State of Alaska Epidemiology Bulletin

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Marijuana Use among Breastfeeding Mothers — Alaska, 2012–2013

Background

The American Academy of Pediatrics recommends marijuana not be used by breastfeeding mothers due to potential risks to the baby.[1] Delta-9-THC, the active compound in marijuana, has an affinity for fat, where it can be stored (for an unknown duration) and then delivered by breast milk to the nursing infant.[2] In Alaska, breastfeeding initiation has been steadily increasing from 90.5% in 2002 to 94.8% in 2011; during the same timeframe, self-reported postpartum marijuana use was stable at about 6%.[3,4] This *Bulletin* compares self-reported marijuana use between limited/non-breastfeeding mothers and established breastfeeding mothers prior to legalization of recreational marijuana in February 2015.

Methods

The Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing, population-based, randomized survey completed by about 18% of mothers following delivery of a live-born infant. On average, women respond to the survey about 4 months postpartum. PRAMS asks mothers if they smoked marijuana or hash since the birth of their baby, if they ever breastfed or pumped breast milk, and, if so, for how long. PRAMS sampling requires mothers be at least 8 weeks postpartum, so this is used as a proxy measure for established breastfeeding. Established breastfeeding mothers can include those that supplement with formula or those that breastfeed exclusively. We explored postpartum marijuana use differences by select demographic factors, breastfeeding status, and services or counseling received during the prenatal and postpartum periods. PRAMS survey data are statistically weighted (weighted numbers are shown as n_{wtd}); results represent the entire annual birth population.

Results

During 2012–2013, 94.1% of mothers reported initiating breastfeeding. Of the 76.9% of mothers who reported breastfeeding a minimum of 8 weeks (n_{wtd}=16,158), 5.1% (n_{wtd}=802) reported postpartum marijuana use. Postpartum marijuana use was nearly twice as common among mothers who did not breastfeed or breastfed for less than 8 weeks compared with established breastfeeding mothers (p=0.02; Table). Among the 5.1% of mothers who both smoked marijuana postpartum and breastfed for at least 8 weeks, 59.3% reported that a health care provider discussed the potential effects of illicit drugs on their baby during a prenatal visit and 87.8% reported having had a postpartum check-up. Mothers participating prenatally in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) reported higher postpartum marijuana use compared to non-WIC participants, overall and regardless of breastfeeding status (Table).

Discussion

This analysis using weighted PRAMS data indicates that about 800–1100 Alaskan infants born during 2012–2013 were potentially exposed to marijuana through breastmilk. Breastfeeding mothers need to be informed that marijuana is transferred to and stored for unknown lengths of time in breastmilk,[5] and that this differs from alcohol, for example, which is not stored in breastmilk for extended lengths of time following maternal consumption.[1] Forty percent (40%) of established breastfeeding mothers who reported smoking marijuana indicated that their prenatal provider had not discussed the effects of illicit drug use on their baby (lost opportunity) and that nearly 90% of these same women reported having a postpartum check-up (opportunity gained). Health care provider screening and counseling of all women of reproductive age, including those who are pregnant or breastfeeding, is a vital component of care. Reported rates of pre-pregnancy marijuana use in this population support adoption of universal screening and counseling by health care and social service providers.[4] Opportunities to educate and counsel are available both at prenatal and postpartum health care visits, as well as through programs such as WIC.

Table. Postpartum Marijuana Use, Overall and by Breastfeeding Status — Alaska, 2012–2013

	% overall postpartum marijuana use	% use among limited/non-breastfeeding mothers	% use among established breastfeeding mothers
Overall*	**6.3**	**9.3**	**5.1**
Maternal age			
<20 years	**7.9**	8.4	8.0
20–24 years†	**9.1**	13.5	6.4
25–34 years†	**5.6**	8.5	4.6
35+ years*	**3.3**	<0.5‡	3.8
Maternal race			
White	**5.8**	9.4	4.9
Alaska Native‡	**9.7**	13.2	8.0
Other	**2.6**	4.4	<0.5
Prenatal WIC participation			
No	**4.0**	6.3	3.3
Yes	**9.2**	11.1	8.1

**p value <0.05 and †p value <0.10 for test of differences of marijuana use by breastfeeding status; ‡Interpret with caution, estimate is based on at least 30 but less than 60 respondents.*

PRAMS data are limited in that responses are self-reported and it is not possible to determine if the mother's timing of marijuana use was such that it affected her breastmilk. About half of women who deliver infants in Alaska participate in WIC and receive nutritional advice and assistance through the program, including about breastfeeding.[3] This provides WIC personnel with a unique opportunity to screen and refer those in need of counseling and additional care.

Recommendations

1. Health care and social service providers should use Screening, Brief Intervention and Referral to Treatment (SBIRT) to screen women of reproductive age for misuse of substances (see: http://www.integration.samhsa.gov/clinical-practice/sbirt/Brief_Intervention-ASSIST.pdf).
2. Train appropriate clinical staff in how to use SBIRT. The Arctic SBIRT program can provide technical assistance to clinics (see: https://www.uaa.alaska.edu/research/institute-social-economic-research/sbirt/contact/).
3. For more information about the health risks of marijuana, see: http://dhss.alaska.gov/dph/Director/Pages/marijuana/facts.aspx and http://dhss.alaska.gov/dph/Director/Documents/marijuana/MJFactSheet_PregnancyAndBreastfeeding.pdf

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