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ROUNDTABLE

Acupuncture and Integrative Medicine in Pediatrics

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Participants: Melanie Brown, MD, FAAP,[3] Melanie A. Gold, DO, DABMA, DMQ,[4] Danielle M. Graff, MD, MSc, FAAP,[5] Im Quah-Smith, MD, PhD,[6] and Hilary McClafferty, MD, FAAP[7]

Pediatric acupuncture is being used to treat many different symptoms in various healthcare settings—from the clinic to the emergency room to school-based health centers. Medical Acupuncture *convened the following roundtable discussion with the physicians shaping the field through their clinical practices and their growing evidence bases.*

DR. SHIU-LIN TSAI: Thanks to each of you for joining this panel on acupuncture and integrative medicine in pediatrics. We have a ''dream team'' of experts and leaders in the field of pediatric integrative medicine for this discussion from across the United States and as far away as Australia! What a privilege to have you all together to describe the many innovations that you are doing in your areas, and to discuss the state of acupuncture in pediatrics. I would like to start with Dr. Brown—would you please describe for us the integrative service clinic at the Children's Hospital and Clinics of Minnesota? How did that clinic get set up and who have you been seeing in terms of your patient base?

DR. MELANIE BROWN: Our clinic has actually been in existence for more than 10 years, and we have a very busy practice. One unique thing is that we are part of the Department of Pain, Palliative Care and Integrative Medicine, and truly take a comprehensive approach to taking care of children with serious illnesses as well as typical healthy children.

At Children's Minnesota, we have both an inpatient and an outpatient practice. Our outpatient clinic gets referrals from all areas of the hospital, as well as from the general region. We see children with many different diagnoses—including vocal-cord dysfunction, pain, nausea, anxiety, postconcussion/headache, sickle-cell disease, and abdominal pain, and for general nutrition and health, and much more. One of the beautiful things about integrative medicine is that it is the kind of care that can benefit everyone. In our comprehensive approach, we look at what is most concerning for the patients and their families and focus our care on exactly what it is that they need.

We are focused on strengthening the resources and the tools that our patients and families have innately, and a lot of our work is modeled around that. Some of the integrative techniques that we use involve clinical medical hypnosis. Other therapies include acupressure and acupuncture; biofeedback; and nutrition counseling, looking at vitamins and supplements, looking at sleep and exercise,

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and all of the components that can improve a child's wellness and quality of life.

DR. TSAI: That sounds wonderful. And do patients come on their own as well? Or is it all referral-based?

DR. BROWN: They do both. It is largely referral-based, but we often have families that seek out the clinic on their own as opposed to being referred by a clinician. Some referrals come from patients whom we have seen in the hospital in consultation and others from their primary providers or subspecialists. At times, patients are referred because the referring providers feel that they have come to the end of what they have to offer as far as medication management. Or, sometimes it is that the family is interested in a more-holistic or natural approach.

DR. RICHARD C. NIEMTZOW: With all your integrative modalities, when a patient comes in, how do you decide which modality you are going to use?

DR. BROWN: Our initial visits with a patient are typically scheduled for 90 minutes, and I often find myself going over that time because we are really taking an in-depth approach to all of the pieces of the patient's history that could lead up to the concerns that he or she is having. We choose the modality based on what seems to be most successful for the patient at that time.

Another factor that impacts which treatment is chosen is patient preference. On an initial visit, for someone who is very interested in acupuncture, we may do some acupuncture treatments in conjunction with our visit. We often do mind–body work during our first visit, and then some biofeedback. Our patients really enjoy seeing their progress from visit to visit using the biofeedback tools, and we have found that to be very successful.

DR. TSAI: This program sounds very well-established, Dr. Brown! Integrative medicine is now used in schools, due to the work of Dr. Melanie A. Gold. Dr. Gold, in the program that you have started in the public-school system in New York City, you also offer differing types of integrative modalities. Is that correct?

DR. MELANIE A. GOLD: Yes. It was my contribution when I started in August of 2014. The school-based health centers are primarily staffed by medical providers who are nurse–practitioners, a physician assistant, and 2 physicians in addition to myself. We have psychologists who provide mental health care. We offer primary care, conduct physicals, and administer vaccinations, and we provide subspecialty adolescent medicine care and a lot of mental health care. We also take care of a lot of acute issues.

So, when I came, I charged all of the different disciplines within the school-based health centers to decide which integrative modalities they were interested in learning and offering to our patients. Because I am the only one who is licensed to do acupuncture, I am available to consult and administer acupuncture for patients at the different sites. And now, most of the nurse–practitioners have been trained in acupressure.

We started off diffusing aromatherapy in our waiting areas, but then the staff kept ''borrowing'' the aromatherapy diffusers for procedures and small groups, or for patients with anxiety. Now, every medical and mental health provider has an aromatherapy diffuser in each exam room, and the nurse–practitioners have all been trained in aroma acupoint therapy.

I also trained the mental health providers in clinical hypnosis. They are using hypnosis mostly for anxiety and procedural anxiety and discomfort. We also have health educators who have been trained in mindfulness, so they teach our adolescent patients who are dealing with issues around stress to use mindfulness as a coping strategy. I have 1 mental health provider, who holds a doctorate of psychology [PsyD], and she is certified in yoga. She conducts group mental health, using yoga and meditation as part of her mental health treatment.

DR. TSAI: How cool and wonderful is that! I think children across the United States, especially children in school, are all experiencing stress. There was a news piece recently that the most common diagnosis in children younger than 18 years of age in the United States is anxiety and depression. Offering these integrative modalities in a school setting to help children cope with stress is tremendous. Dr. Gold, how do the students and the parents view your services? Are they excited? Are they wary?

DR. GOLD: I have not found any to be wary. In order for me to do acupuncture, I always get verbal consent. I am in a setting where our pediatric patients are seen in the school-based health centers. The parents have given us consent to provide their medical care. However, because we still consider acupuncture to be a bit outside of the realm of typical conventional care, we always get specific consent for acupuncture, though it is verbal usually—not written.

Yet, for all of these other modalities, we call parents on most visits or send a letter explaining what the diagnosis is and what treatment modalities we have offered and the parents are delighted, particularly around the use of aromatherapy, acupressure, mindfulness, and yoga. Families have been really excited about these.

We did an integrative health needs assessment with the high school students at six of our school-based health centers, and had 373 patients, from 9th through 12th grades, complete a web-based survey in our waiting areas. Most of them had heard of these integrative modalities; we had asked about 14 different ones. It turns out that they were fairly familiar with the modalities, and the patients were very interested in having them available at their school-based health

centers. More than 70% wanted massage, meditation, mindfulness, and yoga. Yet, even when we looked at modalities such as acupuncture, only about 43% of the patients had actually heard of acupuncture. However, 40% of them said that they wanted to have it at their schools, and more than half said that they wanted to learn more about it from a health professional.

So, I think these modalities are very acceptable to the families. And the patients that we see are minority youth. Many of them are immigrants. Oftentimes, they are Medicaid- or medical assistance–supported populations. They may be undocumented. They are from all over the world. And they are all interested, even in modalities that they have not even truly heard about, such as Ayurveda, Traditional Chinese Medicine, Qigong, and Reiki.

DR. TSAI: How remarkable! Perhaps numerous families are actually utilizing some of these modalities and not reporting them.

DR. GOLD: I would say that the majority of the children that I have done acupuncture on have family members who have used it and had positive results with it. They were mostly parents and grandparents with musculoskeletal problems, back pain, and joint pain. The children were very receptive to it, and the parents or grandparents were very supportive as well. Even inpatient consults that I have done for a variety of different adolescent issues for symptom relief, the teens and their families were surprisingly experienced in having heard of acupuncture as well as other integrative health modalities.

DR. TSAI: This is fantastic Dr. Gold. Thank you! Dr. Graff, what has been your experience in using acupuncture in the pediatrics emergency department [ED]? You are based in Louisville, KY. What type of patients do you see in your pediatric emergency room, and how have they been responding to your using acupuncture to treat their pain?

DR. DANIELLE M. GRAFF: We see a very diverse population in Louisville. We actually are a large refugee center for the United States for a variety of different populations. We have a lot of Somalian families and also have a large Amish population, among others. I would say our population diversity surprises a lot of people when they first come to our hospital.

DR. TSAI: That is surprising. And you have been offering acupuncture?

DR. GRAFF: Yes. I offer it for a vast number of concerns/ailments when I am there on my ED shift, but I also have an outpatient acupuncture clinic. It truly depends on the patients' diagnoses. So, I will approach many families who are open to it, and they will end up coming to see me in my clinic as well.

It has actually gone over extremely well. We have some patients, particularly children with migraines, who come in not wanting the medications and who are asking for acupuncture because it has done much better to relieve their symptoms, as well as helping the duration of relief.

DR. TSAI: Dr. Graff, would you describe a little bit of your research in acupuncture and migraine?

DR. GRAFF: Yes. We published an article on auricular acupuncture for migraine,[1] which created a standard, set protocol for our division. We started with a pilot study on the question: ''Does pediatric auricular acupuncture in the emergency department work?'' We had significant results, wherein the pre–visual analog scale [VAS] score was, on average, 7.63 and the post-VAS score was 0.55; so, there was a significant decrease.

After our hospital personnel saw those results, they were very excited and sent me to get acupuncture training with Dr. Brown, actually. So, from there, we are now finishing up our clinical trial on auricular acupuncture versus our IV migraine cocktail protocol. We are looking at a variety of different factors, such as time to discharge and duration of improvement, as well post-treatment interventions. We are also looking at cost-effectiveness as well as management.

DR. NIEMTZOW: Thank you, Dr. Graff. Dr. Im Quah-Smith, regarding your experience in Sydney, Australia, what has been your experience and what diagnoses are you treating in pediatrics with acupuncture? Do you use only auricular acupuncture?

DR. IM QUAH-SMITH: I would say most of my work is actually mental health–related or, functional connectivity–related. I see a lot of autism spectrum, attention-deficit hyperactivity disorder [ADHD], attention-deficit disorder [ADD], and children with learning difficulties. I have been working with these children, using low intensity therapeutic laser acupuncture and my mental health protocol to reestablish functional connectivity of the brain, accessing it, using the brain regions in the ear, at the earlobe, tragus, and anti-tragus.

I have been doing that for more than 10 years. I see the patients weekly, and I take them through one school term—in Sydney, our school term is about 9–10 weeks, four times per year; this helps consolidate the functional connectivity changes. Then I see them monthly after to ''top up'' the brain signaling. The feedback from the patients' parents and their teachers is that, after this laser acupuncture intervention, these patients are more socialized and have improved attention spans. The patients communicate better and express themselves better, so everyone is happy all around.

DR. TSAI: There is a huge upsurge in the diagnosis of ADHD in the United States. We question if there is a real

increase in incidence in children or that we are recognizing ADHD more with increased knowledge out there for pediatricians to make this diagnosis. However, regardless, pediatricians and families look for any kind of intervention that would be helpful for children with ADHD.

DR. QUAH-SMITH: I am more than delighted to, at some stage, demonstrate what I do. My statistician, Jim Lemon, PhD,* and I have developed a computer program wherein one actually records the laser upload at each session, and—at the end of the whole series or school term—is able to print out a graph to show the parents where the children are up to and how much progress they have made.

REIMBURSEMENTS

DR. TSAI: Dr. Brown, may I start with you and ask about the payment system? Are your services paid by the patients' insurance or is it mostly self-pay?

DR. BROWN: We have a few different models. Most of our services are covered by insurance, with the exception of outpatient massage. Outpatient massage is fee-for-service, and there is no charge for inpatient massage. Our other services are covered by insurance. We also have a few grants that support certain patient populations for massage therapy. For example, there are grants that support children with sickle-cell disease or oncologic diagnoses for massage, so we do have some grants that support some of the services. However, most services are billed through insurance, and the acupuncture service that we do is within the integrative medicine visit. It is not necessarily strictly an acupuncture visit; we are encompassing all domains of care.

And we are able to show improvement. We are often able to show decrease in utilization of other services because of the integrative treatments that these patients are getting. Unfortunately, sometimes children end up coming to us after they have had the gamut of tests done. However, if we can get to them before that point, we hope to be able to avoid those tests when they are not necessary, by giving children the tools that they can use to empower themselves to take care of their own health and wellness.

DR. TSAI: That is wonderful. Dr. Gold, does your service in the school-based health centers get reimbursed or is that part of the service that New York City provides for its students?

DR. GOLD: This is a great question. Ours is really part of the overall service that is provided. Our patients are predominantly insured by medical assistance; so, if you look at how the pay structure works for the school-based health centers, about 65% are medical assistance. The hospital subsidizes about 25% of the services, and then the rest are in grants. That is just for the general services provided by school-based centers.

When we submit the billing, we submit the evaluation and management (E&M) codes for whatever the diagnosis is and, if we spent a lot of time—which I often do—specifically, if I am doing either acupuncture or teaching pediatric patients self-hypnosis, then it is billed by time. But I do not specifically bill for acupuncture because medical assistance will not reimburse for it yet, just like I do not specifically bill for hypnotherapy, so it is just included in the range of services that we provide.

DR. TSAI: Dr. Graff: How do you do your billing? Does your emergency room bill for your acupuncture service?

DR. GRAFF: The emergency room does. I am credentialed at our hospital given that I did official training, so I can do acupuncture and bill for the procedure in the ED. We get a relatively good reimbursement of about 30%–40%. Our hospital has been happy with this, as it is a service that is much-needed to our population.

In my clinic, however, we do not bill for the acupuncture procedure. It is a little different from billing in the ED. In the clinic, I am very similar to some of the other people that were speaking, in that we bill for the time as well as the diagnosis, but do not bill for the procedures. Except that, after 2 years of training, with our Passport insurance (our Medicare for children), we can perform a chart review and conduct patient interviews to assess responses to treatments. Based on meeting certain standards/criteria, Passport may start covering for the acupuncture procedures. This is something our medical director, whose clinic I have now taken over, had set up with Passport, so he was actually billing for the procedures as well.

DR. TSAI: Dr. Brown, is that what you are experiencing as well, the 30%–40% that Dr. Graff mentioned in your patient mostly insured population?

DR. BROWN: In our clinic, acupuncture is a part of the integrative medicine visit, so that reimbursement is in alignment with our clinic reimbursement in general for pain, palliative care, and integrative medicine, which is at about 50%.

DR. TSAI: Dr. Quah-Smith, how does it work in Australia? How are your services paid for in doing acupuncture on the pediatric population?

DR. QUAH-SMITH: In Australia, since 1975, we have had a very comprehensive universal healthcare system called Medicare. Bulk billing clinics charge the Medicare rate and other doctors would charge a private fee. With private fee

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charges, one claims back from Medicare the rebate amount per session and is responsible for the gap (or difference) oneself. Medicare designates a ceiling amount of how much the individual or family should pay for healthcare per calendar year. If the individual exceeds this amount per year, their Medicare rebates are more substantial. I think it is a reasonable health system. Medicare is funded by Australian taxpayers—we all pay a Medicare levy, a small percentage of our annual incomes.

Then, alongside Medicare, we have a private health system; so, there are private hospitals as well, like you have in the United States. The private system is such that, when you go to a private hospital, you still can claim a little bit of that from Medicare, but the rest of it will be partly or fully covered by a private health fund depending on your level of coverage.

So, there is a difference between a medical acupuncturist and a nonmedical acupuncturist. Patients of the nonmedical acupuncturist can only claim rebates from the private health funds up to about $500 per year. If you are a medical acupuncturist, Medicare will give rebates; as long as you can justify in your records what you are treating and how, there is no such ceiling.

PROGRESS IN THE FIELD

DR. TSAI: Pediatric medical acupuncture has come a long way. I do not think we could have gathered this same type of group even 10 years ago. Would you agree, Dr. Hilary McClafferty?

DR. HILARY McCLAFFERTY: I would completely agree. Having felt like a pioneer through even the pediatric emergency medicine part of my training, when that was a relatively new field, the integrative world feels a lot like that, as we are pushing the field forward very thoughtfully.

So, the way I implemented my acupuncture training was by starting a consult clinic of my own, and I used similar time-based codes and primary-based codes. Then, when I came here to Arizona and joined the faculty in the Center for Integrative Medicine, there was a relatively small amount of pediatric integrative medicine material initially in the curricula.

One of my jobs was to enhance the curricula for all the Fellows. They come from all over the world—these physicians and advanced practice nurses and physician assistants. A lot of them are in family medicine, so they were very interested in the pediatric integrative medicine material as well.

It is just so intuitive to embed integrative medicine into pediatrics, where you want to focus on preventive health. We know that many families—especially with children who are living with chronic illnesses—are already using the integrative therapies. The clinicians just need to know the evidence base. That was the impetus for developing the Pediatric Integrative Medicine and Residency Program [PIMR] that we then embedded right alongside conventional medicine training in residency. When you think about the advancement in the relatively short amount of time in this field, it has been fairly incredible.

DR. TSAI: Yes, and with all of these different arenas where integrative medicine and acupuncture has made inroads—school-based health, outpatient/inpatient service in Minnesota, and the emergency departments—Dr. McClafferty, tell us a little bit about the PIMR that you helped develop. How many residencies did this program got integrated into?

DR. McCLAFFERTY: Sure. PIMR started at five pilot sites at Arizona, Stanford University, the University of Chicago—where Dr. Brown led the charge, as a matter of fact—and also at the University of Kansas and then Eastern Virginia Medical School Children's Hospital of the King's Daughters.

We then fairly quickly added several early adopters, including Vanderbilt University, Children's Hospital of Philadelphia, the University of New Mexico, and the University of Southern California. In 2016, we added three children's hospitals in Munich, Germany. And we just added Columbia University.

So, it has been a fairly good uptake. The way it works is individual faculty or pairs of faculties at their residency programs lead an integrative program using our curriculum, which is about 100 hours of online curriculum as a framework with a lot of case-based exercises and interactive teaching.

One of the modules in PIMR is an introduction to acupuncture so that the residents understand the background, philosophy, and training required of people who would be interacting with children around acupuncture. So, it is truly to meet this goal that we expose the residents to the acupuncture module, so that they can teach their patients and families.

DR. GOLD: And let us not forget that we also taught Dr. Niemtzow's Battlefield Acupuncture {BFA] this past year in the Section on Integrative Medicine at the American Academy of Pediatrics. Dr. Brown, do you remember how many people we had there? I know we had many people sitting around at the workshop tables with practice ears and then practicing on each other, learning BFA.

DR. BROWN: We had a great turnout. People were very excited, very enthusiastic. I would estimate that we had about 30–40 participants, and many more have requested the educational materials and slide deck.

DR. TSAI: Did you hear that, Dr. Niemtzow? Your BFA^2 protocol is going viral!

DR. NIEMTZOW: I know. It is very popular and, even in the Air Force, our Surgeon General has directed that BFA be established in about 75 medical facilities, which is about all

the medical facilities that we have. I was told the other day that the Veterans Administration [VA] made the statement that BFA was available at all the VA hospitals.

So, I know it is moving around the United States—certainly in the government. And I know overseas, there is a similar movement to do BFA. I am happy that so many patients have been helped. When I was at the National Institutes of Health [NIH], some people asked me: ''How can Battlefield Acupuncture establish itself when, initially, there was very little research?'' I said: ''Well, that is the phenomenon; when physicians see something that works, they go forward and start doing it.''

What happened was one physician would tell another physician, and then it blossomed in Iraq and Afghanistan during the war, and it became one of the number-one acupuncture requests by patients.

DR. TSAI: You are famous Dr. Niemtzow! I have had very good outcomes using just small SEIRIN® J-type needles with your protocol, and published, with colleagues, a small case series from our pediatric ED.[3] The migraine auricular protocol has worked well in our pediatric ED as well. Both protocols have worked well with Aiguille Semi-Permanent® [ASP] and small SEIRIN needles.

Dr. Graff, I know that your mentor, Mark J. McDonald, MD, and you were both at the 2017 Pediatric Academic Society Integrative Medicine Special Interest Group, where you demonstrated your auricular migraine protocol to a packed room. Tell us about this.

DR. GRAFF: Yes. The youngest patient I put ASP darts in—and she tolerated it very well—was actually 6 years old.

DR. TSAI: Six years old! That is amazing!

DR. GRAFF: And she was fine. A lot of times, patients tell me even if it did hurt a little bit, it was nothing compared to the pain they had.

DR. TSAI: It is so exciting to see so many different arenas where acupuncture has made inroads. And, Dr. Quah-Smith, I understand you are conducting research with auricular acupuncture in babies. Is that correct?

DR. QUAH-SMITH: Yes. I was a coinvestigator and cosupervisor for a neonatal intensive care unit [NICU] study. It was very well-received, and we plan to seek funding for a wider project. The project just finished in 2017, when we were measuring the pain response of the NICU babies during heel pricks.[4]

DR. TSAI: I know that you have been conducting studies with magnets on the newborn babies. How has that worked out for the patients and the families? Have they been receptive?

DR. QUAH-SMITH: Yes, everyone has been very receptive. We have completed the study and, early this year, we hope to apply for our equivalent of NIH funding—a program grant to try to monitor these babies during other conditions and take them through a longer duration of observation. Ideally, it would be helpful to follow them through to school entry at age 5.

DR. TSAI: A 5-year follow-up; that is tremendous work.

DR. QUAH-SMITH: Yes, so with the magnets, the parents were delighted. Our article on the study was recently published in *Acta Pædiatrica*.[4] It was not part of the study to focus on the qualitative measures; however, the parents—the mothers—noted that, with the magnets on, the babies were calmer and feeding better in spite of their multiple heel pricks.

Because our study was focused on just heel pricks, we were not able to measure if they were leaving the NICU earlier, but I think that is what we are intending to do with the next stage—to work out all these subtleties of the qualitative measures as well as the time in NICU.

So, it is wonderful. Because they are babies, and their auricular tissue is so receptive and sensitive, one does not actually need needles in the newborn. Just magnets are fine, and I have been using magnets in my ADD children—so long as they are of a certain age when I know they will not disturb the magnets or try to pull them off or try to eat them. I put magnets in my children from 4 years old up or depending on what age they come to me with ADD or are on the autistic spectrum.

With the younger ones, I use laser. I think low-intensity laser, as a device, is wonderful. It is something I would love to show you, because I think it is something you could consider using in the United States. Laser is also easy to implement in double-blinded randomized controlled trials.

DR. TSAI: Thank you. Are there any other areas in your fields that any of you would like to be sure that we bring up during this Roundtable?

DR. GOLD: I have just one other addition that we did not mention: It is specific to adolescent medicine, but that is certainly part of pediatrics. As many people know, long-acting, reversible contraceptives have become state-of-the-art for reproductive health. You might ask: ''What does that have to do with acupuncture?''

We have been using an adaptation of BFA as a pretreatment to prevent anxiety and discomfort associated with intrauterine device [IUD] insertion. And we have been using acupressure seeds on the ear instead of acupuncture needles, because I am the only one who can put in the needles right now. However, we are in the process of putting together a randomized controlled trial (RCT), so that we can actually assess the protocol and determine if it is effective. It appears

to be clinically effective. As Dr. Niemtzow says, you start to do it and, when you see it makes a big difference, you want to just keep doing it. Hence, the difficulty of doing the RCT occurs, because none of my providers want to have patients *not* be offered acupuncture or acupressure.

Yet, we truly would like to be rigorous in our evidence-based approach, so we are looking to maybe partner with family planning clinics and other adolescent clinics where they are less—you could say—contaminated by the results of not wanting people to get either a placebo or be in a group that does not receive the BFA-adapted protocol.

DR. TSAI: Right now, is this research being carried out in the obstetrics and gynecology department? Or is the research at school-based health centers?

DR. GOLD: Well, we do IUDs and contraceptive implants in the school-based health centers. I think, because the nurse–practitioners saw how effective BFA could be at both decreasing anxiety and pain associated with the procedure, these nurse–practitioners have become more comfortable with it.

We layer modalities. We use aromatherapy, we use heat packs, and we play calming music. We teach patients diaphragmatic breathing, and we use hypnotic language. So, it is not only the auricular acupressure seeds or acupuncture needles. We found that these integrative health modalities truly help patients not only feel more comfortable during the procedure but also help them recover more quickly so they can leave and return to class. This then allows us to use the room for the next patient, which I know you mentioned, is an important issue when it comes to the ED.

DR. TSAI: Yes, that is fabulous, Dr. Gold.

DR. QUAH-SMITH: I would add that I think it is imperative that we work together to overcome the opioid crisis, starting in pediatrics—in neonatal intensive care and emergency-room management strategies.

DR. NIEMTZOW: I would like to add something too. All of us know the benefits of using acupuncture for pain. And Dr. Tsai knows I have a research project involving acupuncture for degenerative retinal disease. Maybe in the pediatric population you might see retinitis pigmentosa. So, if all goes well, in March, I am going to go into Phase 3. This is actually being done in Vietnam. I have a group of people who are helping me with this research in which I can restore functional vision to some of the people, especially those with retinitis pigmentosa who otherwise could not see. I find this very exciting. As was mentioned, the different types of modalities that exist with integrative medicine, I think, will increase substantially in the coming years.

DR. TSAI: Dr. Niemtzow, you are a true pioneer developing numerous auricular acupuncture protocols, and in using these to treat different diagnoses in conjunction with different treatments. Your clinical results are just absolutely amazing. It has been such a privilege to have this opportunity to talk with every one of you—Dr. Quah-Smith who is joining us all the way from Australia, and Dr. McClafferty, Dr. Graff, Dr. Gold, and Dr. Brown. I thank you all so much for being pioneers in the field of integrative medicine and for sharing your groundbreaking work with us in this roundtable discussion.

AUTHOR DISCLOSURE STATEMENT

No competing financial interests exist.

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