Coming of Age in Sonoma

'Nursing is the practice of Anthropology'

By Melanie Dreher

From Dreher's talk to students in the Sonoma State University course on Cannabis as Medicine taught by Jeffrey Hergenrather, MD, May 2, 2018.

I had never thought about being an anthropologist, but I was a big fan of the work of Margaret Mead, and had an opportunity to work with her at Columbia University in the 1960s.

Margaret Mead asked, "Why are Americans having such a hard time with adolescents, when adolescence is just an easy time in other cultures?"

She never got tenure at Columbia University. She had left the traditional path of academia, and was writing for *Parent* Magazine and for the public. Margaret Mead took anthropology to the public. And the anthropologists at Columbia —stuffy, old, white men— hated that. So they would never grant her tenure. But she was head of the largest natural history museum in the world. She had an enormously important position. I think when she was much older, and they thought they should offer her tenure, she shrugged and said, "Mm, I don't really need or want it."

Sometimes you can't take just the academic route. Margaret Mead published in academic journals, too, but she felt that if Americans need to know more about how to handle adolescent behavior, they're not going to read those articles. She needed to put it in Parent, for women who are raising children to read, and not to worry about tenure, or progression from assistant professor to full professor.

I certainly have done the tenure thing, and was Dean of Nursing at four different universities. But my mission, at least in the last 15 to 20 years, has been to really inform the public of the truth. Margaret Mead's example reassured me that I'd get along fine without promotion and tenure. She was an excellent role model, teacher, and person.

I don't even know if they assign her in anthropology courses anymore, but if you ever have the opportunity to read "Growing Up in New Guinea," and "Coming of Age in Samoa," you should.

Margaret Mead taught me how to do field work and I tried to use her approach when I had the opportunity to study cannabis use in Jamaica.

I was a first-year doctoral student at Columbia University and my major professor was applying for a research grant from the National Institute for Drug Abuse. There was a very enlightened person at NIDA at that time, who thought, "What's going on with marijuana in the US?"

In the 1960s marijuana was being used by college students and NIDA became interested in the impact of chronic use —not just what happens to you immediately after ingesting marijuana, but what happens when you use this substance all the time for several years.

The proposed study examined three cultures in which marijuana was used consistently: Costa Rica, Greece (in the form of hashish), and in Jamaica, where it was called ganja, a term you've probably heard.

So, after a year of taking courses in anthropology, my professor said, "Let's see if you can cut it. Go to a country or village that you've never lived in before and find out everything that you can about..." a substance that carried a two-year mandatory prison sentence for possession.

I said, "Oh, no problem, I'm on my way." So in 1969—the same summer as Woodstock and the first landing on the moon—I found myself on a mountain top with no electricity, no plumbing, no running water, no telephone, or transportation. I did not know a lot about Jamaica, and I actually knew nothing about cannabis or marijuana, because I had never smoked anything. And I didn't actually know all that much about anthropology.

So I got to this mountain top, and started thinking, "Wow, an illegal substance—no one is going to talk to me about this." But in fact, people did talk to me. I attribute that to my being a nurse. I was used to asking about sensitive questions, and getting answers, and having conversations about intimate topics. So I think my nursing skills really helped me in that environment.

I managed to come back with a fair amount of information, about why it was used and in what kind of context. I discovered that it was exclusively men who smoked marijuana, and the women were in charge of the tea.

So here was a substance that not only had recreational value for men, but was also a very powerful part of the folk pharmacopeia. It was used for just about everything, from early childhood —giving children who were teething an eyedropper full of tea or medicine— to mothers who wanted to make sure their children were smart and healthy and prepared cannabis tea for them three times a week.

You can imagine what would have happened to those mothers if they were in this culture. But in Jamaica, where folk remedies were rampant, people would say to me, "We've got a lot of good folk medicines, but ganja is the king of it."

Ganja was not indigenous to Jamaica. It was brought from East India by indentured laborers who worked in the sugar cane industry, picking and loading cane. Very much like the workers who came to the United States after the Mexican Revolution in 1910 brought marijuana...

Ganja was an attractive substance with so many uses that the Rastafarians, who rejected the white man's use of alcohol, took on ganja as a sacrament.

Very quickly: Rastafarians believe that Haile Selassie, who was prince of Ethiopia, is the living God and that at some point in time, all black people would be repatriated to Africa, and would be disciples of Haile Selassie, the prince of Ethiopia.

There was a sense of discontinuity between the working class people and what was going on at the highest level of government in Jamaica.

So I spent a wonderful summer, went back and made my report, and was told, "We got funded, so I want you to go back again and recruit the subjects for a medical anthropological study."

Undergraduates at Sonoma State University heard the talk by Melanie Dreher transcribed here. BIOL 385 was a 3-unit upper division course, open to all majors. Basic biology and chemistry courses were prerequisites. The groundbreaking SSU course created an odd irony: these college students would know more about cannabis as medicine than most US physicians.

Melanie Dreher

We needed 60 men to go into the hospital for a period of two weeks each, and be subjected to a number of studies. Everything from a psychological battery to a blood test, urine test, the whole panorama of what's going on with these guys physiologically. My job was to recruit subjects.

Recruiting the users was not a problem. Finding 30 matching non-users in a country in which 85% of the working-class males smoked marijuana was really hard. But it helped to explain many of the findings in the study. For example, we found that comparing the users and the nonusers using psychological tests, we found that the users were much better adjusted than the nonusers.

The immediate assumption is, clearly there's correlation between being well-adjusted and adapted to your environment, and the use of cannabis. But when you think about it, the non-30 users that I managed to recruit for the study, there was already something a little weird about them. They didn't gather with the other men in the rum shops after work, or down at the river to have a smoke. They were a little odd, and in Jamaica at the time, and still, the belief was that in order to smoke marijuana, you had to have the brains for it.

They also imparted the information that that's in fact why women couldn't smoke marijuana. They didn't have the brains to handle the psychoactive effects. I just sort of put that in my pocket and dealt with it. But you can imagine the tiny percentage of men who didn't use it, they just weren't part of normal male society. So we should not be surprised that they didn't fare as well in the study.

So then I figured, "All right, I have to do a dissertation on this."

At that time, there was a theory about the "Amotivational Syndrome" —that once you started smoking cannabis on a regular basis, you would lose your ambition, drop out, not care about succeeding, perhaps not finish college and not be able to find a job, etc. But I had found in that first summer something very interesting: people in Jamaica were actually smoking marijuana to make them work harder. The sugar cane plantation managers —they called them "Bushers"— would come around to see how they were loading the cane and cutting the cane, and in order to make them work harder and faster, they would actually dispense ganja for them to smoke. The bushers would come around on horseback and pull out a big thing of cannabis, and give it to them so they could roll it up and smoke it and work harder.

Student: Was there a language barrier at all?

MD: Jamaicans, especially rural area Jamaicans, speak something called Patois, which a combination of Elizabethan English—15th century English— and West African. But you can pick it up after a while.

If children drink marijuana tea, do they actually perform better in school?

They do understand and speak the King's English, and that was what was taught in the schools....

Anyway, that became my dissertation: "Is there really an amotivational syndrome that occurs universally for anyone who uses marijuana?"

I studied men who were rural farmworkers and cane workers in three communities, and discovered that actually their use of marijuana had no impact on their work whatsoever. Even though they would claim that it would make them work harder. I discovered this by actually measuring the tons of cane they cut, which was not hard for me to do, because the factories, in which they cut the cane and bring it to the factories, had a measure for each man and how much cane they cut.

I found that there was no impact. But while I was there I noticed that women routinely gave their families morning teas of ganja two or three times a week to keep them healthy and to make them more productive. They believed it made them stronger, they ate more. For children especially, mothers believed that it helped them concentrate in school.

So I finished the two-year study, and got a job after I graduated, and I had a couple of babies, and decided I needed to continue this work. I went back to see if this was true: If children drink marijuana tea, do they actually perform better in school?

I went to a rural community, a different one than I had been in before. I asked one

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Margaret Mead

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Worker cutting sugar cane.

of the teachers if she could identify for me which of these children in this school you think might be drinking cannabis tea. And the teachers consistently picked out children who were not doing well in school. And said, "Okay, probably this one and this one and this one."

So that was part of my data set, and I went to each of these families and actually measured the amount of tea they had consumed. When, how often, how much, and so forth. And I found that it was actually just the opposite. The children who were drinking cannabis tea, as the parents had predicted, were in fact performing at a higher level in school. They were also the children who came to school most often. And they were also the children who had clean uniforms and notebooks to write in, and so forth.

So one of the things that I had discovered was that preparation of cannabis tea for children was part of what I call the "Good Mother Syndrome." If you wanted your children to do well in school, you made sure that they had whatever was necessary, including shoes to make that long walk of two-and-a-half miles to school. Had a proper breakfast, had lunch at school, and so forth.

So once I looked at the results of this study and thought, "Hmm, another correlation between really strong behavior, good behavior, positive behavior, and cannabis use." But was it really the cannabis use? The best we can say about a study like that is what we said about the earlier study. We know it doesn't disadvantage them.

While I was doing that study, I noticed that increasing numbers of women were starting to smoke cannabis in a manner not unlike the way men smoke it. It was the early 1980s. The women were smoking with their friends, they were smoking alone if they had a hard task to do. If they were going to the field to pick crops, or even at home doing laundry, it was not uncommon for many of the women—not all of the women— to have a ganja cigarette, a spliff. And I thought, well this is a change. Things are happening.

The Rastafarian men really felt that their Rasta Queens had their right to smoke.

The Rastafarian movement had given women a special place in that culture. They called the women who were Rastafarian the Rasta Queens. The men who were not Rastafarian, who criticized women when they smoked (unless it was in a pre-sexual context with them) didn't like it at all when women smoked with friends or in a social manner.

But the Rastafarian men really felt that their Rasta Queens had their right to smoke. They saw it as part of their religion, and part of Rastafarian culture.

So we had a number of women and mothers who were smoking, and I saw it as an interesting phenomenon that I should take a look at.

I was able to get funding from the March of Dimes. The Thalidomide crisis was still on everyone's mind. [A drug taken by thousands of pregnant women to counter nausea and morning sickness turned out to cause deformity and death]. People were very, very interested in the teratogenic effects of any substance being used through pregnancy, and what the outcome would be neonate.

Cannabis was the third most commonly used substance by pregnant women in the US. So there was a particularly keen interest in looking at women who were users, and then when they got pregnant, what impact it had on their own prenatal experience, and their own neonatal experience of the newborn.

We followed the women from the third trimester all the way through their pregnancy, then we examined their neonates at one day, three days, and one month.

We used the same model that we used in the earlier study. We took 30 women who were cannabis users and we matched them according to parity —the number of children they already had, socioeconomic status, and age. We had a very nice match sample from a rural parish in Jamaica, and we followed the women from the third trimester all the way through their pregnancy, then we examined their neonates at one day, three days, and one month.

We used a standardized test that had been developed in the US by the Brazelton Neonatal Group at Harvard — a famous test for looking into variation in neonatal behavior.

We discarded the first study — immediately after birth through the first 24 hours— because there was such variation. Some babies we'd catch at three hours and some babies we'd catch at 24, and babies change a lot in the first 24 hours after birth.

So we decided to use the three-day measure to compare the neonates of these samples, the exposed and non-exposed babies. And then we compared them again at one month.

We found that at three days there is very little difference between the exposed and non-exposed babies. This was a neurobehavioral test, so we would do things like drop a Kleenex on their face and see if the babies would raise their hand to push it away. Very simple things, but simple things a neonate would be capable of.

We gave them the test again at one month. At one month, we got very different results. We found that the babies of the mothers who were smokers did significantly better on every item on the Brazelton Neonatal scale. This was completely nonintuitive. We just assumed there would be differences, and the differences would be in favor of the non-exposed babies. That was not the case.

There was a culture for marijuana. When there is a culture, rules are developed by people about who should smoke it, when, where, at what age. All these things just emerge from the culture, and that's how you control a phenomenon culturally. They didn't need laws, they didn't need a two-year mandatory sentence.

All of these mothers were breastfeeding. We knew that cannabis passes through the mammary gland barriers and that these babies were getting continued exposure to cannabis, and yet they were really very sociably alert, had high neurological scores, and were doing very well.

That was a very hard study to get published, because there was so much resistance on the side of editors and so much bias on the part of editors, that they just didn't want to put it in. The study was completed around 1989 or '90, and we could not get it published until 1994. Finally, *Pediatrics,* which is a medical journal, published it. And then it sat there.

I thought there would be a response to the article, that people would be writing in, pediatricians would find it outrgeous… Nothing. There was no public response at all,

When it went online the American women who were interested in the effects of marijuana use during pregnancy found it and there was online dialogue. But that was it, the only response. It wasn't until almost 15 years later that I was walking into work one day —I was Dean of Nursing at Rush University in Chicago— and one of my students rode by on his bike and said, "Dean Dreher, your study's gone viral!" Now this is 15 years later when the American public began to question, "Hmm, is this really the problem that it's purported to be?"

NIDA funding

In Jamaica we had this wonderful sample of 30 babies who had been exposed to cannabis and 30 babies who hadn't been exposed, and I thought it was time to go to the federal government for funding. The National Institute on Drug Abuse had funded my pre-doc and my postdoc, and they gave me funding to go back and follow these children post-birth until age five.

The environmental factors, familial factors, economic factors were much more powerful than whether they had been exposed prenatally.

We wanted to look at their readiness for school, and to see if their prenatal exposure had any impact on their beginning to be ready for school. We found that there was no impact of the cannabis at all. The real issues had to do with children who had better environment for neonatal development than other children. The environmental factors, familial factors, economic factors were much more powerful than whether they had been exposed prenatally.

So those results were published, and we sent them into NIDA and asled for an extension to do the study from ages five to ten. That's when you see something called "executive function" begin to operate,. Would these children be able to actually execute in their academic environment, accomplish tasks, become good students?

That's when I got the call from NIH, saying, "We're not going to fund you anymore." They didn't like the results of the study, and said, "Unless you can find something negative or something wrong with cannabis, we can't fund you, because Congress will not like your findings, and we get our money from Congress. And if you could just find one bad thing about cannabis and follow that trajectory..."

And I said, you know, "these are the data. I met the terms of my NIH contract, I did the study, I collected the data, analyzed it. Everything was done very carefully. And I can't change the data, these are the facts."

At that point I said, "Okay, enough. I don't want to have to fight these battles with the federal government." So I discontinued that work for a little bit and thought, "Maybe I've done all I can as an individual researcher, maybe someone else can take this up."

Cocaine

It was the 1990s. I was still teaching, and was Dean of Nursing at the University of Massachusetts. I decided to keep taking nursing students to Jamaica where they could really learn a different kind of nursing practice.

That was a very good thing to do. The students came back incontrovertibly changed in their whole way of thinking about patient care. But while I was there, I noticed that in Jamaica, cocaine had entered the substance-abuse scene. And this was very sad.

There was a culture for marijuana. When there is a culture, rules are developed by people about who should smoke it, when, where, at what age. All these things just emerge from the culture, and that's how you control a phenomenon culturally. They didn't need laws, they didn't need a two-year mandatory sentence. They had their own laws that were well obeyed. So if they saw a 12-year-old, an older man in the village would say, "Ey, boy, no, you're too young. Wait five years, then you can be a man, then you can do this."

There were all these things that I had been recording and I thought, "Someday, I'm going to write the book on how a culture monitors itself with its substances." But when cocaine came in, there was just no culture for cocaine —crack cocaine— at all. And crack, as you may know, is a highly addictive substance, the most addictive form of cocaine.

What we were seeing was a big rise in prostitution, some serious rises in crime. The cocaine was coming in, Jamaica was a trans-shipment port from South America to Louisiana and Miami. So the smugglers would get to Jamaica, drop bails off the ship, and then the fishermen would go out to help them bring in these bails of cocaine. Then they would be transported to another place, put on a different ship, and taken into the United States.

The fishermen and transporters had never heard of crack or cocaine before. They had no idea what it was. But that's how they

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were paid —in cocaine. So everyone had their pound of cocaine to take in. They quickly learned from people in other countries, entrepreneurs who would come down and show them how to make crack. Soon Kingston and Montego Bay had a real crack cocaine problem. We were seeing increasing numbers of women using it.

I went to the State Department and they agreed to fund me to look at substance use in general through Jamaica.

I took five anthropology students with me, put them in different locations throughout Jamaica, and did a study of all substance use.

From the time that the fisherman put the bail in his boat that cocaine would be touched 30 times before it got to the eventual user. That's 30 people who derived an income from that crack cocaine. It was amazingly lucrative for some people. For others, it was just a way of making a living in an impoverished third world country that didn't have many ways of making a living.

I had a meeting with the chief of police in Jamaica, and he understood that I was doing this work. He said, "Can you tell us where these crack houses are?" And I had students who are working in these crack houses, collecting data there. I said "No."

He said, "I know some of your students are working in these crack houses." And I said, "That's right, they are. Our students have been here for five weeks. Your police have been here for years. And I bet your police officers know where every crack station in Kingston or Montego Bay is."

The police were very heavily involved in this. They always have been. Less so in ganja. They were obviously being paid off in the crack cocaine industry.

The kind of heroes of that war between crack and ganja were the Rastafarians, who wouldn't touch crack cocaine. Marijuana was their substance. And they feel that it gave them the protection against crack cocaine. And I thought, "Well, that's pretty interesting," so I got the State Department to fund a study of sex workers in Kingston-Jamaica, who were crack cocaine users. I wanted to see how they were using it, how often, under what conditions, what context, and how that linked to what they were doing with marijuana.

That study was really enlightening for me, One of the things it made clear is that marijuana is not a precondition to crack cocaine use, it is not a gateway drug. Most of the women had never smoked ganja — crack cocaine was the first substance they smoked. When they were given what they called a "season spliff" — a ganja cigarette that has been laced with cocaine— they found just by trial and error, that they did not immediately want more.

They would say, "When I smoke crack cocaine, it feels great, and then I have this sudden drop, and then I feel really bad, like I need to have something right away." Whereas when they smoked the seasoned spliff they didn't feel the need to have another dose of crack immediately. So some of the women started looking at this as a way of relinquishing their crack cocaine habit.

I found that people were doing this in Brazil as well, getting off of crack cocaine by using marijuana in some way.

Today, when I see what's going on with the opioid epidemic, I think, "This is exactly what's happening. People are using marijuana to get off opioids."

In Illinois, with the dispensaries that are now open, they estimate a third to a half of the people they are seeing in the dispensaries are there to relinquish their opioid addiction, and doing so really successfully.

I sit on the Chicago Board of Health,. There are four physicians and they're all in internal and primary care. I said, "Come on guys, you can't tell me that some of your patients haven't cured themselves by using cannabis."

In the US alcohol is allowed for pregnant mothers. We know the damaging effects of alcohol. We know them. Yet we can't find any for cannabis and it's illegal.

And they said, "Yeah, we're seeing that, but we didn't prescribe it."

And I said, "Listen to you: you don't want to prescribe something that is very effective, pretty inexpensive compared to what else there is, and you would rather see the pharmaceutical companies come up with very expensive, synthetic products that only rich people will be able to afford, and that the taxpayers will pick up the bill for, when poor people need to have this antidote to opioid addiction."

And that's sort of where we are right now on this whole issue,

So as I've shifted from saying, "I did the research, here are my findings, and it's up to you policymakers, you clinicians, or you educators, to take those findings and get them out to everybody." Now I'm saying that I have to be part of that group that is out there spreading the word and helping people understand what a profound substance this is. And that if it were discovered today, it would be considered a miracle drug.

But because it has this long history, in a fear-driven society, we are reluctant to use what is there, what is available, what is the cheapest, most effective we have for a serious addiction problem.

Student: You talked about the farm workers and how they use ganja. What about other occupations, like doctors and teachers?

MD: There was a wonderful physician in this village who was absolutely fine with cannabis. He didn't use it himself, but he had no problem with his patients using it. He had trained in England as a physician and then went to the University of Minnesota where he got a degree in public health. He was well known and liked.

On one of the articles, he's the second author. He found that it was a very helpful substance to people, and they should be encouraged to drink the tea, and saw nothing wrong with it at all.

A Jamaican doctor named Manley West observed that ganja smokers have no glaucoma. He and hiis colleagues developed a medication called Cannisol —eye drops for glaucoma— that never got to the US but sells very well in South America.

Teachers, no. I found that teachers were really struggling to move from what might have been the working class to middle class. And they were divesting themselves of anything that might speak to a working class behavior. Even though they may have ingested it themselves as children, been given it by their mothers, they just wanted to separate themselves from what was a working-class phenomenon.

One of the things about being an anthropologist, working in the community, living in the community with the people whom

The author in Jamaica with two study subjects, WHAT YEAR›

you're studying, is that you go through several trials of trust. I was a nurse, that helped a lot. I delivered a lot of babies when I was in Jamaica. Once someone delivers your baby, you feel pretty comfortable. I have a lot of godchildren who are now big adults, older than you. It was a useful skill set to have, to be able to treat peoples' problems.

Studying behavior in context is really important. The studies that have come out in the US on marijuana use during pregnancy, are usually done by a questionnaire, a research schedule that people can respond to: "I do," "I don't," "I do sometimes," or "this is how many times..."

But to actually be in a place where you can observe people's behavior makes a huge difference. You can relate it to other behaviors. I could understand which women were going to become the marijuana smokers, because they were usually women who were independent of their men. They could take a chance, use when they wanted, and many women in our study whose children were exposed prenatally were also vendors. So one of the things they could do that other mothers couldn't do was stay at home, have their home-based cottage industry, preparing and selling cannabis, and have their baby with them at home. So they developed a unique environment for neonatals, in which they were with their babies constantly.

Have there been any other studies like that? No, and it's unfortunate, because that's the only way you can study women and children.

The other reason why Jamaica is the kind of place to do this work is because until recently, you did not have multiple drug users. Women who used cannabis were highly unlikely to use any other substance. Maybe an occasional beer, and since cigarettes in the area were sold one cigarette at a time, they might on a Saturday night to look cool, buy a cigarette and smoke it. So we essentially had an opportunity to study the actual effects of cannabis divorced from any other substance use.

Some of the NIH critics of the study would say, "Well you know, that works in Jamaica, but I don't think the data would apply here in the US." And in fact, you can't do that study here in the US because there is so much multi-drug use in the US. Pharmaceutical drugs are so widely used that to tease out the specific effects of cannabis is very hard to do here.

Every society, every culture, has its substances that it approves, and its substances that it doesn't approve. In the US, alcohol is allowed for pregnant mothers.We know the damaging effects of alcohol. We know them. We can't find any damaging effects for cannabis and yet it's illegal!

"...the state authorities have removed the baby and put the baby in foster care."

I have made many court appearances in response to heartbreaking stories. I get a desperate letter from a family that says something like, "My wife was having her first baby, they did a hair-sample test during labor and delivery that was unauthorized, it wasn't approved, which we didn't consent to, and they discovered she was using cannabis. And the state authorities have removed the baby and put the baby in foster care."

These are the kinds of stories that have put me more into the activist role. Some are much worse, believe me, where they actually put the mother in prison. Recently I called the Attorney General of a big midwestern state, and I didn't speak to a staff person and said, "What is the problem? What problem are you trying to solve here?" I was very nice, I wasn't trying to be confrontational, I just said, "Just explain to me."

And they said, "Well frankly, we do not believe that a child is safe in a house where there is cannabis. Where marijuana is present."

And I said, "Really? But your gun laws say that anybody can have a gun. You don't take a baby out of a house where there's a gun, or dishwasher detergent. Or a bottle of asprin, or any of the other things that can kill children and babies. Why are you so focused on this?"

They don't have an answer, but they really feel like they're doing the right thing. It's astounding. But we have classic, wrenching stories of women who have been imprisoned right after the birth of their child, without even the proper clothing or services needed for a woman who's just given birth. These letters keep coming. We really have a problem, and it's not going to go away unless we become activists and do something.

JYH: In the Jamaican study were all the pregnant women smoking or were some just drinking tea?

MD: We had women who smoked daily, several times a day. They were categorized as heavy users. And then we had women who were in the middle, who tend to just smoke recreationally or socially, on the weekends, and use cannabis tea during the week. And then we had the third group, who were pretty serious cannabis tea drinkers, and occasional smokers. It might have been two or three times a month. They had to be smokers, they had to smoke cannabis at some point. But again, we really could not find a difference among the three groups, in terms of neonatal outcomes at all. Nor could we see any differences at age two, using the McCarthy scales, and then at age five. There was just no evidence of any impact at all.

Student: How many journalists turned you down before *Pediatrics* published your papaer in 1995?

MD: Interestingly, all the nursing journals turned me down. The issue was, "what does this have to do with nursing?" Seriously, the third most commonly used substance in the United States! "What does this have to do with nursing?" I just find it astounding that a profession could be so narrow-minded.

The nursing profession has many subspecialty organizations. One is addiction nursing, and cannabis use is considered an addiction. Cannabis is not addictive...

Student: The dogma in America is that it doesn't make you productive, it makes you lazy and all that stuff.

MD: Right. That's the sort of cultural folklore. And the cultural folklore around cannabis use in Jamaica is that when you smoke cannabis it goes right to the brain, and it has a psychoactive effect. They don't use the term psychoactive, but it affects how you think. And cannabis, when it's consumed as an infusion, when it's drunk, it goes into your blood. This is the folk explanation for it. It makes you healthy and strong, and gives you protection for the future. You don't feel the effects right away. It's for prevention, it's a strength-inducing,

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appetite inducing substance.

Appetite is very important in Jamaica. They do not like skinny people. They find it unattractive. So losing your appetite is not a good thing in Jamaica. But those psychoactive effects, when you ask farmers and cane workers, or women who are home attending to their gardens, cleaning their house, where they have a lot to do, and I found this in pregnant women who consistently said, "It just gives me the energy I need to do all the tasks I have to perform."

The study we did with children was very interesting for me because, one, it showed what good parenting was about. These schools in Jamaica are likely to have 50 in a classroom, with four children squeezed into a desk about this size. Lots of noise, lots of things going on, and for a child to concentrate in that kind of environment is really difficult.

Parents believe that the ganja tea helps them concentrate in that kind of environment. And they would go without ganja themselves, if their supply was low, so the children could have their tea.

Student: Why just two or three days of the week, if it's so effective? Why not every morning?

MD: Because they have a range of other teas that they drink, to give to their children. For example, WHAT if they have worms and need to be evacuated on a regular basis. Thyme tea, and then just a chocolate tea once a week. So the try to mix it up and not give their children the same tea every time.

They always gave them cannabis tea the morning of exams.

Student: How did you know that?

MD: I lived in the community, so I'd go and meet with the mothers every day. There were only 28 children in that study. So I would go to the mothers, I'd give them a sheet to fill out, I'd go and talk to them, and this is the value of living where you do your research, because they trust you and they tell you the truth.

The children who were getting the ganja tea did very well. They were the leaders in their class. They had their little notebooks, their sharp pencil, we're talking primitive things, fresh uniforms. How much is attributable to the ganja? It's hard to say. But I think one of the areas of research where it's really going to be important in the future, is looking at the significance of ganja preparations, or cannabis preparations, for children who are easily distracted.

I think we're missing a big opportunity for these kids who have attention deficit disorders. I'm not recommending that they all go out and smoke marijuana, but it seems to me that we should be identifying some sort of therapeutic substance that children with ADD can have.

Ritalin is a terrible drug. If you can really get kids on something that is harmless, yet does the trick to get them focused, that's phenomenal. I think the problem is we can't experiment with children. Maybe the best we could do is to get adults who had taken Ritalin as children, who were identified with this problem as children, because it continues into adulthood.

I never saw dementia in Jamaica. They live longer than we do, and I never saw a hint of dementia there.

In addition to Attention Deficit Disorder, I think something can be done with very elderly people. I never saw dementia in Jamaica. They live longer than we do, and I never saw a hint of dementia there. I'm sure there were some, but in all the villages I lived, in Kingston and wherever, it just wasn't there. So I think it's worth really examining the role of this substance in brain functioning in much older people.

Student: Do you have any idea how the ganja-using children turned out?

MD: In 2000 I got a tiny grant from the Ruth Landes Field Study Fund, Research Institute for the Study of Man and I went back to look at these kids, who were then between 18 and 20. We didn't have a lot of time, but we found 14 of them just by going around the villages and asking where they were. It was so much fun! We'd pull up to the house, and look. "Miss Mel, it's you?"

We asked what they were doing now. Many of them had gone on to college — meaning high school in Kingston— and then went on to do professions like accounting, nursing, teaching, which I thought was pretty good. These were all the using children. But since I didn't have the whole sample, and couldn't do a comparison, I just didn't think it was yet worthy of publication. But it was gratifying to see these kids, who were allegedly doomed by nurses and teachers to not succeed, in fact succeeded quite nicely in a country in which it's quite difficult to succeed.

Valuing anthropological evidence

It's very hard to understand any kind of human behavior when you take it out of the context in which it occurs and put it into a laboratory or test tube and try to figure out what's going on. Or even to do a questionnaire or a survey. But when you can actually witness this behavior as it occurs, it's intelligible, you can understand it. And that's the real value of social science.

I don't know if any of you are considering a career in social science, but I would say we add an enormous amount. What we don't do is double-blind studies that have clearly formulated hypotheses. What we do do very well is record and compare human behavior. And that in itself can be extraordinarily enlightening, and enriching for people to help them understand their own culture as well.

What I've found is that nursing is the practice of anthropology.

Anybody in nursing? *(A hand goes up)* Great, is there a program here at Sonoma State? And where are you along in your course?

Student: I'm still in pre-nursing, so I'll start applying next year.

MD: It's a really great career. Sometimes people will say to me, "Hmm, nursing and anthropology, that's a kind of interesting mix." But what I've found is that nursing is the practice of anthropology. I'm not sure why they don't require anthropology the way they require pathophysiology in nursing. Because nursing is all about human behavior in context, and comparisons. So each patient you have, you compare with the patient you just had.

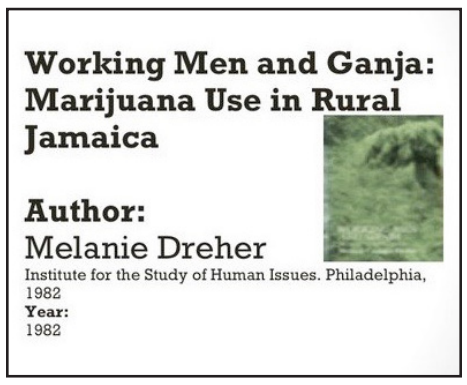
Student: Do you think of yourself as having been blackballed by the medical journals?

Courage is greatly lacking in our culture today.

MD: I don't hold any rancor for them at all. People and organizations act in their self interest. It's just a fact. And I can understand, if I was head of NIDA and I thought that my budget was going to drop as a result of this person's work, or the funding of this particular scientist, I'd have to think twice. But what I think NIDA should do, and what NIH should do and doesn't, is to actually go to Congress and have an audience with them and tell them "We have some really interesting findings. You need to be informed so that you can inform your constituents."

Courage is greatly lacking in our culture today. If we're really serious about healthcare in the US, we can't just look at the same science that has guided us forever and ever. We have to step outside those boundaries and look at other ways of doing things, other ways of thinking and learning.

Melanie Dreher, Ph.D., RN, FAAN has served as the dean of four Schools of Nursing. While at the University of Iowa College of Nursing she established a Masters in Nursing and Health Care Practice degree, which became the national model for professional nursing education. The author of books, articles and reports, her research interests include cross-cultural studies of the health care systems and financing of community health care.



The War on Mothers

1. "Perinatal Marijuana Use and the Developing Child" was published by *JAMA* July 16. Lead author Lauren Janson is in the Department of Pediatrics at Johns Hopkins. Co-author Chloe Jordan, PhD, is with the National Institute of Drug Abuse.

Their fear is that "Expanding use of cannabis among pregnant and lactating women (as likely will occur with legalization) may lead to increased risk from fetal and child exposures if the teratogenic potential of cannabis remains underappreciated."

The neoprobes' goal —summed up in the quote highlighted by the *JAMA* editors and reprinted below— is to suppress dissent among physicians.

> Advice from medical professionals should be consistent: pregnant and lactating women should be advised to avoid cannabis use...

The authors cite numerous published allegations of harm and then express dismay that many clinicians do not consider these allegations conclusive.

"...Despite these risks, it appears that clinicians are not addressing cannabis use during pregnancy or lactation; in one study of 74 lactation professionals, 85% encouraged breastfeeding among marijuana-using mothers. Most national breastfeeding guidelines (eg, the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists) have remained steadfast in recommending against cannabis use during lactation. However, the Academy of Breastfeeding Medicine has changed guidelines (2009 and 2015) to allow the potential use of cannabis during lactation, citing "data...not strong enough to recommend not breastfeeding with any marijuana use" despite urging caution due to "possible long-term neurobehavioral effects."

The failure of the Academy of Breatfeeding Medicine to remain "steadfast" upsets the authors, who want doctors to propel the cannabis-using mothers into treatment.

"The medical community should advise pregnant women to avoid perinatal THC exposure and **intervene for women** needing treatment, for children at risk for neurobiological and developmental problems, or for dyads at risk for negative outcomes associated with an untreated substance use disorder.

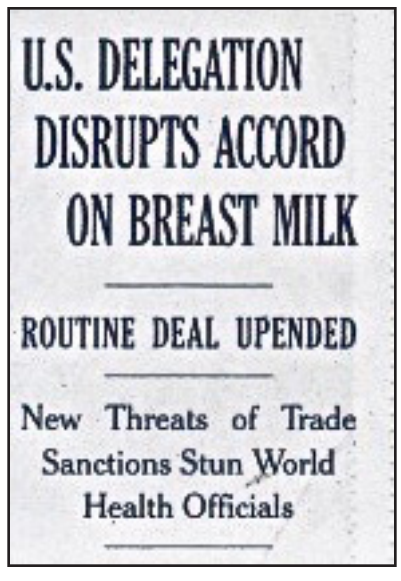
"Advice from medical professionals should be consistent: pregnant and lactating women should be advised to avoid cannabis use, and women (and men) caring for developing children also should be advised to maintain abstinence. Treatment programs for women with CUD should be available and accessible, and gender and culturally specific, particularly during pregnancy and postpartum periods."

2. "Association of Nausea and Vomiting in Pregnancy with Prenatal Marijuana Use" ran in *JAMA* online as a research letter August 20. The authors are with Kaiser Permanente's Northern California Division of Research. In response to more pregnant women using cannabis as an antiemetic, Kaiser records were analyzed to find a correlation between marijuana use and nausea and vomiting during pregnancy (NVP, also known as "morning sickness"). They found, unsurprisingly, that the more severe her nausea, the more likely it is that a woman will use marijuana.

"In a large, diverse sample of pregnant females from 2009 to 2016 who underwent universal marijuana screening in California, those with severe NVP had nearly 4 times greater odds of prenatal marijuana use, and those with mild NVP had more than 2 times greater odds of prenatal marijuana use than females without NVP. Although results are consistent with the hypothesis that women use marijuana to self-medicate for NVP, marijuana use may also contribute to NVP, or clinicians may diagnose NVP more frequently among women who report using marijuana to treat it."

The authors conclude with a reminder tha "national guidelines" promote abstinence. They advocate drug-testing for the mothers-to-be!

"The health effects of prenatal marijuana use are unclear, and national guidelines recommend that pregnant women discontinue use. Patients with NVP should be screened for marijuana use and educated about effective and safe NVP treatments."


U.S. DELEGATION DISRUPTS ACCORD ON BREAST MILK

ROUTINE DEAL UPENDED

New Threats of Trade Sanctions Stun World Health Officials