Dr. Mary Beth Happ is the Distinguished Professor of Critical Care Research and Director of the Center of Excellence in Critical and Complex Care at The Ohio State University College of Nursing and is faculty in the Office of Geriatrics and Gerontology. Her program of research is targeted to seriously ill older adults and is focused on developing and testing interventions to improve care and communication with mechanically ventilated and communication-impaired patients, symptom communication, and end-of-life care in the intensive care unit.

Dr. Happ led an interdisciplinary team to develop and test a multi-component intervention (nurse training, communication tools, speech-language consultation) to improve patient communication during mechanical ventilation (SPEACS). She co-led the Robert Wood Johnson Foundation INQRI project, SPEACS-2: Improving Patient Communication and Quality Outcomes in the ICU. Dr. Happ is a Fellow in the American Academy of Nursing and a 2013 Fellow in the Gerontological Society of America. She serves on the editorial boards of Geriatric Nursing, Heart and Lung, and the Journal of Gerontological Nursing, and has authored/co-authored over 100 published articles, editorials, book chapters and educational modules.

ElderBranch interviewed Dr. Happ to discuss her editorial, Aging, Complexity, and Critical Illness in the Journal of Gerontological Nursing.

Why is the study of critical illness and aging growing in importance?
Well, certainly it’s demography and epidemiology. With the population aging and the increase in chronic illness and conditions that are often associated with acute and critical illness episodes, we are seeing an increase in the proportion of older adults in critical care units, requiring intensive care services, and we see that demographic trend only growing in the future.

The very nature of critical illness – the assault that the body undergoes during critical illness and critical injury – may accelerate physiological aging. We know there is a release of cortisol and other substances that can potentiate inflammation and cause other difficulties and complications to recovery. So we are becoming more and more aware of the sequelae of critical illness and how that affects people of all ages, in ways that gerontologists know about best.

So cognitive decline, physical function decline, and some psychological complications such as depression and anxiety are all conditions that gerontologists face and are skilled at handling. It’s the recovery issues that we are critically concerned about.

What are the main issues surrounding critical illness among the elderly?

Certainly, the need for early rehabilitation and prevention of functional decline within and after discharge from the intensive care unit is most important.

I think another important area, and these issues were presented in the Journal issue, is that critical illness can be the precursor to end-of-life for a proportion of older adults.

So family members and health care providers must be aware that critical illness places patients at a high risk of dying, and together should consider what that means in terms of the person and goals for care.

### Some Fast Facts

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<th>Fast Fact</th>
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<td>Approximately 84 million Americans (28%) have more than one chronic condition, or multiple illnesses /impairments expected to last a year or longer.</td>
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<td>73% of Americans over 65 years of age have multiple chronic conditions</td>
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<td>The number of Americans with chronic conditions is projected to be 171 million by 2030</td>
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<td>More than one-half (55.8 %) of all intensive care unit days are incurred by patients over the age of 65</td>
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What are some key recommendations for improving quality of care during critical illness for older patients?

There is a movement and an awareness amongst critical care providers and researchers that our approach has to be more holistic. The approach has to include attention to preventing sequelae of critical illness, or what we are calling “ICU Syndrome,” which can occur both in patients and their family caregivers.

We have seen this approach be very effective in long-term care. My colleague, Dr. Barbara Resnick at the University of Maryland, has done a great job of infusing a restorative care perspective in long-term care and assisted living, but that approach has been slow to migrate to the acute and critical care setting. But we see that it is just as important there.

New research on early mobility, decreasing sedation use, symptom management, and regular assessment and treatment for signs of delirium (or acute confusion) are certainly important quality of care issues.

Supporting families during the critical illness experience and making efforts to assure safe and supported transitions in levels of care are also areas for quality improvement.

Nurses play such an important role in improving quality of care, the restorative care initiative and intervention, and in end-of-life quality care improvement. It certainly takes an inter-disciplinary effort, and nurses have been instrumental in both identifying the issues and in conducting some of the research to show which interventions can be most effective.

Finally, the movement towards integrating palliative and end-of-life care in the critical care setting is also tremendously important and we are seeing hospitals make some important strides in that area, but we still have a long way to go.
What are some examples of restorative care and interventions in the critical care setting?

One example is in Dr. Michele Balas’s article in this issue of the Journal. The “ABCDE Intervention,” which stands for Awakening and Breathing Coordination, Delirium Monitoring and Management, and Early Mobility, empowers members of the interdisciplinary ICU team to implement the best available evidence regarding mechanical ventilation, sedation, weakness, and delirium, in a safe, effective, and patient-centered manner.

Patients are awakened regularly and sedations are interrupted on a regular basis to assess the continued need for them. Traditionally in critical care, there has been this approach of sedating patients because that both facilitates the use of mechanical ventilation and it was thought by the care providers that patients would be more comfortable if they were asleep. But, we have found that it is not the healthiest approach – it actually extends time on mechanical ventilation, it exposes patients to the risk of infections and all the hazards of immobility. To the extent we can decrease the use of sedation while still keeping patients comfortable is a tricky, but important, balance to achieve.

Assessing patients’ cognition and their ability to breathe is also important. It’s important to conduct spontaneous breathing trials to work towards liberating the patient from mechanical ventilation as soon as possible. My work has been in the area of improving communication with patients when they are unable to use vocal speech during mechanical ventilation.

It certainly takes a lot of coordination, a lot of teamwork (physical therapists, speech therapists, occupational therapists, nurses, and physicians) to conduct these interventions, and to make this practice change.

How important is it to get institutional support to make these changes in critical care units?

It is crucial. In my own work, we have really looked at ways to lay the groundwork with the nursing administration and nurse leaders in a particular ICU. We found that each unit has different needs and different ways of approaching change and their work, so individualization of program implementation is warranted.
I think, for better or for worse, we have seen that accrediting bodies and requirements around these kinds of initiatives also help to boost support – it’s like that carrot and stick approach. We are seeing more attention in regulatory standards to palliative care and end-of-life care assessments, provisions for family and family visitation, accommodation of patient communication needs, even in the ICU. As accrediting bodies become more aware of these quality of care initiatives and begin requiring hospitals to show evidence that they are attending to these care needs and improving these processes, we will start to see more successful change.

Certainly, the impetus toward reducing hospital readmissions is an area in which I think hospitals will have to back up and say, “ok, what are some of the causes of readmission and are people too deconditioned or leaving the hospital with cognitive changes?”

People leave the hospital still delirious in some cases, and we know that is a huge risk factor for readmission. So I think hospitals are becoming aware that to the extent that they can prevent those conditions, and prevent cognitive and physical decline during hospitalization, the better chance they will have of avoiding 30-day readmission.

You currently serve as Director of the OSU College of Nursing Center of Excellence in Critical and Complex Care (CECCC). Can you describe the objectives of the CECCC and how you are going about trying to realize those objectives?

This is a center of excellence in scholarship in our college. It is an interdisciplinary center – we invite colleagues who are interested in improving critical and complex care for adults throughout the university to partner with us.

The domains of interest in our center, among our faculty and students, are aging, prevention and recovery after critical illness, quality and safety, symptom management, and decision making. Our objectives are to advance knowledge and improve care in these areas.

We recognize complex conditions as those that are multiple-chronic conditions, or complex treatment regimens, and we know that persons with multiple-chronic conditions are more often older adults and that patients hospitalized in the ICU usually have several pre-existing chronic conditions. We also know that people can leave critical illness with newly acquired chronic conditions. So, our objectives are to really address some of the causes and conditions of disability and symptom of distress during and after
critical and complex illness.

What advice would you have for a senior or their family when they enter the critical care unit of a hospital?

There are certainly some online resources available, such as:

- [http://icusurvivors.com/](http://icusurvivors.com/)
- [http://www.mycucare.org/Pages/default.aspx](http://www.mycucare.org/Pages/default.aspx)

I would want families to certainly connect with a primary nurse in that particular intensive care unit, and to ask to speak to a social worker right away to help in coordinating care and understanding things like the patient’s level of function, both physical and mental, before they became ill and what the treatment goals are.

It sounds easy, but it is not. Families often don’t know these resources are available – they just want their loved one to get better – which we all do. It’s important for the family members to identify caregivers in the hospital and ICU who can be supportive and help them navigate the illness experience.

It is also important to be available to the physicians and nurses for questions and updates, but also to take care of yourself as a caregiver, and not feel like you have to be at the bedside continuously. Critical illness is a great strain on families and family members need to be attentive to their needs for recovery breaks.

Related posts:

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