Bart Drinkard Behind the Mask June 2, 2021

Barr: Good morning today is June 2, 2021. My name is Gabrielle Barr. I am the archivist with the Office of NIH History and Stetten Museum, and today I have the pleasure of speaking with Bart Drinkard, [who is a Captain in the U.S. Public Health Service] and a senior physical therapist at the NIH Clinical Center, and today he is going to speak about some of his work with COVID patients. Thank you for being with me.

Drinkard: My pleasure, thank you.

Barr: How did you and others whom you work with prepare to take care of those who have or have had COVID?

Drinkard: Sure. Actually, it was a relatively seamless transition because we always practice universal precautions here at the Clinical Center. The additions were wearing masks. We're not used to wearing masks every day all the time. It was those "three w's", you know: wearing a mask, watching our distance, and washing our hands, but of course, the washing the hands we do all the time. The biggest change was that we platooned our staff in the two separate groups. One would work one week, and then one the other week. I guess the third big change was for those of us seeing patients directly with COVID, we had to become familiar with donning and doffing the PPE, not just the gowns and gloves and masks, but the PAPR device, which is kind of like a bicycle helmet that has a big fan in the top and blows air through, and you wear a shroud, and so that's what we wore on the units where patients with COVID were.

Barr: Did you have in-person training or was it virtual training on how to don and doff the PPE?

Drinkard: I did both, but the in-person training was very valuable, and actually through this whole past year, there was always someone there right outside the ICU that would help if we—sometimes you just need help to put that thing on and get everything tied, and so it was the nurses who were great for that.

Barr: That's really good. Did you model any of your preparations for other diseases?

Drinkard: Well, I'd say yes, persons with ARDS (adult respiratory distress syndrome) there are similarities there, and certainly all of us have worked in the ICU, so we're used to seeing people who are very sick. There were some differences, you know, one of those being the amount of hypoxia that these patients experience so we're closely monitoring that during activity, but yes, it wasn't that big of a transition working with those patients because we were used to working in the ICU. Certainly, I have to give kudos to the really great physicians and nurses there that help us as part of a team caring for these patients.

Barr: That's great. What is hypoxia?

Drinkard: That's just low oxygen content in the body; that's one of the big impairments in COVID.

Barr: What are some common effects of COVID-19 that require a person to have physical therapy?

Drinkard: A lot of those are very similar to, as I said, the other patients that we've seen with respiratory

distress in the ICU and the biggest one being decreased functional capacity. Patients may get very weak, get very short of breath, and we have to slowly progress them along to ultimately get them back to the functional level that they were at: strength, endurance, weakness, balance, coordination along with in some cases, cognitive impairments. We have to be careful about education and making instructions and exercises very simple in COVID. I would say the big one, the big standout, was the hypoxia that we mentioned before and really carefully monitoring their oxygen levels during activity.

Barr: As a physical therapist, what are specific ways that you cooperate with the rehabilitation of these patients?

Drinkard: Specifically, a lot of breathing training, and that's something that I had done some in the past but really sort of focused heavily on that with these folks. And not just taking deep breaths, but paying attention to helping people with the pattern of how they're breathing, using their diaphragm, and then using what's called an incentive spirometer, which is a little device that they breathe with that's sort of like lifting weights for the diaphragm. I always tell my patients, "You know the diaphragm is a muscle too, just like your leg and arm muscles, and so it needs exercise." Then progressive mobility is one of the biggest things. Some people may have trouble just sitting up in bed, literally, that weak and that deconditioned so we work on mobility from sitting and then standing and transferring maybe to a chair or a wheelchair and then slowly back to walking—so it's that progressive mobility. Then there are specific things that we do for endurance and strength and balance. Almost every patient that I saw required some sort of gate aid device like a walker or a cane at least temporarily.

Barr: Yes. What types of exercises and techniques have you found to work best with many of these COVID patients? I know every patient is different.

Drinkard: Yes. Again many of them are the same techniques that we had used in the past. [For] a lot of people, we might start with in-bed strengthening and flexibility exercises and certainly the breathing that I mentioned before. Then just helping them to work their way back to sitting, standing, walking, and transfers, and then of course that breathing technique is very important that I mentioned earlier.

Barr: Yes. At what point do you get involved in a patient's treatment plan and has that evolved over the course of the pandemic?

Drinkard: It's not really evolved over the course of the pandemic. We are a consult service, so we get involved whenever the ICU or the team that's caring for the patient asks us to be involved via consult. Typically that would be after they're medically stable, and they can tolerate a little more activity, but it may not be that they're going to tolerate walking all of a sudden, so we will get involved as early as when the patient's in the bed to help them maintain their flexibility, make sure they don't decondition, lose strength. We didn't see, at least here at the at the Clinical Center, we didn't see a lot of people when they were on ventilators, a few, but the majority that I saw initially were on what they call high-flow O2, high-flow oxygen.

Barr: I'm assuming that's much better for the patients in terms of their recovery?

Drinkard: Yes, it's not a ventilator so they don't have a tube going down their throat, but it's a big nasal cannula that's able to provide a lot more flow and concentration of oxygen than just what you might see somebody out walking with a small oxygen tank.

Barr: Interesting. How do you all collaborate with other health professionals at the Clinical Center about a patient?

Drinkard: Well, we certainly have a scheduling system, and we work closely [together]. In some cases, we would collaborate with occupational therapy, recreational therapy, and certainly with nursing. I mean nursing is key. The nurses are great here, but in some cases, if a person required a heavy amount of spotting to make sure they're safe, then maybe an occupational therapist [or] myself might see the patient at the same time just to make sure that they're safe, for example, when they stand up for the first time. The collaboration and the multi-disciplinary team effort is really key.

Barr: How long do COVID patients tend to remain hospitalized?

Drinkard: Well, that varies a lot. There's a huge variation, but roughly I would say maybe from as little as a couple of weeks out to—I know that I had one woman who was here, I think, at least three months. It's a very long time for a patient to be only meeting people wearing the PPE suits and not seeing faces and everything directly, but I guess we've all experienced some of that with all the masks. Yes, it can really wear down the patient psychologically, and so I really applaud the patients and their perseverance.

Barr: How did you motivate and inspire her and others as well with some of the limitations that you had because of the trying to stay safe with the pandemic?

Drinkard: Well, you're right, there are limitations. Sometimes it's hard to communicate in that with the fan and the air blowing. It's just being consistent and respectful and really being there for them. I think just sometimes things might not go in a treatment session according to what I had planned, but I was flexible and building that rapport and often asking them how their family is doing or just that normal kind of interaction that we would have. I think even though we're wearing the PAPR suits and everything, seeing that familiar face and just being consistent, seemed to seem to be helpful.

Barr: How did you stay motivated at times when patients seem to relapse or not recover as fast as you maybe had hoped or wished?

Drinkard: Yes. That's interesting. I never really thought about that. I mean I've always just kind of thought about it as my work, and it's automatic. I guess it was important for me to go home, get plenty of rest, to eat well, all those basic things to keep myself healthy. I have ridden my bike to work for many years. I think the team approach really helps. I mean having co-workers that are there, and then of course, it's caring for the patient, being there for them.

Barr: Yes, has there been a case that has stood out for you for a particular reason?

Drinkard: Well, there was one gentleman who was very sick in the beginning. When I saw him initially, he was on high-flow oxygen, had a lot of cognitive impairments, and he was declining. I was very worried about him. He got to the point where they actually had to send him to another hospital to go on what's called ECMO [extracorporeal membrane oxygenation]. It's a heart lung machine. I didn't know if I would see him again, and sure enough he got better at the other hospital, came back here, was still very sick, and then slowly over, I don't know, two or three months, finally got to the point where he was walking again. He had a really big smile. I can remember his smile. He stood out just for that perseverance.

Barr: That is impressive.

Drinkard: It was a really an amazing recovery.

Barr: Have there been opportunities for growth as a therapist?

Drinkard: Yes. The whole sort of upping the multidisciplinary team collaboration. But for me specifically, I've really gotten interested in breathing training. I've started reading more literature. Now I'm looking into implementing an improved version of breathing training and inspiratory muscle training for the diaphragm for many patients that are in the hospital now. I realize especially when looking at the literature how much of an effect that can have, so specifically that's probably been one of the things that I've been most passionate about and has been a benefit from this whole thing. I'm using that now even with patients that don't have COVID.

Barr: Well, that is really great. Can you speak a little bit about your involvement in other COVID related initiatives?

Drinkard: I'm involved in a new study. It's called the COVID Care Study, and it is an exercise intervention study for patients who are recovered from COVID. As you know, patients who are recovered from COVID sometimes have lingering impairments, and so we're interested in how exercise can help those individuals. It's just getting started. We only have a few patients so I can't really comment on what our findings are because we're just getting started. We hope that exercise will be a big benefit for these folks.

Barr: What types of exercises are these patients doing?

Drinkard: Well, they're doing a very specific regimen of aerobic exercise, and we have used that regimen in other populations like persons with pulmonary hypertension and advanced lung disease and most recently in patients with lupus, so we feel confident in this intervention, and we're hoping that our findings will be significant.

Barr: Yes. We're going to transition from you as a clinician to you as a person living through the pandemic. What have been some personal challenges and opportunities for you due to COVID- 19?

Drinkard: You know, it's a great place to work. I don't feel as much of the challenges right now as I do the opportunity. The challenges were around the work and the splitting of our staff and maintaining continuity of care and those kind of things. The opportunities being able to—on those off weeks when I was teleworking—to eat lunch with my son who was homeschooling. I have a younger son, and that was wonderful. We also learned to together to ride what's called a rip stick. It's like a two-wheeled skateboard.

Barr: That's so cool!

Drinkard: It's something somebody my age probably shouldn't be riding especially as a physical therapist. It requires a lot of balance, so we were doing that together, and you know, certainly being with my family, that was that was good.

Barr: That's very nice. Well, this is a fun question. What is one thing you wish you would have stacked up on in the beginning of the pandemic?

Drinkard: Yes, I didn't have a problem with the whole toilet paper thing. I think it was just before the pandemic started. I bought a bread maker, and then I couldn't get yeast. I think I had to wait a month just to get a little package of yeast, but then one of my neighbors up the street said, "Oh, here I've got some sourdough starter." So that worked out.

Barr: That's nice, are you into baking and cooking?

Drinkard: Well, not so... you know, it's funny, not so much baking. I do like a little bit of cooking; I like making Indian food.

Barr: Is there anything else that you would like to add as an NIH employee?

Drinkard: I think almost all of the patients that I've worked with have done extremely well. I don't know how they're doing now because I only saw them during the acute care phase, but I was really impressed with the teams here, especially the nurses and the physicians in the ICU, and it was just encouraging to see how well so many of these patients did.

Barr: Yes, that's really wonderful. Well, I wish you and those that you work with all continued success and continued safety.

Drinkard: Thank you Gabrielle, and it's a pleasure talking to you.