Why pregnancy and pot don’t - and shouldn't - mix

By David Murray

UTSanDiego.com | Sept. 25, 2014

The fall of the Roman Empire is the subject of much debate, and includes attention to the possible role of their aqueducts, lined with lead. More likely, the decline was the result of lead poisoning caused by the consumption of grape juice boiled in lead cooking pots. The aristocracy of Rome consumed as much as two liters of wine a day — almost three bottles — adding alcoholism to the risk of lead poisoning.

Lead poisoning has an impact on intelligence, even at concentrations as low as 10 micrograms per deciliter. In the New England Journal of Medicine on April 17, 2003, Richard L. Canfield writes that children between the ages of 3 and 5 suffer a decline of 7.4 IQ points from environmental lead exposure.

That figure represents a substantial loss of intellectual capacity. There is no effective treatment for children so exposed. One can be grateful for a dedicated public health campaign to mitigate this powerful yet avoidable toxin in the lives of children.

That said, no one is advocating that pregnant woman splash lead-based paint in their nursery. Unlike another substance that also holds high risk during the prenatal period. Incredibly, it is a substance that for pregnant women is more than permitted, it is encouraged by some advocates.

That substance is marijuana. In the life of the developing adolescent, heavy marijuana exposure is associated with brain abnormalities, emotional disruption, memory decline, and yes, loss of IQ; a decline of an estimated 8 points into adulthood, according to research by M. Meier in the Proceedings of the National Academy of Sciences in October, 2012. But what of prenatal exposure, from maternal marijuana use?

The website Cannabis Culture provides an answer in a 1998 article. The opening graphic is of a dreamy, topless woman who is in the late-term of her pregnancy. She is curled around a hookah.

Under advice from a “Dr. Kate,” she is told that smoking marijuana while pregnant is not only safe, but that “cannabis can be a special friend to pregnant women in times of need.” It is said to mellow out those periods of morning sickness and to reduce anxiety.
The potential impact of such misinformation is widespread. According to the 2012 National Survey of Drug Use and Health, the rate of illicit drug use in 2012 was 18.3 percent among pregnant women aged 15 to 17. **The drug being used is overwhelmingly marijuana.**

An article by L. Goldschmidt in Neurotoxical Teratology in April/May 2000 concluded “Prenatal marijuana use was significantly related to increased hyperactivity, impulsivity and inattention syndrome (as well as) increased delinquency.” **The marijuana used by pregnant women in this study would almost certainly be seen today as low-potency.**

Recent research is even more specific concerning the damage. For instance, Xinyu Wang published on Dec. 15, 2004 in Biological Psychiatry results from examination of fetal brains. It noted, “**Marijuana is the illicit drug most used by pregnant women, and behavioral and cognitive impairments have been documented in cannabis-exposed offspring.**”

Their results showed “specific alterations of gene expression in distinct neuronal populations of the fetal brain as a consequence of maternal cannabis use.” The reduction was correlated with the amount of maternal marijuana intake during pregnancy, and particularly affected male fetuses.

**The THC “readily crosses the placenta and can thus affect the fetus,” while “longitudinal human studies have shown motor, social, and cognitive disturbances in offspring who were exposed to cannabis prenatally.”** Finally, “**school children exposed in utero to marijuana were also weak in planning, integration and judgment skills.”**

The authors also note “Depending on the community, **3 percent to 41 percent of neonates born in North America are exposed in utero to marijuana.**”

Marijuana, the president has assured us in an interview with David Remnick (The New Yorker, Jan. 27, 2014), is “no more dangerous than alcohol.” **To which he could now add, “and for the newly born, only marginally more dangerous than lead.”** With this president, you take your assurances where you may.

In Colorado today, marijuana is treated as a legal recreational indulgence and is hawked as a medicine. Moreover, adolescent use of this substance, in the form of the new, highly potent industrial dope now being produced, is soaring. Included in that population of adolescent users are young females, some of whom are, or shortly will be, pregnant.