to demonstrate any actual harms to the children involved.

Science has clearly demonstrated that the baby is exposed to cannabis via pregnant and nursing mothers who use cannabis because cannabis crosses the placenta and is present in breast milk. With this knowledge, and recognition of the severe consequences many mothers face as a result of their cannabis use, I spent a great deal of time trying to discover the potential risks for those babies. I've read a great deal of research, looking for proof of harms or detrimental impacts associated with cannabis use during pregnancy or while nursing.

One of the first discoveries I found was shocking to me; here is the article I wrote after reading a study on infant mortality in the first two years of life for drug-exposed babies published in 1997 by the American Academy of Pediatrics[i]:

http://www.examiner.com/article/marijuana-consumption-by-pregnant-women-may-reduce-infant-mortality

Unfortunately, a few of the charts I created and linked in the article are no longer connected, but the relevant information and data are all still linked. The most intriguing chart is at the top of the linked article and posted below for your reference.

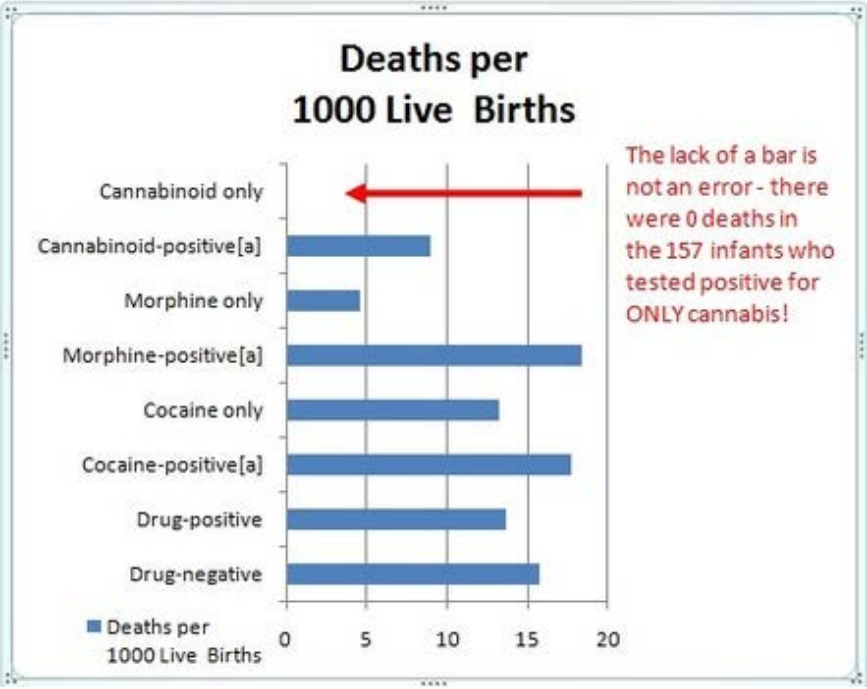
Storm Crow, who collects studies related to all things cannabis, had shared an article on this study and noted the significant difference in mortality in cannabis-positive infants as compared to the drug-negative babies (read that sentence again to ensure you understand the data presented: the cannabis-positive babies were far ***less likely to die*** in the first two years of life than the drug-negative babies, or in other words, the babies exposed to NO drugs prenatally).

The numbers, as presented in the study and shared by Storm Crow, are as follows:

> ***"No drugs at birth" deaths..... 15.7 deaths per 1000 live births***
>
> ***"Cocaine positive" deaths.....17.7 deaths per 1000 live births***
>
> ***"Opiate positive" deaths.....18.4 deaths per 1000 live births***
>
> ***"Cannabis positive" deaths.... 8.9 deaths per 1000 live births [5]***

While that data was shocking enough, what I found when I was able to get the full data charts was even more shocking; among the babies that were positive for cannabis ONLY (no cocaine nor opiates), there wasn't a single death recorded in the study.

Here is the chart I created using the full data from the study that I was able to obtain with student access available to me at that time:



Now, as a mother, I understand that death isn't the only potential risk to be considered; there are many other potential risks to be considered, so I am not claiming that this particular data is necessarily evidence of a lack of harm from cannabis use. As you can see by the linked article that I wrote, this finding raised more questions for me than answers. So I continued to research to try to find out what other risks may be linked to cannabis use by pregnant or nursing mothers.

What I found were no clear answers; studies conflict on whether marijuana is harmful or beneficial for both the baby and the mother. The endocannabinoid system is believed to play a critical role in establishing the suckling reflex that is necessary for successful breastfeeding and breastfeeding is an important bonding experience with well-known health benefits. This and other similar studies illustrate potential benefits to cannabis use in at least some cases. Further, if cannabis is being used by a mother to relieve symptoms of other health problems, including morning sickness, it is possible that the benefits could outweigh the risks in these cases, even if there were demonstrable risks to the baby. Dr. Melanie Dreher has also published extensive research from Jamaica on cannabis use by pregnant and nursing mothers since cannabis use is much more prevalent there. I am aware that these studies have already been presented to you by multiple others so I will not reiterate those findings here.

The harms presented in the studies that are intended to illustrate "risk" tend to be very inconclusive and illustrate minor risks that are often confounded by other variables such as alcohol or other drug use as well as socio-economic status; there are claims that the baby may be more "jittery" or "difficult to console" or similar fairly insignificant side-effects that are suggested to be correlated to prenatal cannabis use. The real problem with these claims is that there are just as many studies that demonstrate the exact opposite, and even some studies that seem to conflict within themselves. The only consistent thing I could find in all the studies was a lack of any direct connection between cannabis use and any subsequent problems, as all studies illustrated the confounding factors, including the ethical necessity to rely on self-reporting of drug use in human samples and the likely inaccurate reporting of other concurrent drug use among other unknown variables. Admittedly, many respectable individuals and organizations discourage cannabis use during pregnancy or while nursing based on the lack of knowledge of the potential harms that may occur – but none of the respectable sources make any attempt to suggest that cannabis has been linked to any deformities or birth defects, as the proposed bill suggests.

In fact, the only sources I can find that claim deformities or birth defects as a result of prenatal marijuana use are articles that fail to cite any studies (and instead simply claim "research suggests" or "studies have found" with no documentation on what research or studies they are relying on) and are often written poorly and clearly agenda-oriented. I have yet to find any credible research that suggests deformities or birth defects as a result of ONLY cannabis use during pregnancy. There are a

few studies that fail to differentiate alcohol or other drug use from marijuana use, which notably skews the results of the research as alcohol and various other illicit drugs have been demonstrated to cause deformities and/or birth defects, but even these studies note the confounding factors present in the study in their conclusions.

Obstetricians often recommend that pregnant and nursing mothers avoid any substances with unknown effects as a precaution. When I was pregnant, my doctor advised me against using any medication, even over-the-counter remedies, other than regular strength Tylenol (and even then, to use it minimally and only if I had a fever or severe pain, such as when I had teeth extracted). She also advised against eating foods with a lot of salt, such as deli meats, to avoid water retention, and many other health-based recommendations to ensure the best possible outcome for both myself and the baby. *These are conversations that should be had openly and honestly between a doctor and a patient.* Unfortunately, the status of marijuana as an illegal drug at the federal level, despite the evolving law reform at the state level, has resulted in continuing stigmas and fears for many pregnant women that prevent an open and honest dialogue with their health care professionals.

We still have a lot to learn about cannabis, as most research has been stifled for decades due to the prohibition of marijuana. Further, research regarding cannabis on developing fetuses is still hindered by the belief that it is unethical to intentionally expose a fetus to any substance for research purposes (a belief that also hinders research on most substances, even licit drugs, which is why most substances are contraindicated for pregnancy). As a result, I understand the intent of the proposed bill is to educate cannabis consumers and protect unborn children from unknown potential risks. That is a worthy cause and commendable.

However, it is clearly misguided to claim that the use of marijuana by pregnant or nursing mothers results in deformities or birth defects or to suggest that there are known "harmful effects" to the newborns of mothers who use cannabis, when science has failed to credibly demonstrate such harmful effects. Even if potential harmful effects are demonstrated in the future, this information would be best distributed by doctors to their patients instead of posted in retail outlets as the result of fear-based regulations implemented by the legislature.

I would instead recommend that if some sort of "warning" or posting is deemed necessary by the legislature, medical marijuana and retail marijuana outlets could be required to post something much more credible and fact-based that serves the same purpose. A simple statement could be posted that says, "If you are pregnant or nursing, be sure to openly and honestly discuss your cannabis use with your doctor to assess any potential risks to you or your unborn baby." This directs the dialogue back to the appropriate forum: between an expert medical professional and their patient in a confidential forum that takes into account the benefits and the risks on a case-by-case basis as it should be.

What has been clearly demonstrated by science is that adequate prenatal care and an open and honest relationship with your doctor has the most impact on the well-being of both the baby and the mother. Continuing the stigmatization of the use of cannabis by pregnant women will not result in a more honest dialogue with those health-care practitioners. I strongly urge you to oppose this bill in its current form, and if any such "warning" is deemed necessary, to craft a warning that encourages an honest conversation between a patient and a doctor where it should take place instead of the current proposed postings found in Senate Bill 445.

Thank you very much for your time and consideration.

Sincerely,

Jennifer Alexander
Beaverton, Oregon