English Transcript

Interview with Dr. Diane Altounji and Lynn Kysh

Dr. Eyal Ben-Isaac:

Hello, and welcome to the Perspectives on Pediatrics Podcast. I'm your host, Dr. Eyal Ben-Issac, recording from Children's Hospital, Los Angeles. I had the pleasure of talking to Lynn Kysh, Clinical Scholarship Librarian with the Institute for Nursing and Interprofessional Research and Dr. Diane Altounji, Clinical Practice Leader for The Cancer and Blood Disease Institute.

Dr. Eyal Ben-Isaac:

I got to chat with Lynn and Diane on the topic of evidence-based practice, a topic not frequently discussed, but incredibly important to every clinician's day-to-day life. We reviewed what evidence-based medicine looks like in practice, different levels, and illustrated the importance of it in a clinician's practice. The discussion was very informative and relevant to all of us whose career involves medicine. Here's my conversation with both of them.

Dr. Eyal Ben-Isaac:

Hello, everyone. Today, we are here with Lynn Kysh and Dr. Diane Altounji from Children's Hospital, Los Angeles. Welcome Lynn and Diane.

Lynn Kysh:

Thank you.

Dr. Diane Altounji:

Thank you.

Dr. Eyal Ben-Isaac:

Diane and Lynn, maybe if you can introduce yourself to the audience and tell us what you do at our institution. Lynn, do you want to start first?

Lynn Kysh:

Sure. I recently just changed my title to be more accurate. So I now say that I'm the Clinical Scholarship Librarian, so that covers everything I do from supporting clinicians in specifically their clinical work. But if they are ever interested in pursuing quality improvement, or evidence-based practice or research, I am there as well. One of my favorite things to do is scoping systematic reviews, which are fun little endeavors where we get to do large searches. And I'm currently housed in the Institute for Nursing and Interprofessional Research, which has the goal of promoting work between the disciplines in research.

Dr. Eyal Ben-Isaac:

Diane, how about you?

Dr. Diane Altounji:

So I'm the clinical practice leader in The Cancer and Blood Disease Institute. So I work with the nursing staff from inpatient and outpatient in our CBDI. And basically my role in a nutshell is focusing on anything and everything having to do with

clinical practice. So I look a lot at EBP. I do a lot of sort of quality improvement work as well, and just looking at patient outcomes and how we can constantly improve our patient outcomes. That's pretty much basically what my role is all about.

Dr. Eyal Ben-Isaac:

Thank you for joining me in this conversation about evidence-based practice and how we can educate ourselves to apply the concepts of evidence-based medicine into our clinical practice. I thought it would be interesting to compare and contrast with the practice of EBP or evidence-based practice looks like and get interdisciplinary perspectives of what evidence-based medicine or EBM looks like at the clinician level; from the librarian view and at the institutional level.

Dr. Eyal Ben-Isaac:

So just to start us off, is it called evidence-based medicine or evidence-based practice, and what is the difference there? Lynn, do you want to explain?

Lynn Kysh:

Yeah, I like to call it evidence-based practice. It's a subtle, but I think a rather significant difference possibly by accident. Evidence-based medicine is more exclusive and used to describe the framework that's followed by physicians, whereas EBP or evidence-based practice is more inclusive and more accurately describes the framework adopted by all clinicians in the health sciences.

Lynn Kysh:

I think it also opens it up to disciplines outside of medicine and health sciences, because we're seeing EBP pop up in social work. We're seeing it pop up in policy work. We're seeing it pop up everywhere.

Dr. Eyal Ben-Isaac:

Thank you for the clarification. What is evidence-based practice to each of you and why do you think it's important?

Dr. Diane Altounji:

So, in a nutshell, I think EBP is just really using the best available and most recent evidence to guide our clinical practice. Historically, I've seen the importance of this at CHLA. We've, in the past, have done it very informally; it's happened in a variety of ways. But in about 2013, we decided to sort of formalize that EBP process for us. And the reason we decided to do this was because there was so much variety in how people utilize evidence, that we wanted to help streamline that process, but also help sort of demystify that process as well, because it can be very overwhelming.

Dr. Diane Altounji:

So in 2013, we had a clinical services research council, which just to explain a little bit, clinical services is basically the non-physician clinicians. So that includes nurses, pharmacists, social work, the rehab services, pretty much anything you can think of that has to do with the clinical practice that is non-physician. And we felt that this

was something that really was missing from clinical services, in terms of support and ability to access evidence and things like that.

Dr. Diane Altounji:

So we did a huge search of different EBP models throughout the country, what different hospitals were using. And as a group, we came to the determination that we really loved the Johns Hopkins nursing evidence-based practice model. Which they use the term “nursing,” but we found that in researching their process, it could actually be applied to any discipline, including medicine. So we loved it. It has lots of tools. It’s very streamlined. There’s sort of a step-by-step process to it. And again, kind of going back to that goal of demystifying the process, we felt like it really simplified it.

Dr. Diane Altounji:

So that was a kind of a big accomplishment from the research council that we were really proud of. And since then, we’ve been able to provide a lot of education that surrounds evidence-based practice. We now teach our nurse residents when they’re just newly graduated, we go through that process as well, and really try to sort of embed this in our culture throughout clinical services to truly always be utilizing evidence to drive our clinical decisions.

Dr. Diane Altounji:

And I also want to mention, before I forget to, we have now really started looking at our process with policies as well and incorporating, we always have incorporated

evidence, but again, really trying to formalize that process and making sure that everybody is using sort of those most recent sources of evidence to drive our practice and our clinical decision-making.

Dr. Eyal Ben-Isaac:

Thank you, Diane, for explaining. Lynn, do you want to explain your role and how you use the EBP on a regular basis?

Lynn Kysh:

Yeah. To add to that too. I had a great discussion with the RN (Registered nurse) residents last week, where we were talking about what evidence-based practice is, and we found it really interesting to talk about what it's not or what the opposite of EBP looks like. And they talked a lot about tradition and the phrase, "Well, this is the way we've always done it." And EBP actively really, really works against that.

Lynn Kysh:

And I'm excited to be a medical librarian in the clinical setting, because I get to play a huge role in that. I like to think that medical librarians, we're kind of like a safety net that never goes away. When trapeze artists start out, much like a health science clinician student, you have that safety net to catch you to figure things out, and librarians, even as you move on, we're still around to help with that process. So I really see myself to support all clinicians in seeking out the best available evidence.

Lynn Kysh:

I like to think I work with this how to fish model, you teach someone to fish, they can eat for a lifetime. And so I'm happy to work with clinicians together to help collaborate and focus and track down that literature, teaching them how to fish. But I also know clinicians are super busy, so there's sometimes that you'll come to me and just say, "I really need a fish right now." So I'm happy to go to the librarian bat cave, so to speak, do some digging and send citations along to support their clinical work.

Lynn Kysh:

If we kind of think about what EBP looks like in my daily or weekly or monthly life, it really varies. So sometimes I'm getting those as needed email requests to pull literature. Sometimes I'm in meetings where I'm just typing away to find stuff to connect to what is being discussed. But I'm also supporting clinical scholarship. So in quality improvement, I'm there, in research, I'm there and in EBP projects, I'm there to be a support as well.

Lynn Kysh:

And there's also our regularly scheduled monthly things that go on in the hospital. So multidisciplinary action plans I get to work on, morbidity and mortality reports. And like I mentioned earlier, teaching our trainees as they come in.

Dr. Eyal Ben-Isaac:

And Lynn, thank you for always pulling out articles for me when I need some help with research endeavors so, thank you very much.

Dr. Diane Altounji:

Yeah. Same here.

Lynn Kysh:

Eyal, how would you describe EBP in your daily practice or monthly practice or weekly practice?

Dr. Eyal Ben-Isaac:

I think obviously for any physician who works in clinic, I think it's different for everybody and what works for you might not work for me or vice versa. So I think it's important just to keep what's more important for you first. So for me, journals specifically that I read and I try to do journals that are helping me with clinical every day to day work, what I see in clinic. So things for me, Contemporary Pediatrics, Pediatrics in Review, Pediatrics, or Consultant 360, those have a lot of great clinical cases for me that helped me keep up, various newsletters from the American Academy of Pediatrics, various podcasts as well, and attend our institutional Grand Rounds on a regular basis and go to national conferences here and there to learn some more as well.

Dr. Eyal Ben-Isaac:

In clinic, I may use some various websites to help me answer clinical dilemmas, such as the CDC website and even use Google a lot. Many people I know like specific apps like Epocrates, which calculates pediatric drug dosages, the Harriet

Lane Handbook, the Red Book Online, Pediatric Care Online. Those are great apps also that I know a lot of my colleagues like to use as well.

Dr. Eyal Ben-Isaac:

Personally, and I know people might not agree, but I feel it's important to have a broad knowledge base, so you feel comfortable in answering most questions that parents ask with confidence and really not having to look things up in the middle of a visit, because I think that's very important for parents to see as well, is that you feel comfortable in what you're discussing, but also really be able to look up information that is less common and rare when you're not sure what's going on.

Dr. Eyal Ben-Isaac:

I do show parents various pictures on websites to allow them to verify and know this is what I think their child may have and why. So for example, a picture of a child with Osgood Schlatter disease, I'll show them what it's like, where the pathology is and how this is consistent with what your child may have. So that's how I personally use it in my day-to-day practice.

Dr. Eyal Ben-Isaac:

Maybe we can go over examples of how we apply EBP into our practice by sharing a case or two as examples. Diane, do you want to start?

Dr. Diane Altounji:

Sure. I'd love to. So I was thinking about this and I decided I wanted to share sort of the bread and butter, those things that come out of the RN residency EBP projects, because I love the mix of a brand new nurse coming with some sort of clinical inquiry and having very fresh eyes and combining that with somebody like me, who serves as their advisor to really help guide them through the process.

Dr. Diane Altounji:

And this is sort of one of our greatest success stories with our EBP projects. So I was working with two newly graduated nurses and we work in HemOnc (Hematology-Oncology). And so with our oncology patients, we started noticing a lot of inconsistency, in terms of mouth care for our patients. And as we know, chemotherapy can be very damaging to the oral mucosa. And so having a consistent practice to try to help manage and prevent those complications is really important.

Dr. Diane Altounji:

We also started looking into the evidence and finding out that being good at oral care can actually really help reduce the risk of bloodstream infections, which is not an intuitive concept, but it really sort of opened up this opportunity of, we could really have a huge clinical impact if we just standardize our practice and really improve the care that we're providing our patients.

Dr. Diane Altounji:

So we embarked on this journey. We looked at many different sources of evidence. We got lucky. We found some randomized controlled trials, which are sort of gold for us in EBP; that's what we really want to see. But we also had to use some different other, in Johns Hopkins model speak ,different lower levels of evidence, which included expert opinion and consensus and things like that. And we looked at different hospitals, sort of the top hospitals in the US and looked at their oral care protocols. But what I loved is that we were able to go back to those clinical trials and see what truly affected outcomes. And with all of that, we sort of synthesized the evidence and came up with a recommendation for an oral care bundle. We collaborated with our physician leaders, as well as our nursing leaders.

Dr. Diane Altounji:

This whole process kind of took a little while because the nurses are in their residency programs. So of course, we had to also allow them to learn how to be new nurses. But in the process, I loved that they were so passionate about really having an effect on this clinical outcome of bloodstream infections. And so when they were done with their residency, they decided this is something they really wanted to continue to pursue.

Dr. Diane Altounji:

So we all, as a team, sort of started looking into how are we actually going to operationalize this bundle? And we met with our nursing director and our friends in our supply chain, and we came up with an actual physical bundle with clinical practice standards. And in true EBP form, we measured our outcomes prior to

implementation. We looked at outcomes after, and we actually were able to see a huge, significant reduction in our bloodstream infections. This ended up being published.

Dr. Diane Altounji:

So, I'm just so proud of these RN residents who are now amazing experienced nurses, who really had such a big impact on patients who otherwise would have had a bloodstream infection, we were able to actually prevent that complication, which as we know, can be very detrimental to a cancer patient, in terms of their morbidity and mortality. It also has huge healthcare costs, so we were able to save the hospital a ton of money.

Dr. Diane Altounji:

So all in all, it was just a very great success story. But the one thing that we really learned from it was how important it was to actually have evidence to back up those recommendations. Some of our colleagues who again, were in that sort of state of tradition, as Lynn had mentioned before, and "we've actually always used chlorhexadine as a mouth rinse and people found that to be very effective." When in reality, the evidence was showing that it was actually damaging the mucosa even more.

Dr. Diane Altounji:

And so our recommendation was to use sodium bicarb rinses to help sort of neutralize the oral mucosa and in turn helping reduce that breakdown. And it really

was the evidence that helped sort of get people's buy-in, because just sort of on the front, you make this recommendation and people say, "Mm, I don't know. I'm really nervous about not using chlorhexadine because it's sort of this anti-microbial agent," right? Intuitively it should work. But when we actually armed them with these clinical trials and different data that we have been able to get from the evidence, that was really what helped with buy-in. And it's sort of like that change management theory of trying to get people to sort of embrace it, a clinical practice change.

Dr. Diane Altounji:

So we still continue to use that oral care bundle today, but in the spirit of EBP, we continue to review the evidence and make sure that we're still continuing with that standard of practice, in that nothing has sort of changed or updated that has proven to be a better intervention.

Dr. Diane Altounji:

So that was something that I really enjoyed being a part of and has actually served as a good model for us, in terms of going through that process of EBP, which starts with a practice question or that clinical inquiry, looking at the evidence and then translating that into practice.

Dr. Eyal Ben-Isaac:

Thank you, Diane. Lynn, to you want to give a specific example of how you use EBP in your regular day to day practice?

Lynn Kysh:

Yeah. I mentioned before, I sometimes get to work with committees who develop multidisciplinary action plans. So basically, how the hospital should treat a typical patient in different settings. So I worked on one for hospital acquired pressure injuries. And so with this team, I was able to help them develop a series of questions, including what types of bed, what types of bed surfaces, foam dressings for treatment, foam dressings for prevention, moisture management, all these things that I had never heard of, so I learned a lot about.

Lynn Kysh:

And by digging in the literature, we actually found no clear answers for pediatric patients. And this is pretty common in pediatrics for some not so great reasons, like a lack of funding for pediatric research, especially in terms of the population that they make up, but also for some pretty good reasons like ethics. In the Belmont Report, children are considered a vulnerable population. So for good reasons, it's harder to conduct these robust studies and robust trials.

Lynn Kysh:

So a lack of evidence is pretty common when you're doing evidence-based practice in pediatrics. I think it's really important for everyone to kind of understand that in this situation, we were able to rely more on clinical expertise, rely more on what patients are comfortable using and can expect to be done. And I think this is really my role, is to do these crazy obsessive searches to confirm for clinicians, "Hey, there isn't anything great on this topic or more needs to be done on this topic." And like

Diane said too, we're going to reassess. We're going to see if anything continues to come out and adapt our maps, our multidisciplinary action plans accordingly.

Dr. Eyal Ben-Isaac:

Thank you. I'm going to kind of do a similar case. I think one of the most interesting clinical questions that has evolved over the years is what kind of diagnostic workup do we do for a child with a urinary tract infection? Do we do an ultrasound? Do we do a VCUG? In the United States, for example, it is recommended to obtain a renal ultrasound after the first febrile urinary tract infection in kids under six months of age, and also for those greater than six months up to a certain age and girls versus boys. And that's how we do in the United States, but not necessarily in the United Kingdom for those greater than six months.

Dr. Eyal Ben-Isaac:

We also in the past, followed the ultrasound with a VCUG study and evaluating for vesicoureteral reflux bladder obstruction or other pathology. But then the AAP, American Academy of Pediatrics came out with recommendations and many shifted their practice and stopped doing VCUGs after the first urinary tract infection, unless the renal and bladder ultrasound revealed hydronephrosis, scarring or other findings that would suggest either high-grade reflux or obstructive uropathy or in other atypical or complex clinical circumstances, or if there was a recurrence of a febrile infection.

Dr. Eyal Ben-Isaac:

And then people sometimes forget the studies were done in 2 to 24 months old. So not all children really fall into that range. So what about kids who are outside that range? And maybe they need to be evaluated differently. There were also some questions regarding the power of each of these six studies use to develop the guidelines, especially with regard to high grade reflux.

Dr. Eyal Ben-Isaac:

And so many of the guidelines were based on the report that prophylactic antibiotics didn't help, but then the RIVUR study showed that prophylactic antibiotics reduce the risk of recurrence of a UTI by about 50%. But we weren't really sure if it helped prevent scarring.

Dr. Eyal Ben-Isaac:

So why am I saying all this? It's really just to show that if you don't read the evidence and just look at guidelines, you may be missing some important considerations. For example, a normal ultrasound doesn't always rule out the possibility of significant reflux or bladder outlet obstruction, or abnormalities, I should say. There are people who feel the drive of obtaining a VCUG, for example, should be potentially driven by the potential consequences, if not done, not just based on the ultrasound findings. And one may need to also consider other factors, including bowel and bladder dysfunction, age groups, and so on.

Dr. Eyal Ben-Isaac:

So again, it's important to read the evidence thoroughly in order to make an informed decision. I always say medicine is not black and white, and you need to be comfortable in explaining and understanding why you may do something, versus not do something based on the evidence in front of you and important to be able to explain that to the families as well. So that's how I kind of use it on a regular basis, or just as a specific example.

Dr. Eyal Ben-Isaac:

What do you both think about the future of evidence-based practice, and what do you think is going to be done in the future? Lynn, do you want to start with that answer?

Lynn Kysh:

Yeah. So the future, I think that there is a lot to be done about moving evidence-based practice towards precision medicine or bringing them together. Evidence-based practice has really be based on these statistical models, where based on these powers of studies, we can say this is likely to work for you, whereas precision medicine is focused more on what each individual is genetically going to respond to.

Lynn Kysh:

So we're even kind of seeing this with the emergence of N of one trials where someone can act as their own control against different treatments to discover what

works best for them. That currently doesn't have a place in evidence-based practice, but could really come from this melding of EBP and precision medicine.

Dr. Eyal Ben-Isaac:

Diane, how about you?

Dr. Diane Altounji:

Yeah, I definitely agree that that's probably where we're headed more from a medical standpoint, a disease treatment standpoint. And then from what we term as clinical services here at CHLA, but that more sort of care of the patient, in terms of things that are not really necessarily having to do with treating your disease, but maybe treating other types of complications. I think we will still require evidence-based practice in the way that we are using it now, but I would like to see it become even more second nature to clinicians than it is now.

Dr. Diane Altounji:

I've definitely seen a huge growth in the past 10 years. The trend has definitely been, where when I was in nursing school over 15 years ago, we didn't even use the term evidence-based practice. We looked at evidence. We understood the importance of research and sort of peer review papers, but we didn't call it EBP and it wasn't really part of the culture. And I'm seeing it really move towards it truly being a culture in terms of how we talk about the care of our patients and really incorporating evidence into everyday conversation.

Lynn Kysh:

And I think too, with that becoming more second nature, we can finally close that translation gap. I think currently it's still over 10 years between when we know something works to when it actually gets applied into the clinical setting.

Dr. Diane Altounji:

Yes. Lynn, we kind of alluded to sometimes not having enough evidence in pediatrics. And what I would love to see is more people publishing their evidence-based practice projects, because those are still outcomes that are very important. And even though they might have not undergone the sort of rigorous methodology that a randomized controlled trial or an experimental study does, they are utilizing evidence to guide practice and evaluating outcomes. And I find that to be extremely important and really could have a huge impact on clinical practice and expanding that wealth of evidence that we have in pediatrics.

Lynn Kysh:

I agree. I think that would help so much because there's a bit of a cult following of the randomized controlled trial, where it's that or nothing at all. And in pediatrics, there's so much observational data. And especially if we started sharing our data as well, safely, again, of course, protecting patient privacy, but there's so much information out there that we're just currently not making the most of.

Dr. Eyal Ben-Isaac:

And Lynn, I do think what you said initially, we are seeing it a lot more with institutions creating departments or divisions of personalized medicine and where

that's going to go in the future as well. So thank you for both of you for alluding to that.

Dr. Eyal Ben-Isaac:

Lynn, I mentioned some resources that I use in clinic or that my colleagues use. Do you have any other recommendations that you would throw in there as well?

Lynn Kysh:

Yeah. One that came to mind because you were talking about sharing images with patients and their families is VisualDX, which is both an app as well as a website that you can subscribe to. What I like so much about VisualDX is that it has a differential diagnosis tool. And it also is a library of hundreds and thousands of dermatological and eye disease, and specifically focused on giving you different images of severity, but also on different skin color types. So I think that's why it's a great competitor for a Google image search, because we know Google Image is mostly fair-skinned.

Lynn Kysh:

Cochrane Answers is another resource that I really like to promote it's through the Cochrane Collaboration. And so it's similar to something like UpToDate, where it's going to give you precise answers that are up to date. It's hard to say it without saying up-to-date, that also will give you the citations to support those clinical answers.

Dr. Eyal Ben-Isaac:

Thank you again, Lynn and Diane. This was informative, very educational. Are there specific takeaway points that you would like our audience to keep in mind?

Lynn Kysh:

Yeah. I like to remind people that librarians are everywhere in the non-creepy way possible. We like this stuff. We know the clinicians have so much on their plate and we're always happy to answer their questions. We spend all day thinking about PubMeds so you don't have to.

Dr. Eyal Ben-Isaac:

Very true.

Dr. Diane Altounji:

And we love you for it.

Lynn Kysh:

Thank you.

Dr. Diane Altounji:

I think from the clinician side of things, I want everybody to remember that EBP can be done in so many different ways. It can be like the example I mentioned, in a formal sort of very defined project type format, but it can also be very informal and it could be a matter of, "I'm taking care of this patient today. And I just want to know more about this particular procedure or this disease and how to treat it or

management of this complication. And I'm going to do a quick literature search just to see sort of what the evidence shows," and sort of everything in between that too.

Dr. Diane Altounji:

So it can be formal. It can be informal, but it's just so important that we're constantly looking at evidence to drive our clinical practice decision-making skills, and really just making sure that that's what eventually ends up providing our patients with the best care possible.

Dr. Eyal Ben-Isaac:

So, Lynn, as I understand it, you are developing or developed an outline course for evidence-based practice. Can you tell us about that?

Lynn Kysh:

Yes. It's in a beta testing now. It was a collaboration with the Online Pediatric Educational Network (OPEN). The audience is really any clinician seeking to learn more or refresh their EBP skills. I broke it down into the five A's. So ask, acquire, appraise, apply and assess. Super easy to remember, because I like to pronounce it as "Aaaahhh"

Dr. Eyal Ben-Isaac:

That is easy to remember.

Lynn Kysh:

It’s easy to remember, right? It includes online videos, which I think are great in a very biased way because I made them. It has interactive activities, online assessments to confirm what you’re learning and you can access it when it’s up at www.learnwithopen.org.

Dr. Eyal Ben-Isaac:

Wonderful. Thank you so much for educating our audience today.