



CMSC PODCAST

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“A Pillar Series” featuring Arthur Asbury, MD, FRCP

Operator: The conference is now being recorded.

Ms. Dottie Pfohl: Thank you. Thank you for joining us, and welcome to a podcast presented by the Consortium of MS Care.

This is Dottie Pfohl, Director of the website project, and it is my pleasure today to welcome Dr. Arthur Asbury for the first of what I’m calling “A Pillar Series.”

At the CMSC, we often speak of pillars, of the foundation and the things that hold us up and keep us going. So, this is the first opportunity I have to greet someone I could call, if not a treasure, a pillar.

Dr. Arthur Asbury is the Van Meter Professor of Neurology Emeritus at the University of Pennsylvania School of Medicine. He is well known to neurologists around the world as a living treasure in neurology.

I did not come to the University of Pennsylvania during his tenure as Chair there, but have been there many years, during which time he’s served not only as Chair, but as-- actually as Interim Dean of the School of Medicine early in this century.

He’s well known as an editor, a writer, a creative person, a leader in national and international organizations, members of many, many organizations, and a fine colleague.

Dr. Asbury, welcome.

Dr. Arthur Asbury: Thank you, Dottie.

Ms. Dottie Pfohl: We're going to talk a little bit, I think, in an unusual way. You mentioned some concerns that your field of specialty was not MS, per se, but we talked about how there have been intersections, and your interest in peripheral neuropathy has really come full circle with you.

But, for today, I'd like to look at the obvious reasons that you're introduction was short, because it could only be short, or it would take days to get through. So, in reviewing it, we've divided our questions, really, into chapters, so that I'd like to have you think a little bit about your life as a writer and an editor.

I know you as a mentor and an expert. The organizations that you've interacted with, if you would like, sometimes you're--in some way your philosophy toward education and training. But, I think it all does boil down, in some ways, to your leadership.

So, with that, I guess my first question is a personal one because, any time you speak, there is always a creative, energetic, poetic feel to what you say and do. And I'm wondering, where does that come from?

Dr. Arthur Asbury: Oh, I have no idea about that, Dottie. I don't feel as though I'm a poet.

Certainly, I've done other things than medicine. In fact, I didn't go into medicine until I was well dry behind the ears. I was 25 years old when I started medical school, and had been a raiser of thoroughbred horses. I'd been in the Army for two years. I'd been to three different universities before I really settled on one I like, which was at the agriculture school at the University of Kentucky.

Ms. Dottie Pfohl: I had wondered about the agriculture.

Dr. Arthur Asbury: Yes.

Well, that's where I grew up. And although all of my relatives were physicians, those who weren't were farmers. And that was my first thought was to be a farmer.

And I went to the agriculture school, and I found that it wasn't a big enough bite. And so, I changed my mind and, after a couple of years in the Army, during the Korean War, decided medicine was the right size bite. And that's what I took on, and I've never regretted it in one day of the 50 years I have been.

Ms. Dottie Pfohl: You speak of the tie-in with MS, and we can literally say that you have written the book.

How do you see your work with peripheral neuropathy being related now with some of the evolution of thought about MS?

Dr. Arthur Asbury: Oh.

Well, I think--well, for first--for starters, Dottie, when I started in neurology, the specialty was neurology. We didn't have any subspecialties. There were a few people who tended to favor seeing patients with particular disorders, like Parkinson's disease or strokes, but everyone did everything because that was the way we were trained, and that's the way we thought.

And so, multiple sclerosis was the providence of every neurologist. And there were no specialists who only did MS, unless they were full-time researchers or something.

And so, there was a time--and it's only been, you know, a couple of decades since MS was viewed as a full-time subspecialty of neurology. All of us took care of MS patients, and I was certainly no exception. I saw many, many people with MS. We had

very little we could do about it. Corticosteroids, and then more recently Copaxone, were--became available, but those were the mainstays until recent years.

Ms. Dottie Pfohl: Well, we were the original site of the product that you mentioned, the Copaxone, at the University of Pennsylvania. And now, of course, you know, we have a whole cadre of disease-modifying therapies and advances in researches, etc. But, I'm still not sure how peripheral neuropathy--.

Dr. Arthur Asbury: --Ah, yes--.

Ms. Dottie Pfohl: --Because--is it simply because of the demyelinating factor?

Dr. Arthur Asbury: Well, the disorder of the peripheral nerves that I've been most interested in and have done--where more of my research has been focused has been on Guillain-Barre syndrome and, to a lesser extent, the chronic form, the chronic inflammatory demyelinating polyneuropathy.

And those are interesting in that--particularly the CIDP, the chronic form, is very similar in terms of its waxing and waning and as--and it's demyelinating in the same way that multiple sclerosis is, so that multiple sclerosis seems to be the central nervous system, that is to say brain and spinal cord, equivalent of what we see in the chronic inflammatory demyelinating polyneuropathy, which is restricted to the nerves, nerve fibers and the nerve roots, but not in the spinal cord or brain.

Ms. Dottie Pfohl: Well, I know just in the 20 years that I've been involved with MS, we went from pretty pat answers about MS being a demyelinating illness of the central nervous system, but primarily white matter. Now, we're hearing about whole brain and the technological advances of MRI and PET scanning that I also had the privilege of being involved in way back when.

What excites you most about future possibilities for advances with either neurology in general, or treating these demyelinating diseases in particular?

Dr. Arthur Asbury: Yes.

Well, with MS, you're--you've touched on something that I've been quite aware of for several years, and that is that it didn't make a lot of sense to me to think that the focal white matter lesions in--that are what are so obvious about MS, particularly with the new neuroimaging techniques, but it didn't explain the fact that, once people got into the progressive stages of the illness, it didn't look like a white matter disease any longer. And loss of intellectual capacity became a very prominent feature.

Ms. Dottie Pfohl: Hmm.

Dr. Arthur Asbury: And it turns out that there--now that we've got much more sensitive techniques for looking what--at what's going on in the cortical ribbon itself, there's clearly very extensive dysfunction and loss of cortical neurons that come in a progressive--slowly progressive way that we had no idea about until just in the last, oh, few years--.

Ms. Dottie Pfohl: --Uh-huh--.

Dr. Arthur Asbury: --You know, half a dozen years. And that's a critical aspect because, once that aspect of the disorder takes over, you know, the progression of it is inexorable.

And I think that's something we need to focus on, or I hope will be focused on from a research standpoint, very carefully because we can't go around measuring relapses and, you know, recurrent relapses as the measure of the disorder, because that's only part

of it. The rest of it is we have to come to grips with and learn how to try to intervene against that neuronal loss in the cerebral cortex itself.

Ms. Dottie Pfohl: Well, when you mention research, it's certainly exciting to see so many people now interested in research, certainly, to learn the answers to these questions, but also so many wonderful, talented, and amazing young professionals now who have interest in working with people with MS. That hasn't always been the case.

Dr. Arthur Asbury: Oh.

Well, you know, we--that's what has spawned the sub-specialization of neurology. And multiple sclerosis, and associated demyelinating disorders, has really earned a place as a full-fledged neurological subspecialty. And it deserves people who are committed to that disorder almost exclusively, because that's the way, you know, the research can really come to grips with the disorder.

And I think it's been a very healthy thing, that sub-specialization has overtaken neurology in the last 20 years or so, because the capacity to understand and to manage the disorders of each subspecialty has just taken off.

And I think that's happened in the MS world. I--not to the extent that we would have hoped, but I think the rate of progress has been much quickened by the sub-specialization of neurologists who are almost exclusively focused on MS.

Ms. Dottie Pfohl: So, you have been recognized as a leading mentor yourself, but I'm a bit curious about, looking back, if there have been particular mentors for you.

Dr. Arthur Asbury: Oh, indeed.

I think they--you know, almost everyone who goes into a specialty does so because of a role model. They see someone who--their senior, their teachers, and they say, "I would like to be like that person. I would like to do what that person's doing."

And I had two such mentors, one in medical school, and that was Dr. Charles Erring [sp], who was the Chairman of Neurology at--where I went to medical school in Cincinnati, way--long years ago. But--and the other, who unfortunately just died a few months ago, was Dr. Raymond Adams at the Mass General.

And for, I guess, about nine or 10 years, I worked with him very closely on--as a resident, and then as a fellow, and then as a coauthor and then, you know, fellow faculty member at the MGH.

And I think almost all of the guidance in--that I got in clinical neurology came from those two individuals. And they were the people to whom I turned for advice, always.

Ms. Dottie Pfohl: Does mentoring differ today fundamentally from when your career began?

Dr. Arthur Asbury: That never changes. People are people and I think the--you know, it gets passed along from generation to generation and I'm sure that most academics, as--you know, as they develop, realize that what they learned from their teachers, they owed to their own students.

Ms. Dottie Pfohl: Well, I know of you as a writer and an editor, and I'm wondering how you became involved in that. You mentioned coauthoring, and, despite your modesty, I know of your literary talents. I've enjoyed hearing over the years many

presentations, and have always been amazed that you will take something obscure and make it fun and humorous, and really can see where you would have those talents.

But, how did you get involved as an editor, and particularly involved in publishing, and now use of even the Internet to promote online work?

Dr. Arthur Asbury: Yes.

Well, in--it was basically from the tutelage of Charles Erring and Ray Adams at Mass General. Both of them were very prolific writers and were--and with Charles Erring, he was also interested in psychiatry and he wrote a lot about things such as how should we behave as physicians and things of that sort, whereas Ray Adams was the ultimate scientist in that he was an outstanding neuropathologist and--at a time when most of the neuropathology was done by neurologists and not by members of the department of pathology.

So, neuropathology was the one way we could ask questions about what's going wrong in particular diseases and--both in the animal models of the disorder and in the human pathology of the disorder that we--and that's what my specialty became, or at least--not my specialty, but the--that was the technique that I brought to the study of neurological disorders, mainly neuropathology, either by nerve biopsies or the study of postmortem tissues and, you know, the brain itself.

And that's--to me, that was the way to come to a understanding of neurological disease, was to correlate the clinical features with the anatomic and the pathological features that we could study, either by biopsy or by autopsy specimens. And that was really the only way in the late 1950s and the 1960s that we had coming to grip.

And then, the fields of neurochemistry and neuroimmunology and on and on and on, all of those rapidly developed. And that's also added, I think, a lot to the impetus to a sub-specialization in neurology and--.

Ms. Dottie Pfohl: --Uh-huh--.

Dr. Arthur Asbury: --As we have been. I think there are 12 subspecialties representing in our department now.

Ms. Dottie Pfohl: And hence, the need for texts and really good literary pieces for that.

But, why journals? How did you get involved, then, with the journal as a mechanism for teaching and sharing information?

Dr. Arthur Asbury: Oh.

Well, it was the--I think the common pathways--and this wasn't unique to me. The common pathway was, first of all, if you were going to stay in academics, you just simply had to publish. That was the way in which you were measured.

And so, I was writing papers. Well, my first one was when I was a medical student and it came out, actually, in the journal Brain, which was a leading journal in those days, still is. And when I arrived as an assistant resident at Mass General, I was preceded by the fact that people there knew that I had already been a coauthor of a paper in Brain.

And so, you know, that's the way you established yourself, and so that everything we did was done on the basis that you could codify it, that you could, you know, bring it to a point and--you know, and publish the findings that you had.

And so, it was what you--you know, once you've published a bit and have risen a little bit on the academic ladder, then you're asked to serve on the editorial boards of journals that you've published in. And I think I've served on 10 editorial boards altogether.

And when--and if you excel at that and--then, you may be asked to be an editor of one of those journals, as I was. I was the second editor of the Annals of Neurology, which I did for the prescribed eight years.

And, you know, so--that editing a journal was just one step further from being on editorial boards and judging others' papers, which was one step forward from writing papers yourself.

Ms. Dottie Pfohl: Well, as an organization, the Consortium of MS Centers has a journal, the IJMSC, which is the journal of--the International Journal of MS Care.

Dr. Arthur Asbury: Yes.

Ms. Dottie Pfohl: And that was founded as an online publication by Dr. Bob Herndon, and then became in print, and now it is both.

Dr. Arthur Asbury: Uh-huh.

Ms. Dottie Pfohl: And is applying for various indexings, etc.

Dr. Arthur Asbury: Yes. [Unintelligible--.]

Ms. Dottie Pfohl: --Our new editor is Dr. Lael Stone, a neurologist from the Cleveland Clinic--.

Dr. Arthur Asbury: --Uh-huh--.

Ms. Dottie Pfohl: --And I'm wondering, since you did, as you mentioned, serve as the--it's actually the maximum two terms as Chief Editor at the Annals of Neurology,

if you'll have any particular thoughts for her, and maybe ask the question for her for any thoughts you might appreciate, any pearls of wisdom for using this modality as an educational tool nowadays.

Dr. Arthur Asbury: Oh.

Well, it--it's both educational, and if the journal is, you know, serving its full purposes, it should also be adding its bit to the sum total of new knowledge about the disorder.

And so, I think the--to me, the way you need to go about editing a journal is to, first of all, make certain that everything that is submitted to the journal is dealt with briskly, with no loss of time. Time is so important in publication, and the one way to make your journal better and more popular is to make sure that the editorial process is really crisp, that if you receive a manuscript, their--the--its receipt is noted that day. It's sent out for review the next day, and these days we can do it all online.

And if you get the answer, you know, that you can't take it, or that you can take it but it needs work, or you can take it as is, now, those are the three categories, then that information has to go back to the author very quickly. I mean, that--the whole process has to be speedy, or that's one way of doing it.

The second is you need to go out and promote the journal amongst the people who you think would--who you'd like to have contribute, for instance. Ask for review articles from the people who really know the field--.

Ms. Dottie Pfohl: --Uh-huh--.

Dr. Arthur Asbury: --And get them to write for you. That helps greatly.

And those are the principle features about editorship. It's making sure that you deal with what comes in every day, every day, and not let things accumulate, not--you know, and not be slow about turnaround.

Ms. Dottie Pfohl: Wow.

Dr. Arthur Asbury: And those--.

Ms. Dottie Pfohl: --I'm sure we'll all take that--.

Dr. Arthur Asbury: --Are the tricks--.

Ms. Dottie Pfohl: --To heart--.

Dr. Arthur Asbury: --Of the trade.

Ms. Dottie Pfohl: Do you think there are any gaps in neurology today? I mean, we talk about all the advances in technology and communications, and just our ability to communicate online, or even speak as we are now and reach so many people through podcasting.

But, are there gaps today in neurology that you'd like to see reduced in the future?

Dr. Arthur Asbury: Oh, you mean gaps between the subspecialties?

Ms. Dottie Pfohl: Well, any kind of gaps, just--and just that thought, that perhaps that--just in saying that--and questioning my question, do you feel that there are gaps because of the sub-specialization?

Dr. Arthur Asbury: Oh, there are not many. I think the--one thing that is--I think is important, and I'm not sure how we're going to come to grips with it, and it's this: half of the genes in our whole genome are specific to the brain, to the nervous system. The range of neurological disorder is almost as large as the rest of medicine in--you know, if you looked at it in certain ways.

The number of neurologists adds up to slightly less than 2 percent of all physicians. We are really spread thin. Now, we've made up for it a bit by having, by far, the largest number of the people in our specialty are in academics. Neurologists tend to be concentrated in academic health centers. And so, that--I think close to a third of all neurologists have an appointment at an academic institution.

Now, that may be a, you know, a clinical appointment and they only go in for rounds occasionally, but a large proportion of that fraction of all neurologists are full-time in academia and doing research. And we have to, because we're--I would say we're grossly undermanned as a specialty of medicine.

Neurology covers an awful lot of ground, as does the nervous system and just in its being, you know, half of our genome. And with only 2 percent of the workforce--medical workforce being in neurology, we have to really scramble to keep up.

I think, you know, there was a time--in fact, even in my era, when neurologists were derided usually by their--by the people in internal medicine who said, "Oh, all you guys do is name disorders, and you--but, you can't do anything about them." That has changed very dramatically over the past--well, since I've been in neurology. And it is accelerating.

That's what the--has been the basis for this sub-specialization that I was talking about, why we have subspecialists in MS, because the advances and understanding of MS and of the various therapeutic modes, although they're not where we would like them to be, they do require people working at it full-time. And that's what--that's how the--you know, the subspecialty in neurology of MS specialists has come about.

Ms. Dottie Pfohl: Hmm.

Dr. Arthur Asbury: It's a very positive thing.

Ms. Dottie Pfohl: Sure.

What kind of advice would you find yourself giving, like, to up-and-comers?

In the CMSC we pride ourselves with developing the workforce of the future.

And now, when I think of 2 percent, that makes it seem even more urgent that we focus our attention on the next generation.

Dr. Arthur Asbury: Well, I think neurology, as a field, is going to grow. That seems--the training programs are expanding each year, and it's because the--of the sub-specialization that's taking place and the development of such undertakings as neurointensive care, for instance. That's clearly--there's clearly a major need for specialists in that area, and it's growing rapidly.

So, that phenomenon--you know, as the management evolves for the various neurological disorders, and some of them are quite common--stroke is not exactly a rarity, nor is MS, nor is Parkinson's. There's almost a million people who have some level of Parkinsonian dysfunction in this country.

And it does--it--it's going to require a larger workforce of physicians to really come to grips with these disorders and continue making the progress that we have been making. And I'm confident that will happen. I think that 2 percent will soon be 3, then 4, then 5, and we don't know where it'll level out.

Ms. Dottie Pfohl: Now, I've noticed that a day doesn't go by that I don't get a call from a patient who's lost their job, or have been laid off, or is worried about that, or their co-pay for their insurance has gone up so high that they can no longer afford that.

You eluded to, you know, cognitive changes in MS that we for years said there weren't any and realize now how devastating that can be to the person's lifestyle.

Dr. Arthur Asbury: Yes.

Ms. Dottie Pfohl: But, some of the social situations that we're dealing with nowadays, we call it disease management, but managed care I've heard referred to as managed cost.

You've lived through various types of evolution in the healthcare network. And the healthcare system, in many ways, seems broken.

Do you have any thoughts of how we can encourage people to sub-specialize in a challenging, exciting field like neurology, and sub-specialize in caring for people with MS when it can be so frustrating and so difficult to earn a decent living doing so?

Dr. Arthur Asbury: Well, I think those things will come into equilibrium.

The problem has been that medical fees have been--it's a lot easier to determine a fee for a particular procedure, but it's not been as easy to develop a--an appropriate fee simply for time spent, or for the evaluation of a complicated neurological disorder. And that'll change.

Ms. Dottie Pfohl: That sounds pretty laid back for someone whose life work has had a lot of publishing, and deadlines, and impatience. That sounds like a very patient way of looking at the crisis. Maybe that's what makes a great leader.

Do you see these as challenging times, or--like, what I'm thinking of is some people would say, "Oh we've gotten where we want to be because now we can diagnose earlier, we can have all this technology, we don't have to open a brain to look at it."

Do you see us as having arrived, or just at the beginning of a journey?

Dr. Arthur Asbury: Oh, we're so early in the journey.

There is--I think the big problem that we have here in this country, and it's true to a lesser extent globally, but the way we have structured medicine and paid for care is by emphasizing the management of illness. And that's not what we should be doing. We should be interested in health.

And, you know, the--and years ago in China, physicians were paid each year by their patients if they were well, and not when they were sick.

Ms. Dottie Pfohl: Uh-huh.

Dr. Arthur Asbury: And I thought it made so much sense, I mean, because that's the--what we're trying to do. We're trying to achieve wellness in our populations, not manage, you know--and we're not here primarily to manage illness, but that's what we do.

And I think it's--we need to--you know, there are always going to be specialists who have to deal with--or who are dealing with the patients who have already gotten something. And our mission there is to minimize that something so that they can live a healthy life.

Ms. Dottie Pfohl: My grandmother--.

Dr. Arthur Asbury: [--Unintelligible--.]

Ms. Dottie Pfohl: --Always said that they locked the barn after the cow was stolen--.

Dr. Arthur Asbury: --Right.

Ms. Dottie Pfohl: So--.

Dr. Arthur Asbury: --And what we're doing right now--I mean, people are--you know, they're paid by the procedure--.

Ms. Dottie Pfohl: --Uh-huh--.

Dr. Arthur Asbury: --And that isn't the appropriate way to go. We need to-- you know, we need to be in the care of--for health rather than the management of sickness. We actually have it backwards, because we're paid only [unintelligible]--.

Ms. Dottie Pfohl: --Well, it sounds like it--to get that message across is going to be a challenge. And we would have to motivate people to want to make those changes.

Are there any tricks that you have, or beliefs that you have, or ways to motivate others, like just--is there anything that you as a teacher, at which you are superb, could convey to--any hints to us as we have a very multidisciplinary/interdisciplinary organization, and we are a global organization. So, our members come from everywhere.

But, as a professional organization, do you have any hints on how to best motivate people to make these changes for the future so we continue to go forward on the journey?

Dr. Arthur Asbury: Well, I think the one thing that we need to do is to close the gap between public health and medical care.

Medical care is just one half. It's just half of the story. The other half is, you know, maintaining health, and looked at, you know, from a population standpoint and many other ways.

And we haven't really been effective at doing--you know, bringing those two approaches to--you know, to human well-being together, that is to say public health and medical care. And one of these days we'll figure out how to do that.

But, it's--.

Ms. Dottie Pfohl: --This conversation has been one of the most serious I've ever had with you over the years. And it's your sense of humor that I'm always impressed by, not just the scope of your knowledge, but your quick wit.

And I can pull up at least one example. I know when they unveiled your portrait in the new research building, your question to the artist, I understand, was it's good--is it art? Am I--do I have that story--.

Dr. Arthur Asbury: --That's right--.

Ms. Dottie Pfohl: --Even closely correctly?

Dr. Arthur Asbury: I had two questions for him, because I was completely flummoxed by the portrait and what it looked like. It looked like some kind of cartoon, you know, and I had this unpleasant leer on my face. And so, I was--and I just--I said, I can't--you know that can't be--"Is that art?" And--number one. And number two, "Was that art with a small a?"

Ms. Dottie Pfohl: Oh.

Dr. Arthur Asbury: And [unintelligible]--.

Ms. Dottie Pfohl: --Well, I've always been amused by your--.

Dr. Arthur Asbury: --And it got a--.

Ms. Dottie Pfohl: --Initials of AKA--.

Dr. Arthur Asbury: --Big laugh out of it--.

Ms. Dottie Pfohl: --Also. So, I've heard you make a play on that.

But, has humor served you during your career, or can you think of any time where humor bailed you out?

Dr. Arthur Asbury: Oh, it's probably gotten me in--more in trouble than it's bailed me out of. But, I can't think of an instance [unintelligible]--.

Ms. Dottie Pfohl: --Well, I don't want to end on a silly note. I do have a final question, though.

Dr. Arthur Asbury: Yes.

Ms. Dottie Pfohl: I wanted to capitalize on the historic aspect of all you've shared with us, and I do appreciate so much your taking time.

But, if you were starting your career anew, where would you focus your attention?

Dr. Arthur Asbury: Ooh, now that's a very good question. I'm not sure.

If--you know, I came in--when I came into neurology, it was to understand the basis of neurological disorder. And the way to do it in those days was by clinical exam and by neuropathology, and now that has changed so dramatically.

I'm not sure how--I mean, I still think that's the way to go at it. You know, we have to come to understand what, you know, the root findings, or the root causes of neurological disorder and dysfunction, how they come about. And that'll always be the challenge to us, and we're not going to solve it all ever.

But, I think that what's happened in the past 50 years in terms of the understanding of neurological disorders and the capacity to ameliorate them has been just phenomenal. And I don't see it slowing down. I think sub-specialization is going to accelerate our capacity to come [unintelligible]--you know, to come to the capacity to really manage well the neurological disorders.

The big issue is going to be how do we keep them from happening in the first place.

Ms. Dottie Pfohl: Well, on that note I want to thank you very much for your time and your insights. And I want to thank you not just for the professionals, our member who we'll be sharing this podcast, but for patients everywhere, for all of us who care for and about people with MS. Just a very hearty thank-you for all you do and continue to do on a daily basis for all of us.

Dr. Arthur Asbury: Well, thank you, Dottie. And I was glad to participate.

Ms. Dottie Pfohl: Thank you so much.

Dr. Arthur Asbury: Uh-huh.

Ms. Dottie Pfohl: Well end the recording now.

That wasn't too bad, was it?

Dr. Arthur Asbury: No, that's fine.

Well, I mean--you know--.