Transcript Details
This is a transcript of an educational program accessible on the ReachMD network. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/clinicians-roundtable/delirium-the-hidden-disorder-plaguing-icu-patients/10663/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Delirium: The Hidden Disorder Plaguing ICU Patients

Dr. Birnholz: You're listening to Clinicians' Roundtable, and I'm your host, Dr. Matt Birnholz. Joining me is Dr. Wes Ely, Professor of Medicine and Co-Director of the Center for Critical Illness, Brain Dysfunction and Survivorship Center at Vanderbilt University's School of Medicine. Dr. Ely is also the founder of the Vanderbilt ICU Delirium and Cognitive Impairment Study Group, where he serves as a principal investigator for ongoing clinical trials in sedation, delirium, and post-ICU cognitive impairment. Dr. Ely, welcome to the program.

Dr. Ely: Thank you so much for having me on ReachMD. It's my privilege.

Dr. Birnholz: Dr. Ely, let's start with an overview of your experience in the critical care field. Can you give our audience a little background information about yourself?

Dr. Ely: Sure. I am an intensivist at Vanderbilt University and also work at the Nashville VA, and I've been here for 20 years. I grew up in Louisiana, went to medical school at Tulane University, and then trained in internal medicine, pulmonary, and critical care medicine, and consider myself now a geriatric intensivist trying to do research and care at the bedside that improves the lives of older, more vulnerable, intensive care unit patients. And it turned out, by the way, that the things that we did for the older patients have benefited the younger patients as well, so I hope that we can cover some of those

things during our time together.

Dr. Birnholz: Absolutely but why don't we get a little more background on your current research at the Critical Illness, Brain Dysfunction, and Survivorship Center, which I understand is also known as CIBS. Now, what inspired the development of this center and its various initiatives?

Dr. Ely: Years ago, when I was seeing patients back in the clinic after they had survived the ICU, I was so excited that they had survived, and I told them, "Wow, aren't you great with your life now?" And they would look at me kind of funny like if this is surviving, I'm not so sure it's what I anticipated. I can't find my car in a parking lot. I can't remember people's names. I go to parties and it's super embarrassing. I can't do my job anymore, and I had to retire early. And it just didn't sound like the type of survivorship that I had envisioned when I started extubating patients in the intensive care unit, and that made me start asking questions. What went wrong during the ICU experience and what types of disability have we left our patients with after their critical illness?

Dr. Birnholz: So, let's get into that then and get a better sense of these top of mind perspectives on delirium in the ICU setting because it sounds like this is the great unknown, there's a lot of overlooked territory here in the medical community. What can you tell us about that?

Dr. Ely: Right, well what had happened to these patients was that they had experienced multiple organ dysfunction in the ICU, and the main organ that got dysfunctional that nobody monitored or cared about was their brain. In fact, they were developing delirium for multiple days on end, and we now know and have discovered here through the CIBS Center research over the past two decades that delirium is the strongest predictor of four major outcomes: Length of stay; survival; cost of care; and an acquired dementia. So, these patients, every day they spend delirious, they have a 10% increased likelihood of dying and a 35% increased likelihood of being demented on the back end, and that dementia looks a lot like Alzheimer's disease with problems with memory and executive dysfunction that really creates a disability for people trying to get back to their previous life.

Dr. Birnholz: So, with that new understanding of delirium and how strongly it predicts on a number of these outcomes you talked about, why don't we then talk a little bit more about the research efforts that you and your colleagues are leading to help address this knowledge gap around ICU delirium.

Dr. Ely: We have dozens of research projects here at the CIBS Center, but the most recent one we published was in the New England Journal of Medicine, October 2018, just a bit ago, showing that nearly a half a century, 40 years, of therapy that had been done and become usual care around the world, was not working for delirium. We studied hundreds of patients in an NIH-sponsored investigation, phase 3, randomized controlled trial, and proved that antipsychotics, like haloperidol and

other atypical antipsychotics, do not reduce the duration of delirium in critically ill patients, which really has a great second piece to the story, which is if a doctor thought that they were just writing very easily for a prescription drug like an antipsychotic to reduce delirium, and now they know that that doesn't work, what should they do? And, that's where we published the data on 15,000 patients with the ABCDEF Bundle, or the A to F Bundle. And a lot of this is available on our website, ICUdelirium.org, but the bottom line is that a safety checklist of things like stopping powerful sedation, stopping the ventilator, waking the patient up, treating them like a person and putting their dignity first. Treat them like a real human being and getting them back, I say, to the land of the living, makes a huge difference for these patients in terms of reducing delirium, reducing their likelihood of dying, and getting them back where they want to be, which is what they were living like before they got sick in the first place.

Dr. Birnholz: And have these safety checklists and other outcomes from your research led to any meaningful changes or recommendations for ICU practice paradigms?

Dr. Ely: Yes, absolutely. This idea of the A to F Bundle has led the Society of Critical Care Medicine to develop a quality improvement initiative, and all over the country, we just finished studying 70 adult ICUs and published the data in Critical Care Medicine in October 2018, and showed that in these 15,000 patients, the higher you were – the more compliant in higher performance rates you had with the A to F Bundle in the ICU patient, the reductions were dramatic in terms of less death, less time on the ventilator, less time in the ICU and hospital, less likely to be bouncing back to the ICU after you're discharged – and one of the things that I thought was super interesting, in addition to reducing delirium and coma, was that they were less likely to be discharged to nursing homes and more likely to go to their own home on discharge. So, this type of success is what we're looking for in reforming the way we care for our sickest patients in the medical system.

Dr. Birnholz: Let's stay on that theme then of reform and flip it around and cover the idea of barriers because I'm sure that you have encountered several of them towards trying to make ICU delirium a much higher priority among intensivists. What can you tell us about those barriers on the path towards reform?

Dr. Ely: You know that people are people and they don't like change, and if you're like me, I'm 55 years old and I have gray hair – when I was trained, I thought, "Oh, these people teaching me are teaching me the right way." So, I've had to take a step back and ask the question, maybe we didn't know the right way in the 1990s and early 2000s. And the barriers are that people want to keep doing things the old way, but the new way is better and safer. It just involves a change of culture. So what we're asking ICUs to do is sit around a table with one another and say, what small test of change can we do over the next few weeks and then months, and then it becomes years of improvement, to

incorporate this ABCDEF Bundle, the A to F Bundle concept, and keep the patients safer and have them survive more whole or intact? Much like when you get on an airplane and when it gets from point A to point B, your pilot goes through a series of safety checklists; that's what we're doing in the ICU. Every patient, every day, every ICU, and this is really the new way that we're trying to improve the quality of care for our patients.

Dr. Birnholz: And that's a great take-home for our audience, Dr. Ely, so thank you for that. But as my last question to you then let me turn it right back to the audience and ask how better can we engage them in improving the patient's experience both during and after long-term ICU hospitalizations.

Dr. Ely: Sure, three things. One, we want to remember that the person in the bed has a family with them. The F in the A to F Bundle is Family, and one of the things you can do to increase the overall experience for the patient and family is to make sure you let them be a part of the rounds every day. Incorporate them into the care of the patient. Let them get their updates, and I know you might be thinking we do that already, but not to the degree that we ought to. We've now shown that increased family experience cuts delirium in half and makes a huge difference in the patient's ability to recover and not have to go to nursing homes and rehab facilities. The second thing is that on our website, ICUdelirium.org, you will find information about our ICU Recovery Center, led by Drs. Carla Sevin and Jim Jackson, here at Vanderbilt University, and we would be happy to entertain with any of your teams ways to set up an ICU Recovery Center and a post-ICU clinic for your patients, because discharging them from the hospital back to their primary physician is your goal, but there is also a transition period where they need to undergo medication reconciliation, neuropsychological evaluation, and development of a plan for their body and brain rehabilitation. You have to actually think about physical and cognitive rehabilitation. And the last piece is that we have to keep our mind open for new and exciting research that allows us to modify the way we're doing things. And I really think that that research should not be done as an "all or none," or I say, "Don't try to climb Mt. Everest." Try to incorporate, for example, the change of culture, one step at a time. Ask yourself, what can I do by Tuesday, and if you can take on small, I say bite-sized morsels of change, you're much more likely to have them be sustainable and follow through on them in your care of your patients in your IC.

Dr. Birnholz: Well that was a great note to close the program and I very much want to thank Dr. Ely for sharing his insights on improving critical care practices for our patients. Dr. Ely, it was great having you on the program – really look forward to speaking with you again sometime soon.

Dr. Ely: Thank you so much. It's my privilege to be here on Reach MD.

Announcer: This is Clinician's Roundtable on ReachMD. To access other episodes of this series, visit www.ReachMD.com where you can be part of the knowledge.