

## Palliative Care Chat Episode 8

Dr. Lynn McPherson and Aromatherapist Dr. Susan Kristiniak

Dr. Lynn McPherson: Hello, this is Dr. Lynn McPherson and welcome to Palliative Care Chat, the podcast brought to you by the online master of science and graduate certificate program at the University of Maryland. I am so excited about our guest today I just can't stand it. Our guest is Dr. Susan Kristiniak. Susan has multiple, multiple credentials. She has her Doctorate in Health Administration, she has her Master of Science degree in Nursing, with a focus in Integrative Health. She is a nurse, of course. She is an advanced holistic nurse and she is a nurse executive with advanced certification. She is a certified nurse in aromatherapy and she is a Reiki master. Susan, did I miss anything? Good grief, you've got so many wonderful credentials.

Dr. Susan Kristiniak: Oh, thank you. Thank you very much. Yes, it's been quite a journey and enjoyable.

Dr. Lynn McPherson: Yes, and your current position is Associate Director for University of Pennsylvania Health System in palliative care and I know you wear many hats there as well, isn't that correct?

Dr. Susan Kristiniak: That is correct, yes.

Dr. Lynn McPherson: Wonderful.

Dr. Susan Kristiniak: And I've been fortunate enough to have you come and join our team and share your expertise as well. So, happy to be a part of this.

Dr. Lynn McPherson: Well, wonderful, thank you. So, what I'd like to talk about today with Susan is to focus on her role in aromatherapy, which is a topic that ... I'm a pharmacist, so I find it very interesting and very different from what I do for a living, so when I think of aromatherapy, Susan, I want to order the scent of freshly baking bread, so can you get that for me? You'll see what you can do.

Dr. Susan Kristiniak: No, but we can talk-

Dr. Lynn McPherson: We can talk about it. Can you start by telling us what the heck aromatherapy is and give us a little bit of the background?

Dr. Susan Kristiniak: Absolutely. So, aromatherapy by definition is it's a therapeutic use of pure, unadulterated, essential oils, their hydrosols, and fragrant plant material for the purpose of holistic health treatment. And that is quoted from Rene Maurice Gattefosse, who in the early 1900s, actually coined the term aromatherapy in his own self-discovery following what history tells us is a burn that he experienced while working in a lab. There is some urban legend that he immediately immersed this burned tissue into lavender oil and found it to be healing. Subsequent information around this event was that the burn became infected.

He actually had quite rancid scent to it, and started using what was then perfume, all made from natural plant parts, and when he applied it for scent diversion, he actually experienced the healing process. He then continued to, really from a scientific vantage, mostly case study review and trial and error of what was considered perfume, to really study what we know now is this idea of essential oils using for healing properties for wellness, et cetera.

It's a fascinating field, one that I fell into, actually introduced by a psychiatrist, who at a part of my career, was looking at options to introduce aromatherapy as a way to calm, provide relaxation for patients who are admitted to an acute care psychiatric unit with a diagnosis of agitation with their dementia.

Dr. Lynn McPherson: Mmm, that's interesting.

Dr. Susan Kristiniak: Isn't that interesting? There had been some research. There's a study by Ballard that looked at the same phenomena in long-term care, kind of Alzheimer's units, using a scent called Melissa oil and they had found some improvement in patient behavior in terms of mitigation of that excessive aggressive nature of behavior that we all know can be just so disruptive. In retrospect, the other component of why this psychiatrist was interested, is when you think about what their options are for care in that elderly population, which automatically demands a whole other level of pharmacological approach, what did we have available? We had things like Haldol or the benzos, which many times escalated delirium, caused more instability, increased falls risks, all of those pieces unfortunately that go with that calming effect.

Dr. Lynn McPherson: Mm-hmm (affirmative). [crosstalk 00:04:15]

Dr. Susan Kristiniak: So that was kind of the motivator.

Dr. Lynn McPherson: Yeah, we're in a tough position now with the overuse of opioids-

Dr. Susan Kristiniak: Yes.

Dr. Lynn McPherson: ... and, especially with combining them with benzodiazepines and so forth.

Dr. Susan Kristiniak: Absolutely.

Dr. Lynn McPherson: I certainly thank you for sharing that background with us, but what would be a modern day example where aromatherapy might be useful for a patient?

Dr. Susan Kristiniak: Sure. So, my effort, and I kind of got launched into participating in some of the research that we did in this suburban hospital outside of Philadelphia, really then put me on a trajectory of being trained as a certified nurse aromatherapist and my personal goal has always been to put it in the hands of healthcare providers that really appropriately screen, think about the thoughtfulness about when to use it, how to use it, because there's options of that as well. So, I started in this small hospital nursing-driven program where bringing to the bedside, and it has

changed over iterations of time when we've had better, different types of variety of supplies. So right now, currently, what we're doing at University of Pennsylvania is offering patients scents, essential oils, which is the by-product of plant parts that go through typically either a wood or a steam distillation process. And they are extremely concentrated, so, Lynn, for example, it takes 80 roses to give us a single drop of rose oil.

Dr. Lynn McPherson: Oh my goodness.

Dr. Susan Kristiniak: It takes a pound of lemon peel to give us a single drop of lemon oil. So they're very, very concentrated. They're different than their related herbal ingestion kind of understanding, and as an example of that, if you would ingest, and ingestion is very highly regulated because of the power of these drops, if you were to ingest a single drop of fennel, it would be equivalent to drinking 20 cups of herb tea at a single sitting.

Dr. Lynn McPherson: Wow. That'll wake you up.

Dr. Susan Kristiniak: So you get that relationship, yes. So, what we're doing currently is we're offering patients three oils. One of them is lavender. Lavender has been researched in terms of, in many different kinds of populations, the elderly, autistic children, people in pain. It's been researched in collaboration with doing massage, with doing acupressure and they have found through the data that it definitely has demonstrated this relaxation response to the point that it then subsequently improves sleep, it controls anxiety, and we all know the relationship of anxiety then in proportion to pain perception. So this idea of lavender then helping with pain management, with the sleep process, and with overall anxiety. We are fortunate at Penn that when we started this program about 20 months ago, that we were able to find a vendor who actually gives us the oil contained it what looks like the old Vick's Vaporub inhalers.

Dr. Lynn McPherson: Mm-hmm (affirmative).

Dr. Susan Kristiniak: If you remember those.

Dr. Lynn McPherson: I do.

Dr. Susan Kristiniak: So, it's single use, it's private patient use only, it requires no preparation on the part of the nurse. There is education on how to use it, holding it under your nose, doing deep inhalations and we're able to offer this to patient as a self-care practice. The inhalers are unique in that if you keep them closed, they can last up to six months.

Dr. Lynn McPherson: Oh wow.

Dr. Susan Kristiniak: And they are significantly inexpensive in terms of cost. We selected lavender for those purposes and then we selected peppermint and ginger for the purpose of nausea. And the reason we went to two of those is peppermint, we love. It's

invigorating, it's uplifting, it gives many, many attributes. It's been studied for post-anesthesia nausea. It does have, though, some contraindications and certainly introducing it into a tertiary care environment, a very, very, very conservative approach. So, patients who have a history of hypertension or cardiac disease, because of the vasoconstrictive properties of smelling peppermint, it is contraindicated for pregnant women, for women who are lactating, for children under the age of six.

That being said, we brought in a secondary scent which is ginger, which has been studied along with other anti-motion drugs in comparison and has been found to help again with nausea as a secondary offering for our patients. We targeted the oncology population, who in parallel to me doing a small study within palliative care, patients that have high symptom burden along with their serious illness and always looking for options for care, right? So we did a small pilot of 30 patients. We offered these oils, a nurse introduced them, and we also introduced lavender as a standing practice as a hand massage. So there is dermal absorption, much like we think about other types of pharmacologicals, right?

Dr. Lynn McPherson: Mm-hmm (affirmative).

Dr. Susan Kristiniak: Like scopolamine and fentanyl and nicotine patches. So we provided a hand massage intervention as well. The study we did initially as our pilot with 30 patients, 29 of them experienced positive improvement in their nausea, anxiety, overall well-being, and the language of these symptoms came from a validated tool, the Edmonton Symptom Assessment Scale.

Dr. Lynn McPherson: Sure.

Dr. Susan Kristiniak: So, much like pain is Likert score zero to 10, we are doing now the same with other symptoms and we're asking our nurses to do a pre-score, much like pain, document the intervention which we build into our EMR, so you select the inhaler choice or the hand massage choice, and then they're doing a post-assessment. And we're able to collect that data as a quality improvement initiative. The hospital, University of Pennsylvania, has embraced this more than I could have expected. In 20 months, we have trained, I think yesterday's count was about 840 nurses.

Dr. Lynn McPherson: Wow. That's a lot.

Dr. Susan Kristiniak: And without marketing. I think my personal belief is that nurses, many times when I've done some foundational surveys of are you using any therapies? What are you using? There's a lot of rogue behavior out there, right?

Dr. Lynn McPherson: Mm-hmm (affirmative).

Dr. Susan Kristiniak: So according to many State Board of Nurses, there is permission to practice to use any of the integrative modalities, as long as it is within a standard of practice. So, at Penn, we've created policy that describes very specifically the scope of

practice. We've provided the product, so we're assuring quality, which is a very important component of this. We secure material safety data sheet information on them. We created a patient education information, which actually then, as we all know, giving patient information in a one-and-done is usually not well absorbed, especially in the acute patient care area, where they're bombarded with information. So we provided information on the go, for them to take and we put in a documentation source, so that we can actually now quantify patient responsiveness and really pull that data from a quality perspective.

We've just transitioned to a new EMR, but in our previous EMR, we actually were able to pull the data, and I could share with you that the comparison of pre- to post-scoring for anxiety and depression, which we didn't really ask that nurses include that scope or that symptom, we saw a six point change in a 10 point Likert scale by smelling lavender or having a lavender hand massage.

Dr. Lynn McPherson: Wow, that's amazing. And we know that a 30% reduction is clinically important pain relief at least, so that's huge.

Dr. Susan Kristiniak: So in pain scores, pain scores and nausea scores we saw around between a three and a half and a four point change in Likert score.

Dr. Lynn McPherson: That's amazing.

Dr. Susan Kristiniak: Yeah.

Dr. Lynn McPherson: And does that effect persist? How long would it persist for?

Dr. Susan Kristiniak: So it really depends, I have to tell you, it depends on the individual, it depends on their overall well-being, their metabolism, because the oils get in your system and then they're metabolized primarily through your liver and excreted. So, what we've done is, we've allowed the patients to keep this inhaler or a one ounce bottle of personal lavender lotion at the bedside and instructing them to use it PRN. It's really, really, really hard to overdose on lavender. You can have a paradoxical effect and have an increase in anxiety. I haven't seen it in 12 years, but it apparently could occur. So we're allowing them to keep it at the bedside.

The other messaging very, very clear though, as part of this approach is, more isn't better. As long as the patient is doing correct deep inhalations, not just whiffing it like they're testing a perfume sample, you then might have to go back to the Pyxis. And you might have to say, "You know, okay, it didn't work." Because we know that's true of all kinds of interventions. So, you don't say, "Take five more deep breaths instead of two." You say, "Okay, so you did not respond as well, but we want to keep you comfortable."

So, it can last three hours, I've seen it last five hours. I think the anxiety component, what we're seeing in our geriatric population at Penn is once you bring down that anxiety, then many times our confused patients are actually finally then resting.

Dr. Lynn McPherson: Mm-hmm (affirmative).

Dr. Susan Kristiniak: And they're catching up on that sleep deprivation, and so ironically again as a second off of this experience, my geriatric nurses are saying, "You know, Sue, we're decreasing one-to-ones, because the patient is sleeping comfortably, and we're checking on them, but they're not agitated, they're not upset because we've eliminated some of that overlying delirium that we're creating by new environment, new stimulation of being in the hospital and we're allowing them to rest appropriately. So, again, there you're seeing a much more prolonged effect. Once you get them quieted, calmer, you actually see then that that anxiety-free time is really expanded.

Dr. Lynn McPherson: Yeah. This almost seems too good to be true. And I'm going to go out on a limb here-

Dr. Susan Kristiniak: Sure.

Dr. Lynn McPherson: And [crosstalk 00:14:54] assume that I think this would be almost as relaxing to the staff as it would be to the patient.

Dr. Susan Kristiniak: Amen.

Dr. Lynn McPherson: How has uptake been?

Susan Kristiniak: Amen.

Dr. Lynn McPherson: I would think they would enjoy that. It's something they can do, it's certainly not harmful. What is the response you've gotten?

Dr. Susan Kristiniak: So the staff I think, just by virtue of what we're hearing in terms of utilization, they all have to go through a two-hour competency training as part of this. We don't just put this stuff out in the world. And so that to me is a critical component of understanding where there is exclusion, where there is contraindication, how to do assessment, obviously, to the policy. Ironically, the staff is certainly embracing it for themselves as well, and we've recognized that. So during things like Nurse's Week, in our nursing wellness center, we provide hand massages.

Dr. Lynn McPherson: Wow.

Dr. Susan Kristiniak: And ironically, I have to tell you, why these are available. I was following some medical students the other day who I was smelling lavender very predominantly, and I said to them, "Wow, that smells good. Where did you get it?" And she pulled out the inhaler.

Dr. Lynn McPherson: Aww.

Dr. Susan Kristiniak: She said, "The nurses thought I needed a little calming, so they gave me this."

Dr. Lynn McPherson: There you go.

Dr. Susan Kristiniak: Yes. So it is, in terms of what has transpired many times in my role, is this idea of how can nurses then transform this into a self-care practice.

Dr. Lynn McPherson: Sure.

Dr. Susan Kristiniak: So, when I teach the class, I teach to not only what we're providing as an organization for their care and really as a new education opportunity for patients, but here's other ways of doing it, like through diffusion, you know those misters that people will have or there's things you can put in your car charger and create scent. Here's other ways that your patients may describe how they're using it and how you too could maybe consider it. And it's ironic, I have nurses who will send me pictures that they're out looking for oils or they're now using lavender and they're scenting their sheets at night to improve their sleep. Sleep is such a ... we chase it all the time.

Dr. Lynn McPherson: Yes. [crosstalk 00:17:06]

Dr. Susan Kristiniak: Yeah. So, that's probably one of the most common reasons people seek out this bucket of integrative therapies: anxiety and sleep.

Dr. Lynn McPherson: Yeah. And I like the use of the word integrative, not complementary and alternative because it's certainly not alternative, it's become mainstream now.

Dr. Susan Kristiniak: Yes. And actually the NIH recently changed the name of their agency to reflect that. They took alternative out of the language. It's now the National Center of Complementary and Integrative Health.

Dr. Lynn McPherson: That's wonderful.

Dr. Susan Kristiniak: Which is actually a wonderful website, the NCCIH, I think it's .NIH.gov. Actually one of the important pieces that again a great reference for folks listening to this podcast, is that they have an A to Z topic listing on their main page, their landing page, where anything that anybody describes to you, you can at least look up what it is, what's been researched in it, where there might already be founded contraindications, because we as health care providers, I think, are at times equally unaware of some of the practices out there that are centuries old. I think one of the greatest examples of that is the last Olympics when Michael Phelps got up on the swimming block and had all the bruising all over his body.

Dr. Lynn McPherson: Mm-hmm (affirmative), yeah.

Dr. Susan Kristiniak: Right? They were doing cupping mechanism. An example ... a lot of people had no idea what that was, and again, century old practice. Does it ... you know the

impact ... I'm not sure, but his coach and medical team seemed to think that it did.

Dr. Lynn McPherson: Well, it must have worked. He's got 47 gold medals I think.

Dr. Susan Kristiniak: I know. Yes, it's hard to argue, isn't it?

Dr. Lynn McPherson: Yeah.

Dr. Susan Kristiniak: But that's a wonderful site to explore oils, to look at some research, to find what's out there. I hear often from my colleagues, I teach this at a national level for a company that does holistic nursing training to prep for certification and I hear often that nurses who are looking for information find a lot of conflicting information.

Dr. Lynn McPherson: Sure.

Dr. Susan Kristiniak: And, unfortunately, oils, as they are manufactured and available to our patients as well as nurses, there's a lot of unsafe information being shared with community. There's some kind of networking sales modalities going on right now that, for example, recommend ingestion. And my favorite book in terms of safety equality is Robert Tisserand, who is internationally known, he does a great deal of meta-analysis of research that's out there. He just republished about a year and a half ago his second edition. And that's my go-to handbook for information. And I think his book is well valued and one that I reference for anybody who says, "How come this works? How come it doesn't?" Or "What do you have to validate that we should be using this?" And that's my go-to. But there is a lot of misinformation out there. Ingestion is, while not completely restricted, these drops and you're taking them in your gut, it has to be under very, very close scrutiny by a high level of integrative practitioner, who can monitor things like your LFT's when you're ingesting.

So, but, I think we all have a great learning curve in this area. There's a lot of ... when I talk about things like MRSA and the impact of oils like tea tree oil on things like that, people are like, "Why aren't we using this? Why aren't we?" And again, the research hasn't caught up to, I think, the level of rigor to bring this four-fold, completely into our arena of traditional Western medicine. But it's making breaks. It's finding its way. I just published, or I'm going to be printed, but I was accepted for an aromatherapy journal, well-known, about integration into health care systems and how do you find that? I think, right now the mantra of the patient experience is giving me some wins.

Dr. Lynn McPherson: That's great.

Dr. Susan Kristiniak: Right.

Dr. Lynn McPherson: Well, just to wrap up, my last question would be, if someone's not fortunate enough to work at the University of Pennsylvania with you, and they're listening

to this podcast and thinking, "I would really like to explore this and get into this more and perhaps learn to do this myself," where would you recommend they turn?

Dr. Susan Kristiniak: So, for not necessarily restricted to nursing, but if you ... what I did when the IRB said to me, "Who was your aromatherapist?" my, because there isn't a formalized certification nationally recognized program like many of the integrative practitioners, I went to the Holistic Nurses Association. They have two endorsed programs. One is completely distance learning, run by two nurses, well-published, well-researched called the Institute of Integrative Aromatherapy. The other is Jane Buckle, who is from England. She just retired from the field, but her program is partially live and partially distance learning. She tends to ... there's one going on right now about two hours from Philadelphia in a hospital in North Jersey. But they put them in areas, they kind of come to where your needs are and offer you geographic location proximity. But both of those are about 325 hours of work.

Dr. Lynn McPherson: Wow, that's a lot.

Dr. Susan Kristiniak: Of CEUs or work. Yeah, but they give you the very broad spectrum of the chemistry, the evidence base. You do 30 case studies, you have to do a research project. There is testing involved. And that's what I completed 12 years ago, that that process made me considered expert to be able to conduct research which I've done. I've done the study of lavender with my dementia patients and then I did a study using black pepper to enhance vein visualization for nurses who want to start IVs more effectively ...

Dr. Lynn McPherson: [crosstalk 00:23:14]

Dr. Susan Kristiniak: ... that was also published in an aromatherapy journal, yeah.

Dr. Lynn McPherson: Interesting.

Dr. Susan Kristiniak: Yeah.

Dr. Lynn McPherson: Wow.

Dr. Susan Kristiniak: Yeah, kind of a different approach to different ... to meet our needs.

Dr. Lynn McPherson: Well, it certainly-

Dr. Susan Kristiniak: But those two organizations are what I consider well-endorsed and they're high quality.

Dr. Lynn McPherson: Well, that's great. Well, certainly what you do for a living is very much different from what I do for a living, so maybe the answer is somewhere in the middle.

Susan Kristiniak: I totally agree.

Dr. Lynn McPherson: And then using these therapies as you said, integratively. I think that maybe is the best approach. Well, I would very much like to thank our guest, Dr. Susan Kristiniak, who is certainly an expert in aromatherapy and I'm sure she will let me know when she comes up with that freshly baked bread or perhaps a pizza aromatherapy. That would be my go-to, I think. Good luck with that. But thank you so much for your time, Dr. Kristiniak.

Dr. Susan Kristiniak: You're welcome.

Dr. Lynn McPherson: That was very informative. So again, this is Dr. Lynn McPherson and this presentation is copyright 2017, University of Maryland. For more information on our completely online Master of Science and graduate certificates in palliative care, or for permission requests regarding this podcast, please visit [graduate.umaryland.edu/palliative](http://graduate.umaryland.edu/palliative). Thank you.