

CENTER FOR MIND-BODY MEDICINE
COMPREHENSIVE CANCER CARE 2000

CONCURRENT: Managing Pain and Other Symptoms

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MODERATOR: Ann Berger, MD

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P R O C E E D I N G S

DR. BERGER: Actually, I am both a nurse and a physician who trained in oncology, and then I went into palliative care. Most recently, I came from Yale to New Jersey, University Medicine and Dentistry in New Jersey (UMDNJ). And most recently, I've accepted a position at the National Institutes of Health to start a pain and palliative department, which I will be doing in August of '90. And so, I was asked to moderate this session.

In terms of alternative medicine and complementary medicine, these are the experts here.

MS. BERGER: Yes, August 2000, August 1st. I'm in the process of moving now. You can feel it. Feel the stress?

And the other thing is, as I said, our expert panel is here, and they're the ones really that are going to talk to you about the pain and other symptoms, and complementary and alternative medicine.

My main field is palliative care. And just from a patient point of view, I would like to share this. I not only now have been both a nurse with a masters in nursing and a physician, but most recently I was diagnosed with breast cancer. And I have been undergoing acupuncture for both energy, as well as acupuncture for a herniated disk, which occurred at the same time as when I developed the breast cancer.

The acupuncture has helped tremendously in terms of the herniated disk, in terms of the post-mastectomy pain, and I've really been quite impressed, and hope in the future to be able to do more research on this because it's quite impressive.

Now, the role of the physician -- or anyone really in health care -- is to cure sometimes, relieve often, and then comfort always. And those of us in palliative care are really concentrating on the last two-- relieving often and comforting always.

In terms of goal medicine, here is to cure and to heal. And in terms of to cure, which is more the traditional model, we're looking at disease, diagnosis, treatment, investigation.

Healing, which is what we're interested in, in palliative care, in complimentary/alternative medicine, is really restoring wholeness, relief of suffering, and improving quality of life.

Just a little definition of palliative care. Palliative care is the active, total care of patients with diseases not responsive to curative treatment. Control of pain, other symptoms, and the psychological, social, and spiritual problems are paramount.

The goal of palliative care is achievement of the best quality of life for patients and their families. Many aspects of palliative care are also applicable earlier in the course of illness in conjunction with treatment.

Now this is very, very important. This is an idea that in medicine is really new, particularly in this country in which we're trying to bring across.

The illness projectory I just want to give you here-- people when they present to their physicians actually present with symptoms. We don't present with an illness; we present with symptoms. And from my own experience to -- from experience with my child who was actually sick last year -- with many, many patients, what happens is, you present with a symptom, and a multi-million dollar work-up is done with a million different tests. And then you go on your way to getting a multi-million dollar treatment schedule.

So an example would be somebody who presents with shortness of breath, maybe some chest pain, some weight loss, and the multi-million dollar work-up is all the X-rays, and CAT scans, and scopes, and they're found to have a lung cancer.

What happens in modern medicine is that you go to Midas to get a muffler, and no matter what the situation is, you get your muffler, usually a very expensive muffler; and it's chemo, and rads, and you're on your way. But the symptom is never looked at traditionally. And the patient continues to be short of breath, and have chest pain. And they're like, doc, I still feel just as bad. But at this point, they don't tell the doc because of different barriers that we're looking at, and they're not being treated with their symptoms. So those of us in palliative care are really looking at those pain and symptoms from day one.

And so, I see at this point in my job now -- and expect to do this at NIH also -- all patients with any chronic illness that can ultimately end up in death -- which is most chronic illnesses that we see because it could end up in death four years from now. So we're looking at residents with diagnosis of cancer, cardiac disease, renal, dementia, stroke, HIV, COPD, AOS, and the list really goes on. I mean, it's basically almost everybody who has chronic disease-- diabetes, et cetera.

In terms of palliative care, we use a very team approach, and it's patient and family, number one, with nursing, with social services, with physiatry, music-art therapy, volunteers, counseling. And there really is no head of the team, other than the patient and the family here.

I'm now going to move on. I'm going to introduce Wendy, who's going to be speaking with you first.

Wendy Smith is a licensed psychologist and nationally certified biofeedback therapist, with advanced training in the use of hypnosis for pain. She has extensive experience in the use of biofeedback techniques for a variety of conditions, including pain related to cancer and its treatment.

Dr. Smith has directed a study on incorporating hypnosis and other non-traditional techniques and to treatment protocols at NCI, and designed a pediatric interview for an NCI study on pain and cancer, and HIV disease.

She's authored many articles and book chapters about the management of pain that's related to cancer. She serves on the editorial board for the Journal of Alternative and Complimentary Medicine, and is a member of the board of the American Institute for Palliative Care Development, and serves on the Advisory Council for this meeting.

She's currently acting branch chief within the Division of Clinical and Prevention Research at the National Institute of Alcohol Abuse and Alcoholism at the National Institutes of Health.

Wendy?

DR. SMITH: Thank you. First of all, it's really terrific to see this many people here. Can you give me a sense of how many people were at this session last year? Okay, great, a lot of new people.

What we're going to do is basically expand on what we talked about last year, give you an update, and give you some real concrete information about what the most common techniques are that are used.

The first thing I want to do is to define what we mean when we say CAM. This is a term that's been thrown around all day today. For our discussion this afternoon, I'm using the NIH definition, which is "medical practices that aren't commonly used, accepted, or available in conventional treatment."

What are we talking about when we say symptoms? Again, for this discussion, I'm talking about symptoms related both to cancer itself, as well as symptoms related to cancer treatment. So things like nausea and vomiting, related to chemotherapy treatment, as well as symptoms like pain, anorexia, dyspnea, and fatigue.

So if you're interested in looking at alternative treatments to help manage symptoms; or you're a researcher, and you want to study these things; or you're a practitioner, and you want to know what to tell your patients, what do we need to know about CAM treatments?

The first thing, what are the techniques? There is a whole a variety out there, and there seems to be new ones every year. We're going to go over what the most commonly used techniques are for managing cancer-related symptoms.

The next question is, what does research tell us about these techniques? We're going to over the limited research there is in this area, and we're going to talk about potential risks to some of these techniques as well.

The most common techniques used in palliative medicine come from three major categories--mind-body techniques. This is something Jim Gordon was addressing earlier this morning traditional Oriental medicine. By that term, we mean a completely alternative system of medicine coming out of Asia.

And manipulative and body-based therapies. What we're talking about there are techniques that are based on the foundation that manipulation or touch can promote healing.

So let's take a look at the mind-body ones. The first thing I'm going to start with is relaxation and imagery, because there's a good amount of research in this area, and it's most commonly used.

When we talk about relaxation and imagery, what we mean is not just calming the body, but also using visual imagery, imagining things, most often sensations. So you're picturing things as you're doing a deep relaxation. There's a variety of procedures that can be used. It's usually combined with other approaches.

I believe Barb's going to be talking later in this session much more specifically about particular techniques and how they can be used. What I want to do is go briefly over what the research shows in this area.

I did a Medline search, and review of the Cochrane Library. These are databases that cover all types of medicine. What we came up with were 12 studies looking at cancer-related symptoms. Most common, there were eight studies on nausea and vomiting related to chemotherapy. Seven of the eight reported a reduction in nausea and vomiting.

The eighth study, although they didn't report a reduction, they reported that patients had a more positive experience with their chemotherapy. It's also been shown to reduce oral mucositis pain, promote appetite, and reduce fatigue related to radiation.

What you need to keep in mind if you're considering using something like relaxation or imagery, there are some minimal risks that are primarily related to the training and the experience of the practitioner. I'm talking about emotional and psychological reactions.

What this means is, sometimes when you do a deep relaxation, you're aware of some sensations or some feelings that come up that may be a little unexpected or confusing for the patient. The most common thing I've come across in practice is sometimes people get a little weepy with the release of emotions. It's not dangerous, it's not abnormal, but it's sometimes unexpected. So you need to be working with somebody that you trust, who's experienced, and can help put those kinds of reactions into context for you.

So what's the bottom line on relaxation and imagery? The research suggests strong support for improving nausea and mood related to chemotherapy, and it's generally safe when working with somebody who's experienced and thoroughly trained.

Now, let's take a look at hypnosis. Hypnosis can be thought of in some ways as an extension of a very deep relaxation, with one addition, and that's suggestions. What kinds of suggestions? There's a variety of techniques that can be used.

One is blocking awareness of a sensation; substituting an unpleasant sensation for something more pleasant; changing the location of the sensation, the meaning; as well as a complete dissociation. What that means is you're able to completely tune out the sensations from your body.

This can be particularly helpful for people who experience symptoms like procedural-related pain. For example, lying prone could be very uncomfortable for some patients. And if you have to undergo an MRI, it can be a very difficult process. You can learn with training to put yourself in a trance to where you are unaware of any of those sensations, and go through that kind of procedure much more comfortably. It can be very effective.

Looking at the research, extremely limited on the management of cancer-related symptoms, one focused on increasing a positive sense of coping. Another focused on pain, nausea, and vomiting. And although it did report a reduction in pain, it didn't report any changes in nausea vomiting with hypnosis.

What are some of the potential risks? They're similar to relaxation, but again, taken another step further. You're doing something deeper. You're doing something a little stronger. It incorporates this dissociative state, so again, you need to be real sure you're working with somebody who is thoroughly trained in this technique.

It's important also that this be part of a more comprehensive treatment plan. In isolation it's not as effective or as safe an alternative. You need to work with people you trust, in part, of a multidisciplinary team.

Bottom line, little research looking at it, but there's some suggestion it might be helpful, particularly for pain control and promoting a sense of coping.

Now, let's take a look at music therapy. What we're talking about here is the control of use of music to promote healing. This is beyond just listening to pleasant music. And Kristine's going to be talking more specifically in detail about the music therapy program at the Cleveland Clinic where she works. But I want to just go over briefly, again, what the research shows.

Very limited, and it varies greatly by subject and population, although there's some suggestion it can be helpful in reducing pain and promoting positive mood.

Potential risks. Now, this is something that often surprises people. This is less potential risk, and more contraindications -- cautions, things to keep in mind if you have these, to carefully think about using music therapy.

The first is pain. Right temporal lobe, lesions in the brain. People who have these can often experience music as being actually painful. There's a concern if you have brain cancer or metastases to that area. This does not mean you don't use it. It means you need to be aware that sometimes this can happen.

Catastrophic reactions. What we're talking about here is some people with dementia experience signs of withdrawal as a result of listening to certain kinds of music. They can show signs of anxiety, depression, and distress. Again, it doesn't mean you don't use it; it means you use this with some caution, with somebody who knows what they're doing while patients with dementia are being supervised.

And lastly, epilepsy. There's rare reports of music causing seizures. Some of you may remember, several years ago there was a case of a young man who went into seizures listening to Mary Hart on television, who's on an entertainment program. This is the kind of thing we're talking about, that it sets off seizures. Again, very rare.

Bottom line, extremely limited research data, but there's some suggestion that there may be something positive going on here, particularly for reducing pain.

Next category. Alternative medical systems. What we're talking about here primarily is acupuncture and herbal preparations.

So first the acupuncture. The bulk of the research is on acupuncture for nausea and vomiting relating to chemotherapy. There are six studies, mostly very well done. There's very strong evidence that acupuncture, particularly at the P-6 site, can be very effective in controlling nausea and vomiting.

The P-6 site is very important. I think most people are aware of acupuncture's needling in different sites of the body. Not all acupuncture's done the same way, and the research has clearly documented that the P-6 site is very important to get this kind of effective control of nausea and vomiting. There's a study suggesting it helps reduce pain, another small study suggesting it may be beneficial in reducing dyspnea, and one showing a reduction of vasomotor flushing in patients with prostate cancer.

Things to keep in mind if you're considering acupuncture. There are occasional adverse effects. The worst thing on record is actual fatalities. There's 45 that are recorded in the general medical literature. There's also adverse effects like a collapsed lung, trauma to the spinal cord, things that are primarily related to incorrect placement of the needles. It underscores the importance of going to somebody who's very well trained, very experienced.

Risk of infections. Septicemia, hepatitis, HIV. This was a much more serious concern before the introduction of disposable needles, so it's something to definitely also keep in mind. And aggravation of symptoms. This is the most common adverse effect reported.

What this means is you get a paradox goal reaction. If you're going for treatment for asthma, you actually get an asthma attack as a result of the acupuncture.

Bottom line, there's definite strong support for the use of acupuncture, particularly for nausea and vomiting, chemotherapy related, P-6 site, and a suggestion that it can be beneficial in reducing dyspnea. I can't underscore or emphasize enough the importance of an experienced practitioner and use of disposable needles.

Herbs. What we're going to talk about here are herbs in isolation, but most commonly combinations of herbs, herbal preparations.

It's very difficult to make any kind of meaningful conclusions of the literature on herbal preparations for cancer-related symptoms. There is a great lack of detail. A number of these reports don't even report what kinds of herbs they're studying, lack of detail in the procedures, on the measurements, on the outcomes. It's very difficult to make meaningful conclusions from this data.

There's two reports in the literature focused on pain, both of which report a reduction. There's one focused on pain and itch of cancerous lesions on the skin, and reports some reduction in both. And another study focused on pain and appetite, looking at a combination herbal preparation.

Potential risks. The safety of many herbs and herbal combinations has not been documented. It's very difficult when you go through this process to get information on a number of these things. As there's more and more research being done, and more focus in this area, we're starting to get a body of literature for some guidance.

I've listed here two sources of information for you if you're interested in getting further information about different kinds of herbs. One is a textbook called *The Essentials of Complementary and Alternative Medicine*. It's edited by Wayne Jonas and Jeffrey Levin. It has a very comprehensive section on herbals. And something called *Herb Med*, and that's the website, for those of you who are familiar with computers. What this is a wonderful interactive site listing a whole variety of herbs, contraindications, indications, suggested mechanisms of action, reference lists. It's a wonderful resource, and it's continually building as we get more information.

Another problem is the lack of regulatory protections. What that means is, when you go to the store and you buy these preparations -- dietary supplements and herbals -- we don't actually know what's in them. What may be on the label is not necessarily what's in the package. We also don't know how much of what is in there. We also don't know what else could be in there.

There's a number of studies that came out recently showing a wide variance of ingredients in these supplements. Of concern were things like toxic metals that were found in a number of these kinds of supplements.

The last thing is interactions with other medications. This is a big problem. A couple of studies have come recently, one looking at St. John's wort, showing using that, although it may be effective in certain circumstances, compromises the effectiveness of other medications.

Another thing that came out recently was looking at general anesthesia. The anesthesia literature has been shown more and more complications post-op and during operation. What they found is that it may be related to the use of dietary supplements. So anesthesiologists now nationally are requesting that patients stop all supplements at least two weeks prior to having any major surgery. The most common complication was excessive bleeding -- a caution to keep in mind.

So our conclusions, limited data in the use of herbals, or known actions and interactions.

Finally, the last category, body base. We're going to talk quickly about massage, scientific manipulation of the body. There's a whole variety of techniques and different kinds of methods.

Looking at the research, there's three studies, a quasi experimental study on nine men. It showed some benefit on reducing pain. Another small study, experimental, reduced pain in men, and no change in pain in women. It seems to be gender effects to massage. And there's some anecdotal reports for Shiatsu, which is a Japanese technique related to acupressure.

Potential risks. Diseases and infections of the skin. Massage can serve to spread infection -- you need to keep in mind.

High fever. You want to think very carefully of having a massage if you have a fever. It can increase your body temperature.

Scar tissue. Healing skin is very, very tender. A massage can be a real problem if it's a new scar. Later scars, that's different; but brand new, you need to be really careful.

Open wounds and burns, varicose veins; can dislodge clots. Low platelet count can cause bleeding and bruising. And tumors and infected lymph nodes should never be massaged. There's some question that it might increase the likelihood of a metastasis.

Bottom line -- limited research, positive effect on pain. And it's generally considered safe when you consider those contraindications.

Conclusions. We've got a whole variety of techniques out there. There's a large variance in the research support. The strongest for acupuncture of P-6 for nausea and vomiting, and relaxation and imagery for nausea and vomiting, and hypnosis for pain. And there's potential risks that range from really mild to potentially very serious.

What do you do if you're interested in using some of these things?

I've put this table up here. I know you can't read it, but I just wanted you all to be aware of this. This is coming out in a textbook called Palliative Care: A Practical Guide for Oncologists. What I've done here is, I've organized all this material according to symptom. This is going to be use for guidance for patients and practitioners.

So you look on the left, go down that list. For example, if you're having problems with appetite, anorexia, you can look across, see any techniques that are in the literature, the state of the research support of that, and what some of the cautions are to keep in mind.

If you're interested in a copy of this, or other materials, feel free to contact me. I'll be happy to send this to you when it's published.

So before you leave today at the end of this session, I just want to leave you with two points that are real important.

The first one, natural isn't necessarily safe. We all talk about holistic, alternative. We figure it's less toxic than the traditional things we're aware of. From the discussion today, I think you can see that's not necessarily true.

But the second point is equally important, as you need to remember, just because we don't have research on it doesn't mean it's not very effective and very safe; it just means we don't know. So as you're considering putting together alternative medicine techniques into your treatment plan, you need to keep in mind the state of the research support and the potential risks. There's a lot of promising techniques out there, but there also has to be a bit of caution as well. Thank you.

DR. BERGER: We're going to be taking questions at the end. We're actually leaving a half an hour.

The next speaker will be Kristine Nelson. Kristine Nelson is a medical oncologist, after completing her fellowship in oncology at Yale University. She pursued additional specialty training in palliative care medicine at the Cleveland Clinic Foundation. She was then appointed Research Staff Fellow in the Pain Research Clinic at the National Institutes of Health, where she worked for a few years, where she was involved in research and chronic pain syndromes.

Dr. Nelson is now director of the Palliative Medicine Research Programs at the Harry Horvitz Center for Palliative Medicine of the Cleveland Clinic in Cleveland, Ohio. Her interests are in the area of cancer-associated symptoms, and their treatment, and developing research protocols for the symptoms of advanced cancer.

DR. NELSON: I was asked to talk about the methods that are in the literature for which there is research. I'm a researcher, and I can tell you that it's rather difficult to find anything that's substantiated with a lot of research in the literature. But there are some things there, and I sort of put together a little hodge-podge of those things that are there. And the first thing that I'll talk about is -- I'll just pick up this -- the symptom of dizzy or shortness of breath -- the one you talked a little bit about. And then I'm going to talk about some of the programs that exist within the field of palliative care. That's my area of expertise, in palliative care; and so, these are limited to what's in the literature and what we have there.

So let me first start out by picking up on what Ann said about what the definitions of palliative care are, for some of you who may not know. There are a lot of different terms to define what amounts to this patient population of people, in my case, with advanced cancer. Some people call it palliative care, some people call it pain symptom management, some people, supportive care, pain management and palliative care, and hospice care.

And I think, regardless of what you call it, this is my definition, and it's very similar to what Ann put up there. I take it a little bit further and say, palliative care is the care for the physical, psycho, social, and spiritual issues and problems of patients and their families from the time of diagnosis to one year after cure or death. And we've had to qualify the time limit of palliative care, so this is what we've come up with.

And I work, as Ann said, at the Cleveland Clinic Foundation, and we have a palliative care program there, which is fairly comprehensive, including an in-patient care unit, where people who are having symptoms primarily related to cancer -- although about 10 percent of our patients are other diseases, particularly cardiac disease and ALS. And we have an out-patient clinic, we have a hospice home care program, and a hospice in-patient unit.

So we have a variety of patients at a variety of stages throughout their disease, again, primarily cancer. So this issue of finding more ways to treat the symptoms related to cancer than what we usually have makes CAM particularly attractive to our team.

And just to show you, we agree with the NIH and what the interdisciplinary team is. We've left out a few things here, but basically the common things that you would know is, part of a team taking care of patients in an institution -- physicians, nurse, social workers, physician assistants.

But I think what makes palliative care somewhat CAM like, shall we say -- we always like to take credit for anything we can -- is that we have chaplains in our program, we have music

therapists, we have art therapists, and we have volunteers, which aren't just volunteers who go and give water to patients or run charts around, but actually help and participate in the care of patients and their families.

Our volunteers don't do the kind of care that you would find if you went to Europe, and you talked with volunteers who actually do patient care -- taking care of patients when they're ill -- but they do provide a tremendous service, particularly for families. So we take interdisciplinary care a little bit farther, and I think that really puts us into this area of CAM.

And these are the symptoms that we see in this patient population. Now, this is a study we did. It's derived from a thousand patients that we were asked to see in the hospital who had symptoms related to cancer. And this is the order in which they had them.

As you can see, pain is first. Anyone who works around cancer patients would probably expect that that would be the case. Fatigue is the second. It goes down to anorexia or poor appetite, weight loss, no energy drive. It goes on there.

But I think one of the interesting things about this study that we did -- and we took these three symptoms. These happen to be two of them that Wendy already talked about -- dyspnea or shortness of breath, anorexia or poor appetite, and nausea and vomiting. And the prevalence, or how many people had this symptom when we talked to them on the day that this consult was done is not always what's most important to the patient.

So you can see that the people who had shortness of breath, it was 51 percent of the population that we saw. But it was important in 63 percent of that population.

And the same with anorexia -- much more common, and yet it wasn't as important to patients that they couldn't eat. And again, nausea and vomiting is a little perplexing, the nausea and vomiting. Thirty-six percent of the patients had that symptom, and yet only 16 percent thought it was significant or important to them.

I suspect -- and we've never been able to analyze this. But I suspect that that's because most of that was nausea and not vomiting. If it had been the vomiting, of course, that might be a little different, might be very different, as a matter of fact.

So we need to look not only at what the symptoms are, but what's important to the patient. And I think anybody who takes care of patients and tries to understand things about what they're feeling knows that, that they have to ask them.

So this is the first and the only symptom that I'm going to touch on, and that's dyspnea, which is -- shortness of breath is a tremendous problem in our patient population. As I just showed you, 61 percent of the people had that problem when we saw them. And it's not as common as pain, but it's significant. And you can imagine, if you've ever been out of breath, how distressing this is to a person.

So it's very important for us to find ways to treat this; and it's not particularly easy to treat. We have some methods of treatment, but in cancer-associated shortness of breath it's problematic.

So this is a study. Now, when I say the word "study," I mean that this is something that's reported in the literature. I'm a researcher, so this wouldn't need to be criteria of a very well-designed research study, but it still gives us some information. And I think it's important that we just quickly look over this.

This was a hospice in the UK, and they had 20 patients who had any cancer. So they could have breathlessness from any cancer. The problems with that as a research study is that you don't know anything -- any end. You don't know if it works. You don't know anything about why it worked in terms of which type of breathlessness it worked. But regardless, let's go on because it is important.

It was an open study, which means there are no controls on this study, so we don't know how much of it is so called "placebo" effect, or how much of it is just the effect of having another person there with you, paying attention to you, taking care of you, and talking to you, and helping you with your suffering, which, of course, would have a big effect I think.

So what they looked at was, they looked at vital signs, and they looked at some symptoms in addition to the dyspnea. And what they found was that 70 percent of the people had a marked improvement in their dyspnea.

In addition, besides breathlessness or dyspnea, they did a visual analog, which is a research method of measuring -- in this case, dyspnea usually goes from no dyspnea at all -- no shortness of breath at all -- to the worst I've ever had, or suffocating, or something like that. And they found that there was improvement not only in the breathlessness, but in the anxiety, and in relaxation. They also found that the effect lasted for up to six hours, after one session -- or one treatment -- with the acupuncture. And that the maximal effect was at 90 minutes.

So what can we say about this? There's a lot of questions that remain open when you have an open study, when you don't have controls on it. But I think we can say some very important things. First of all, it did work. If it didn't work, it doesn't matter whether it's controlled or not, we wouldn't go on, and we wouldn't keep using it. So this gives us some introductory information that says, yes, this may be worthwhile in this setting.

In addition, it gave us some important information -- again, information that needs to be verified more -- in how long it works. And this is crucial when you're talking about someone who has shortness of breath, particularly related to cancer, because it's unlikely that that's going to go away.

So if you give something that only works for minutes, or even works for 6 hours, what do you do after that? These are important questions to know, how long something works, and when you have to do it again. It's conceivable that this is a great idea. You could have a man with lung cancer who's having shortness of breath. You could teach his wife to do this acupuncture point. She could do it every time he was feeling short of breath. So it's a really terrific thing, but it needs more research. That sort of mantra you're going to hear me say all the time -- we need more research -- because that's what I do.

What I want to move on to now are just a few programs that exist within different -- in this case, really in hospices, and all from the UK, except for music therapy, which I'll talk about. And the reason I want to talk about this is, first of all, because this is what we see in the

literature; and second of all, because these are great programs to have if you have the resources, but they don't tell us anything particular about specific things that they do. But there are some things.

The first is a report about animal companionship. And I must say, the first time I ever heard about animal companionship, I said, yeah, right. I mean, who didn't know that, that that would help? But, of course, then the researcher in me said, well, we need to prove it. We need to document it, at least.

So this was a report from a day hospice in the UK, where they had 50 patients and staff. I think there were about 35 patients, and the rest staff. And they had to cocker spaniels, and here's what they found.

The people were surveyed, and they said the dogs are very keen; 32 out of 37 reports were that they were very keen. You can tell it's the UK. I guess we probably wouldn't have described it that way here in the United States, but you get the idea.

They found that they were relaxing, they lightened the mood, they created a homey environment where they were, they created some affection, they gave them social interaction, and they were good companions. But as Wendy mentioned, often things that we think are good do have some side effects, some bad things about them, some things that we wouldn't really want.

And the dogs weren't all welcomed. Even people who actually usually liked pets found that sometimes when the dogs came in from outside they were wet, they were muddy, they were unhygienic; some people found them frightening and disturbing, some people were allergic to them. Obviously, we'd exclude those people if they were in there. And some found them to be an obstacle, so they couldn't move their wheelchairs around as easily when the dogs were in the way.

So there are some problems. And this, again, the reason why we need to do some research on these things to find out some of this information. Obviously, nobody's going to bring wet and muddy dogs in, if they know they're trying to provide companionship for someone. But there are other important issues I think that can be researched. And this is something we need to investigate more.

I should tell you in all honesty that we had a dog program -- an animal companion program -- in our hospice, and the dog, for some reason, started biting people, and we had to trade her in for some cats. And the cats are much more welcomed, although I don't think the in-patient facility where it is have been too keen on the cats. So there can be problems, and you can't just jump into these things, I guess is the bottom line in that.

The second area -- or program area -- is aromatherapy. This is, from my knowledge of hospices in particular -- is extremely popular. It's not very well reported, of course. And most of the aromatherapy in the hospices as I'm aware of is massage. Of course, you don't have to have massage with the oil for aromatherapy, but that does seem to be the way it's most effective, and done most in hospices.

This particular study or report comes, again, from a cancer center in the UK, but this one was not a hospice program; this is breast cancer patients getting chemotherapy. And what they

looked at was some depression essentially. And they used what's called the Hospital Anxiety Depression Score, which is just a tool that's used to evaluate depression, which is pretty popular in institutions.

They had 58 patients. They got six sessions each of aromatherapy. And they looked at anxiety and depression, and then the combined score. And as you can see the scores -- the highest score is the worst score -- the three scores were higher in all cases. So anxiety was reduced, depression was reduced, combined is just the anxiety and depression combined score.

So, again, this is, I think, important information for us to look at, but one might wonder what works with the aromatherapy. Is it the person being there, is it the aroma, or is the oil, or is the massage? So there are more questions that need to be answered, but this gives us some information, somewhere to go.

And the last program I want to talk about is music therapy. We have at our institution a rather active music therapy program, and I've become quite interested in this. I'm not sure if it's because we have an excellent program, or because I can't carry a tune in a bucket, as they see. But I like this music therapy program that we have.

We contract with therapists from the Cleveland Music Settlement, which is a large program that does a lot of music therapy. They're board certified music therapists. I think this brings up some important points about the CAM and the programs we use, as how do we determine if people are capable of doing these things, and know how to do them properly.

They use specifically prescribed music. In other words, they go into the room, they talk with the patient and the family, and determine what type of music the patient and family likes. And for those of you who don't know anything about music therapy -- if there's anyone here who doesn't -- that's crucial, to find out what type of music the person likes, in order to get the benefits of therapy.

So we did a survey of our services. And we actually -- when the music therapist came into the room, after she had done what she was going to do, she did some assessment of what went on. This is not patient assessment. So they saw 120 patients over 6 months, and determined -- this is the music therapist again -- that it decreased pain, stress, and depression; it decreased anxiety and agitation; it provided comfort and solace; and opportunity for self-expression.

Now, from this information, we decided to become a little bit more specific about this, and we started collecting the information before and after the music therapy sessions. So the music therapist goes into the room, does a few assessments, and then after the music therapy session, does some more.

This, again, was not really meant to be a study; it was actually meant to document the music therapist work, so that we could assure that we would get paid, so that they could be paid. So our goal was to try and get the insurance companies to pay for this. So that's what this was about.

And this first slide is what the music therapist evaluates as the patient's status. So what are their facial expressions before and after music therapy? And as you can see, the dark blue is a positive change -- this is before and after; she did both assessments -- the yellow is a negative change, meaning it got worse, and the light blue is no change. And as you can see, the facial

expressions were significantly a positive change. The movement was more prominent and no change, meaning, were their movements relaxed. So I think there are three categories for each one of those three, and the movement was, are they agitated or are they resting comfortably, or something in between. And verbal was, were there expressions? Were they moaning, were they resting quietly? And again, the majority were no change.

This is the music therapist. Here are the patients. The patients were asked questions before and after. And the first was mood -- how was their mood, were they said, were they happy? The mood change was significant; 68 percent had a positive mood change after the music therapy; 45 percent had a positive change in pain. These are 30 to 40-minute sessions. We would not have expected any change in pain in that short period of time; and yet, still 45 percent had a positive change.

In anxiety -- actually, you can't see where that is. That's a negative change 100 percent. I can't explain to you why that happened. Shortness of breath was no change in 100 percent.

People who had shortness of breath didn't really change very much, which was a little disappointing to us, as you heard as I was talking about before; this is a significant problem.

But this is information that allows us to go on and of further studies, which we're beginning to do now, and concentrate on an area that we see as being very important, and that's the effect on mood.

So what we need to know about these treatments is that they're useful, that the claims for their effect are justified, and that they're safe. And that's why I keep talking about whether there's research for this or not.

The research -- which is, I think, the way we can determine whether things are safe -- needs to be valid, reliable, and methodologically sound. That's a particular problem to have good methodology in this area, because how do you have what's either a placebo controlled trial or a sham procedure. Those are not easy things to develop in this field, but I think it's one of the -- from a researcher's perspective, very exciting prospects in this field is to begin to do that.

People often will say, well, we have a lot of information; we all know it works -- these CAM treatments -- so what's wrong with that? Why can't we just use that?

In my world, in the research world, anecdotal information, or information based on personal opinion, or personal observation, does not get much credit. But, in fact, I think it's quite valuable; we just have to understand what the value is.

And it certainly provides guidance for research studies, as I think I've tried to make clear here. It's also important in -- a patient once said to me, "These are desperate attempts; give me whatever you have."

I don't like to think of health care being desperate attempts, but the reality is, there are many problems, particularly symptoms, that we can't control very well, and so we do try things that may not be researched or substantiated with evidence.

The problems with anecdotal information is that they can give us a false sense of security. Obviously, what works for us as individuals is important, particularly for us as individuals. So

somebody says, well, what worked last time when you had this problem you're going to try it again because it worked. And as long as it's safe, I think it's a great idea.

But what works for one of us as individuals, or three, or four, or five, or six of us as individuals, doesn't necessarily mean that it works for everyone. And we have to be very carefully about that, not just because it might not be safe, but because we can give patients a false sense of hope.

If somebody comes to me and says, what can I do for this pain, and I give them something for pain, and it doesn't work, I think that's a real tragedy, particularly if I've led them to believe that it may work.

And last of all, the problem with anecdotal information is that often it's junk; it doesn't really apply to large groups of people. So if one person says something works, and it really doesn't work, then 10 people saying it works doesn't mean it's going to work. So I like to say that little bits of junk only equal big bits of junk.

MS. BERGER: Thank you, Kristine. Barbara St. Marie is going to actually come next. Barbara St. Marie is a nationally published pain expert, and she specialized in pain management for the past 20 years. She's published articles on pain management, and is editor of the core curriculum to prepare nurses for certification in pain management through the American Society of Pain Management Nurses.

She's employed by Fairview University Pain Management Center in Minneapolis, and is board certified as an adult and geriatric nurse practitioner.

MS. ST. MARIE: When I first started working at the University of Minnesota, one of the projects that I was given was to develop some way of reducing patient's anxiety and repetitive phone calling when they have a flare of pain. Now, we were experiencing at that time about a thousand phone calls a month, and the nurses started categorizing them into different categories, pain flare being one of them, another one was medication refills, and another one was a broad category of just life stinks.

So we were looking at these phone calls, and thinking which ones can we make a difference in. Certainly, medication refills are one. But the one that was the most glaring, because it took up 80 percent of the nurses' time, was how to manage the flare of pain when it occurs; when they're not able to zoom into the office to get anything, an injection of any kind, a type of therapy of any kind, what can they be doing on their own? So, in looking at that, we looked at the non-medicine, or the non-pharmacological approach to pain, and developing a tool for that.

Now, as we did that, it got bigger and bigger. All of the modalities that all of the providers within the pain management center were trained at doing, we could actually turn that around to teach patients how to do that for themselves. So it was actually a moment of empowerment; that we could actually empower the individual to do some of the non-medicine pain modalities for controlling their flare on their own.

So what we did was, we looked at a packet -- a tool that we'd be using -- to get them trained at doing that. But the problem that we found was that, not that we didn't have a good tool, a good mechanism for giving them, or for teaching them, but that their locus of control was so

much different than what it takes to have a learner who's ready to learn, take on something like this.

So I'm going to spend a few minutes on how we actually shifted the internal locus of control to more of an internal locus of control so that the information actually had some value to it.

Now, I'm a nurse practitioner, and I have a collaborative practice in pain management in an in-patient and out-patient setting during acute chronic and cancer pain. So these phone calls that came in involved all types of diagnosis, not just cancer pain. It was for acute medical disorders, acute trauma, acute post-operative pain, that patients were discharged from the hospital, and then they would follow with me after hospitalization, as well as cancer pain.

So we looked at what can we provide; what can the nurses do, what can they do on the phone when people are calling in, in severe distress over the flare of the pain that they're experiencing?

Well, first off, we have to look at the individual's goals in pain management, look at their belief system, the individual differences, the personal experiences, the knowledge level that they have, and the current status of their pain control.

We need to look at key points that would help us identify if we're able to teach them. Pain treatments work differently with different people, as we've heard about today with all types of treatments.

There are several options available, which really makes it nice for us in offering a package -- a huge armamentarium -- which we all use on a daily basis. When we're practicing with pain management, we use a huge armamentarium to pull in a variety of resources for us to help our patients with pain control.

And then looking at learner readiness, how do we know that the individual is ready to learn, and how do we get them to the point of being ready to learn? How active a role do they want? And we as practitioners have to believe that it works.

So in changing behavior, we want to look at having some type of a change in behavior that's based on experience. So that entails pulling the person in and having them experience some of these non-medicine modalities to control their pain.

In looking at the type of individual that we have, we have to take into many different aspects, and one of it is prior learning. How does prior learning affect how we learn subsequent things? Anytime any of us learn something, we attach it to what we've learned in the past to build on bricks of learning. And so, we what to look at this individual's experience, their creativity, their manner of expression, their facial expression, how they communicate, and looking at the culture, their religious beliefs, and their spirituality.

Dr. Kearns has formulated the Pain Stages of Change Questionnaire. And the pain stages are defined as pre-contemplation, the contemplative phase, the action phase, and maintenance phase.

Now, we scripted out some information that the nurse can use in getting people through these phases. And I'm just going to go through this real quickly because I think it's kind of

interesting to note how you can actually shift the external locus of control internally by making a few simple statements.

When someone is in the pre-contemplative phase, to get them motivated to do something -- to act on something -- is very difficult. They have little interest in making any change in specific behavior. And this isn't just for pain; it's for diabetics, it's for hypertension, it's for cardiac disease, and any type of chronic disease management where you actually have to change their behavior.

So for instance, you have somebody coming in and saying, you have to take away my pain. What are you going to do for me to control the pain? Doesn't that sound familiar? Okay, so we're all on the same page.

Some of the engagement activities that the nurse, or the provider who's on the phone can do, is to instill some of the communications skill that we all learned in school, but have to apply to get changes to actually be made. One of them is reflective listening. So what we do is, we avoid taking on the problem. I've been doing pain management for 20 years, and if I took on all those problems, I'd probably wouldn't be in the field that long.

So having the patient assume the responsibility, you can say something like, you sound as though your chest wall pain is very anxiety-producing for you. You have fears about that. You have fears that it may be a heart attack. You have fears that it may be a new metastasis. You have fears that it may be an injury that's not going away. So I'm reflecting what they're saying. And then to say, I understand how difficult this has been for you, as pain can be so frightening.

Another engagement strategy that can be utilized is clarification of the needs, so you're clarifying their need for some change. So the way that we scripted out for the triage nurses is to have them ask the question, help me to understand what the problem is that you're having. Because, as you know, when their anxiety levels are high, as in any of us, we have multiple fonts, multiple sensations that are coming in all at the same time, and it's hard for us to decipher exactly where we're going with our anxiety, with our pain response.

So to try to turn that around and to slow down the thinking is to just ask for clarification, and clarify the need that, what would you do, what would you like to be doing right now if this episode of pain were almost over? So kind of getting them to the point that they can see beyond that.

The third one is the review of the resources. Reviewing the resources that they have is very important. There's nothing more isolating than a feeling of pain. So as they're feeling this pain response, and the anxiety is just all encompassing, and the family's involved in the process, reviewing that they actually do have resources is very important; and they're resources that they can seek out, they're resources that they can take and do.

So it would sound something like this. It sounds like the pain is very distressing. I'm wondering if we could take a few moments to help you come up with ideas for dealing with that situation differently. So you can actually have the provider on the phone just turn that right around for the person.

And then other things are the reinforcing self-care steps. So what have you done so far? So you're reinforcing what they've already done. What have you done so far to help yourself in this situation?

And then there's initiating a contract. In that contract you can have many different contracts. We have opioid contracts for patients on chronic opioid therapy. We have contracts for the skills that they're going to be learning. We have contracts so that they know what to expect from us, and we know what to expect from them, and it's just clarifying things.

So you can script it out to say, we have reviewed a few things that can be done. I'd like to ask you to do flare management in the way of acupuncture three times a day. In the meantime, I will follow up with a phone call. So I'm saying what I would do. And then I'd like you to call me back in two days to let me know how things are working.

So you can kind of see how this is the ability to shift somebody from thinking, what are you going to do for me, rather and have them think that they have more power to do things for themselves.

When they get to the contemplative phase, they get more at the level of help me to learn for myself. And that will employ some communication skills as well. It will still employ the reflective listening, the focus of influence that I just talked about, but it also reinforces a concern that you have for the person. So you're saying that, I know that this is worrisome, I know that this causes anxiety, and I'm really wanting to help you with that. So you're expressing concern, you're expressing reinforcement, you're expressing support to them.

And then there is reinforcement of the self-care steps again, as I mentioned earlier. And then there's the bilateral contracting so that they understand where they're going in their treatment plan, and where you're going with their treatment plan as well. So it's forming the partnership. So this is the beginning of the partnership.

Once that partnership has occurred, you take them through the preparations, and within the month they're going to be really intensively working within that month. So they're working to prepare, they're working to get themselves already for the pain management.

Then the action that they're going to be doing. Now, basically, we like to change our own behavior, but do we change it over the long term? Well, that's kind of a challenge. And a lot of this activity -- a lot of the action -- has to be geared toward how are they going to be maintaining it. Is it going to be something that they can maintain over a period of time? And it's doing that maintenance that actually is when you feel successful that there's a lifestyle change for your patients.

So let's go through some of the self-care techniques. The general relaxation techniques we all know about. We actually were able to do some this morning before we started the general session, and just getting our minds in a nice relaxed state, our bodies in a relaxed state, doing a body scan, or relaxing every part of our being.

Breathing techniques are very helpful. There's an advertisement from one of our hospitals in the Twin Cities that's a very nice advertisement. It's on the radio, and they talk about how the institution works in relaxation techniques when somebody is coming into the hospital. And what they simply do -- and you do this right over the radio; it was kind of cool the way it was

done -- is the person has a very calm voice, and they're just telling you to breathe in for the count of four, and then to breathe out for the count of six.

And I had a car full of 14-year-old girls as we were listening, and this was on one of their cool stations. So they were already listening already to all their pop music; and then when that advertisement came in, they all did the mantra, "Okay, breathe in, 2, 3, 4, breathe out 2, 3, 4."

There's one thing about being a child of a mom that's been doing pain management for 20 years. One thing that happens is, number one, mom's not interested in hearing about your pain when I get home.

And number two is that you learn a lot of techniques, and you learn it early. So if you have a headache, you're doing biofeedback; you're not taking any Tylenol.

So autogenics is a form of a mantra. So you're saying, right arm is heavy, left arm is heavy, both arms are heavy; right leg is heavy, left leg is heavy, both legs are heavy; right arm is warm, left arm is warm, both arms are warm. So it's kind a repetitive process.

Visual imagery -- can be using a wonderful techniques of visual imagery. One that is pretty famous is the sandbag image, where you actually visualize the feeling of the bag of sand, and that can be a release of energy, or release of pain or tension, according to how heavy that sandbag actually is.

You can have a red ball -- a pain image -- that you can scan your body. I use it a lot with my patients with pancreatic types of pain, where they feel this fiery ball already in the center of their abdomen. And very often you'll hear them describe, it feels like it's coming in from the front, and going out straight in the back. Well, this red ball of pain image is wonderful when they hitch it with that description, and they often will.

Glove anesthesia is a wonderful tool, especially for neuropathic pain in the hands, or in the feet, where they can actually feel the anesthetized part of the body. Then we're looking at muscle relaxation exercises, anything that's conducive to the injury that they actually have.

Music therapy has already been defined, but I'm just going to touch on, real briefly, choosing the type of music to reduce stress, improve healing, and reduce pain. Usually, I would say to somebody, it's not going to be Led Zeppelin, but everyone has their preference, and mine's Mozart. But we usually want the music that we prefer as the most effective, something that's not going to irritate you, something that will relax you, something that's slow so that it's slower than the beat of a heart, and the beat within the music can be very therapeutic. If you want to energize, it would be faster than the beat of the heart.

Older people tend to enjoy music that they remember from their young adulthood. Children tend to associate words with their songs, and then it's the music. So often times in adults, words will initiate an emotional contact. So it absolutely can be quite releasing.

Then cold packs and hot packs. Cold packs can be as simple as a zip log bag. It can be ice cubes, but just make sure that they don't freeze their skin. So you want to protect their skin with just a think layer of a towel or some type of cloth. And also, you want to be careful with individuals that aren't able to feel.

And then the hot packs. Tingle units can be applied, and again, Gate control theory is nothing new to anybody here. And those tingle unit applications, or the electrodes can be placed on various parts of the body. You can go into areas surrounding the pain, or you can go along acupuncture or acupressure sites.

Acupressure is something that we have in the flare packet that we give people instructions on how to do. And the most popular one is LI-4, where you put your thumb and index finger together, and the highest mound of flesh is where you push down. And then you just gently massage, and you get an ache. And that can be very healing for all types of pain or anxiety. And then the rest are listed.

Anxiety plays such an important part in somebody's pain that any of these acupressure points are very good at the sea of tranquility, the Third Eye, the sub-occipital region can really reduce pain by reducing anxiety as well.

Ball therapy is where they use that ball. They can use it like a tennis ball or a racquet ball at the acupressure points, or they can put it on a very tender area that you can just slowly release the pain just from pressure over the area. If it's highly sensitive though, you'd want to just go around the area and massage the area with the ball by rolling it around that painful site.

Soles of the feet are wonderful for rolling a ball. And a lot of my patients go back to work. So they're doing this at their desk with their little ball at their feet, and really feeling -- actually, they get the whole office involved when they see how relaxed that individual is.

Contrast bags would be submerging your body part at different time intervals. So that particular body part is submerged in hot water. The definition of hot water is 106 degrees, no more; and the cold is 65 degrees. So hot water for 10 minutes, cold water for 1 minute; hot water for 4 minutes, cold water for 1 minute. It also gets them thinking, so it's a form of distraction as well when they're thinking about the timing of the water.

Then physical therapy. And I'm not a physical therapist, but I certainly utilize it for all of these stretches, range of motion, muscle strength, joint protection, improve circulation, relax muscles, improve muscle balance and posture.

A form of physical therapy that I have incredible outcomes on is Feldenkrais and the Alexander method. The Feldenkrais is what I work with, and it's a mindful movement, where you're paying attention to every part of your body as you're moving; just a very simple movement. You're just really in tuned to how your body feels through that.

Then pacing, planning ahead, working according to a plan. Avoid heavy lifting, shifting things off a counter instead of lifting it right up. And then avoiding any unnecessary tasks.

Pacing also includes changing position frequently. So if they're at a desk job for a long time, they can get up and move around, letting gravity help them, breathing deeply, trying to get the relaxed benefit of their deep breathing while they're pacing themselves. And then to stop any task to stretch frequently.

So the complementary therapies can also include biofeedback, therapeutic touch using energy fields. Lymphedema drainage can also be used. And with cancer, this would not be something that you'd want to do, unless the diagnosis or the cure has been beyond a five-year point. But it's based on the theory that there's a lymphatic system underneath the skin, that by stretching the skin, you can actually reduce the edema, and increase the comfort.

A popular diagnosis that really is just heavy, whether you have cancer or non-malignant pain - it's a large amount of people within a pain clinic -- is fibromyalgia, and it's a very effective tool to use on those patients.

So while somebody is at home, and they're experiencing a flare of pain, feeling very helpless, and hopeless, and isolated, these non-medicine modalities can be very empowering, and they can start using them right away. You can still call them back at any particular juncture, but they're not sitting there just waiting with nothing to do in that process. And that's all.

MS. BERGER: At this time, I'd like to open the floor for questions for our panel.

Can people ask questions at the microphone, so we can hear.

SPEAKER: Dr. Nelson, you briefly flashed up there marijuana. Could you talk about that, please?

DR. NELSON: The reason I put that up there is because I think -- there are a couple of reasons. I'm quite interested in it, and because I think it's a good example of why we need research in this area.

I don't have the slides, but if you look at marijuana, it's been around since 150 A.D. It was actually legal in the United States, and listed in the books as being -- a physician could prescribe it from about 1820 to 1940, I think; or maybe it was 1840 to 1920. And in 1920, I think it came off the books in the United States. And it's been used a lot. As I'm sure everyone knows, I came of age in the '60s, so I know a lot about it.

But I think it brings up a very important point -- two important points. And that is protecting patients. Some people would say that's too patriarchal; we shouldn't be protecting patients. But, of course, we all do that all the time; we don't recommend things we think are bad.

And so, there's this very prominent issue right now -- should marijuana be legalized for medicinal use? And there's two issues with that. First of all, we need to separate the issue of should marijuana be legalized for a so-called social use within the United States? Do we as a society want to allow that? That is an issue that's completely separate from, should marijuana be available for medicinal use for patients?

I think the problem with what's going on with that discussion right now is that, people who don't know much about health care -- about treatments available -- think that, first of all, they have to go down to their local grade school and buy marijuana in order to get relief of pain or other symptoms. And that's a terribly destructive thing. There are treatments that are available, and they should be used. And people shouldn't be forced to go and buy things which are illegal in most states, regardless of what we think about the social debate. This is the medical issue that's going on, the medical debate.

And furthermore, one might say, well, this has been around forever, it's been used by lots of people, there are many epidemiologic studies, meaning people have been followed over time, particularly in other countries, not so much in the United States, and there haven't been significant problems. So why not just let everybody have marijuana for medicinal use? Again, it comes back to the first issue, does it really work for any medicinal use?

There's some very interesting information that it may have some effect on appetite, and it may have some effect on pain. There may be other things also. But it hasn't been proven yet, at least not with marijuana. It has been proven with some of the synthetic cannabinoids, which are the active ingredient.

But in addition, we don't know what's in marijuana. We know that, first of all, it's more carcinogenic than tobacco. The argument is always, well, people use marijuana for medicinal use. They aren't going to be smoking it continuously, so you don't have to worry.

Well, you do have to worry. Anytime you give a patient, or suggest to a patient if they use something that's harmful, you have to let them know that. It's just like giving chemotherapy that may be highly toxic. We would never do it without telling a person what the problems are. And so, we need to know.

And furthermore, in terms of today's debate about this -- for example, in California and Arizona, you can use it medicinally, legally -- where do you get it, and what's in it?

There was a study done on confiscated marijuana in California that DEA carried out. And they found that very little of the marijuana was pure marijuana. A significant percentage -- over 50 percent -- had grass clippings. So you could go out, mow your lawn, and sell it for a lot of money.

Now, grass clippings probably aren't particularly harmful for somebody who's sick, or somebody who's not sick. I don't know. I actually don't know; maybe it is very harmful. But there were many other substances in that, and some of them had strychnine in it.

So when we say, yes, marijuana should be legalized for medicinal purposes, we need to be very careful about what we're saying. And I'm always interested to know how many people -- those of you who are health care professionals, how many patients are coming to you, or families are coming to you, and asking if they can use marijuana -- anybody -- for symptoms?

And what do you say?

SPEAKER: I'm a patient who's used it.

DR. NELSON: You're a patient who's used it?

SPEAKER: Yeah.

DR. NELSON: And where do you get it? If that's okay to ask.

SPEAKER: A friend.

DR. NELSON: Is that problematic?

SPEAKER: No. And if I can't inhale it -- if I can't do that, I mix it up, and I eat it.

DR. NELSON: Actually, the best studies come from India, where they mix it with milk. Actually, they have a much more potent variety. They mix it with milk, and drink it.

For those of you who may not know, the active ingredient in marijuana are the cannabinoids and the Delta 9-tetrahydrocannabinol is "the" active ingredient that gives everybody the effects they get, as far as we know. It's certainly the thing that makes people high.

There's now a synthetic cannabinoid that's out. The one that's available in the United States is called dronabinol.

And you're shaking your head no?

SPEAKER: I've tried it, and it didn't have the same effect.

DR. NELSON: What did you try it for?

SPEAKER: Well, I've used it for nausea from chemotherapy. I've used it for stress reduction and appetite.

DR. NELSON: Did it have any effect?

SPEAKER: Marijuana does.

DR. NELSON: Dronabinol?

SPEAKER: No.

DR. NELSON: I think there's two or three issues. The first one is exactly that, what this woman said, was that the cannabinoids may work synergistically, meaning one enhances the other, when they're together, as they would be in marijuana, rather than separate and isolated as they are in dronabinol, the synthetic form.

The other issue is, inhaling always gives you a faster effect than swallowing a pill. The third thing is that there may be something about heating these cannabinoids that makes them more valuable, in terms of whatever effect it is they're giving you. And so, there is now an inhaled product being developed. This is dronabinol again, the synthetic cannabinoid, the isolated cannabinoid. It's being developed so that people can inhale it, and that may provide something.

The issue of heating will not be answered by this inhaled form of the dronabinol. But there also may be an issue of dose because you get a much higher dose of marijuana -- if you're getting marijuana in a joint, you get a much higher dose of the cannabinoids than you do when you take the pill. And in fact, one of the problems about so-called prescribing marijuana is that you don't know what the quantity of marijuana is in it, or what the quantity of the cannabinoid is in it. And it varies depending on the plant, where the plant was grown, primarily the seed of the plant. And so, for example, if you go to India, you get a very potent; if you go to Jamaica, you get a little bit less potent, but certainly much more potent than you

get in the United States. And until recently, in the United States, you got a fairly non-potent variety; so you get high, but you didn't get a lot else. I understand actually from the news that there's something coming from Canada that's quite a bit more potent.

So always when people ask us about it, we try them on dronabinol first. Obviously, we can't encourage people to break the law; and that's unfortunately what it is in 48 states right now. So it's problematic.

MS. BERGER: Can we take another question?

SPEAKER: This is not nearly as interesting as the discussion on marijuana, but I'm going to ask it anyway.

There's been a lot in the literature, particularly the nursing literature, in the last 10 years at least, about the use of therapeutic touch for relaxation and pain management. Of course, that requires at least two people.

Can any of you speak to that as an effective method for reducing either anxiety or pain, or any of those kinds of pain-related symptoms?

SPEAKER: And I'd just like to add one thing to that. When I took the history of medicine, the first thing we were taught, was the laying on of hands, and the importance of that activity in all of what we do.

So I think as Wendy said, there's not literature, and certainly there needs to be studies. But this is certainly an area that we need to go forward in.

SPEAKER: I was wondering if you could speak specifically to the lymphedema treatment as well. I work at a cancer support center, and we've had a lot of patients who've had lymphedema, and have had manual lymph drainage much sooner than five years, post-surgery, or dissection. And I want to know if you could cite some sources or speak to that.

DR. NELSON: I also as an oncologist am not aware of that literature. So I don't know. It might be just your institution. I'm not aware of any literature like that, and certainly there were many patients getting lymphedema treatments way before five years, immediately afterwards. So I don't know.

SPEAKER: I want to tell you I do the music therapy. We have wonderful music therapists. They are just tremendous, and extremely knowledgeable about how to do this field. I have over the past two years just been fascinated with how scientific it really is, in terms of what they do and how they do it and so forth. So I feel quite confident that they didn't make these patients more anxious.

Now, it may be due to the tool that was used, in terms of does the patient actually understand what that tool represents, and what the meaning of that scale is. I don't know. But certainly, the music therapist impression of how it affected the patient was always very good. They always had a positive change. If you remember how their facial expression was, what the verbalizations were, and how they were moving about in the bed, was positively changed more than anything else. And their move was improved, and their pain was quite improved.

So it's difficult to understand what the anxiety's about.

SPEAKER: Can the same tool be used to check the mood and the anxiety?

PRESENTER: Those things were patient rated, and the music therapist gave the patient the before and after evaluation form.

DR. SMITH: As a psychologist, I can offer what alternative explanation for why that may happen. And that may be because patients are much more comfortable reporting their anxiety to the therapist at the end of that session -- something we see often in pain literature.

SPEAKER: Just a comment. A few years ago, I did go to ONS, and Defora Aline (?), who is a music therapist, did mention that she did a more substantial study/research using the saliva of these patients. So I think that's had -- more than the survey.

SPEAKER: They looked at immunoglobulin A, which many music therapy studies have looked at. And actually, immunoglobulin A is not the best indicator of immune function, but it's the only one you can pick up in high quantities in the saliva. So those studies have been done on that. That is interesting.

But we're beginning a study looking at some cytokine levels, which are much more indicative of what's going on with cancer actually.

MS. BERGER: Okay. If there are no more questions, please fill out your evaluations. I want to thank everyone for coming.

(Whereupon, the PROCEEDINGS were adjourned.)

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