2021 NCSBN Scientific Symposium - Fatigue Among Healthcare Workers: Do Solutions Exist? Video Transcript

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Event
2021 NCSBN Scientific Symposium

More info: ncsbn.org/15185.htm

Presenter
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- [Moderator] Beverly Hittle is an assistant professor from the University of Cincinnati College of Nursing. Her extensive nursing background, working shift work in the acute care setting, inspired her research path of investigating the intersection of organizational and individual factors contributing to

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rest of us, we are hearing from friends and colleagues about how caring for COVID-19 patients has affected the healthcare workforce.

One thing is clear, nurses and other healthcare providers are exhausted physically and mentally. But what does it mean to be fatigued? We each may have our own perception, and certainly in the face of the coronavirus pandemic, fatigue among healthcare workers seems to be all-encompassing and compounded by emotions of grief and isolation.
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Generally, in the sleep and fatigue, and occupational health world, when we talk about fatigue, many is the definition published by Dr. Steve Lerman and colleagues on behalf of the American College of Occupational Environmental Medicine Presidential Task Force. They defined fatigue as the body's response to sleep loss or to prolonged physical or mental exertion. Sleep loss, physical and mental fatigue, they collectively and they individually lead to decreased alertness and response time, contributing to injuries and errors.

In addition to poor cognitive functioning, sleep and the disruption to circadian rhythms caused by shift work can also contribute to poor health outcomes for workers. You can see in this slide some of the sequela of poor sleep and circadian rhythms disruption. Although some of these outcomes may not present for many years, mental health outcomes including emotional regulation are more immediate effects.

From a healthcare regulatory standpoint, it is important to mitigate the effects of healthcare fatigue which may contribute to adverse events involving patients. Yet the coronavirus pandemic has placed a tremendous strain on the healthcare workforce, exposing the importance of supporting worker health. With that, we need to also place increased importance on promoting workers' sleep and health to ensure that we have a workforce available to care for the public.

So how fatigued and tired is the nursing workforce? A recent study from nurse scientists at the University of Tennessee and the University of Madison Wisconsin compared nurses caring for COVID-19 patients versus those who were not. Nurses caring for COVIDe7(e5o371q0.00000912 0 612 792 hcare provinivhe

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nurses, we know these factors contribute to fatigue and there is evidence to support nurses' personal knowledge and lived experience.

Work timing, likewise work timing, this refers to like, the time that someone would be at work, so such as like night shift, evening shift, early mornings, rotating shifts. These are all the work hours that can contribute to disruption to our natural circadian rhythms in our sleep and also cause fatigue. But of course, we require nurses to provide care in 24-hour facilities. So this is kind of something we can't avoid.

Extended work hours, these are the shift lengths, shifts extending beyond 10 hours and weekly overtime, including voluntary and mandatory overtime. Finally, culture. Organizational safety and professional culture, they have all embraced the three factors, the other three factors in many ways.

There's a [inaudible] that we have seen with little sleep and long work hours in the healthcare industry. In my research, advanced nurse practitioners have told me how the medical profession's culture surrounding work hours has influenced their own actions and beliefs related to sleep, where they feel they are compelled to come to work regardless of illness and fatigue. We see a culture in healthcare where napping while at work, even if it's on a break, is still considered a fireable offense.

Individually, these work factors can cause fatigue, but we also need to think about, like, how they intersect for experiencing, like, multiple factors at once can create like a compounding effect. Folkard and Lombardi, in a very seminal paper, developed a risk index model to predict the risk of adverse event when working shift work.

This model was based on kind of weekly work hours and shift components like, shift length, breaks, timing. And the researchers found substantial increase in risks for injuries and errors with each, like, subsequent night shift so that by the third night shift in a row, the risk was 17% higher and by the fourth night shif t in a row, it was 36% higher.

And similarly, the risks increased exponentially with longer shifts. So overlaying these factors resulted in even higher risks, and there's evidence to support this in nursing. So in shift working nurses, Dr. Geiger-Brown, she had published work demonstrating how every adverse work condition that shift working nurses experienced, such as overtime, shift length, you know, shift timing, when they increased the odds... when they overlay, they increase the odds of nurses reporting sleep problems.

So where does this leave us? How should we proceed? Are there any solutions? The path recommended by experts in the field as well as healthcare accrediting professional organizations such as the American Nurses Association and the Joint Commission is to institute fatigue risk management systems. But what does that even mean? Fatigue risk management is a multilayered approach to preventing and/or reducing fatigue in the workplace.

It is building layers of defense against fatigue. So it should be incorporated into a safety management system where sleep and fatigue becomes an important part of the organizational culture. This type of system is used in other industries. You can see it on the airline industry.

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Addressing barriers. So with that heterogeneity and practice settings and research, this is where I really see nursing can shine. I see that nursing leadership, shared leadership systems within the hospitals, hospital-based DMPs, they can all come together with our scientists to develop evidence-based programs that can really make a difference.

There are plenty of resources and recommendations, but each unit in an organization will have to find what would work for them. Individual differences, educating workers on the risks and some of the ways we can differ can be helpful. It can allow workers to make informed decisions regarding their work and their health. Anecdotally, I can tell you, when I speak to students and workers about sleep, they know they're tired, they think it's just part of the job.

But they are often really surprised by how sleep contributes to health. And it really... Hearing about that really encourages them to kind of think about ways that they can improve their sleep. In addition, I think that having a buddy system in place can be really helpful so that nurses can help support each other and be accountable for each other.

Limited staffing resources. I cannot pretend to be an expert on this. I know that this has been an issue in

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Education, NIOSH does have an education program targeting nurses on their website. It is free to use and we have a study that we're ready to launch with the hopes of recruiting nurses in the fall of 2021. Our study purpose is to evaluate the effectiveness of the training on sleep and well-being. That being said, this is one of the only free education tools available on the market.

There may be training and education programs within organizations, but research is really lacking on the best method for providing this type of training. Individual differences, specifically we need to better understand how the social and environmental influence on individual's sleep, how this all intersects with

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