Critical connections

The Complete News Source for Critical Care Professionals

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Society of Critical Care Medicine
The Intensive Care Professionals

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In This Issue

This issue's focus: Palliative Care

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Society of Critical Care Medicine
The Intensive Care Professionals
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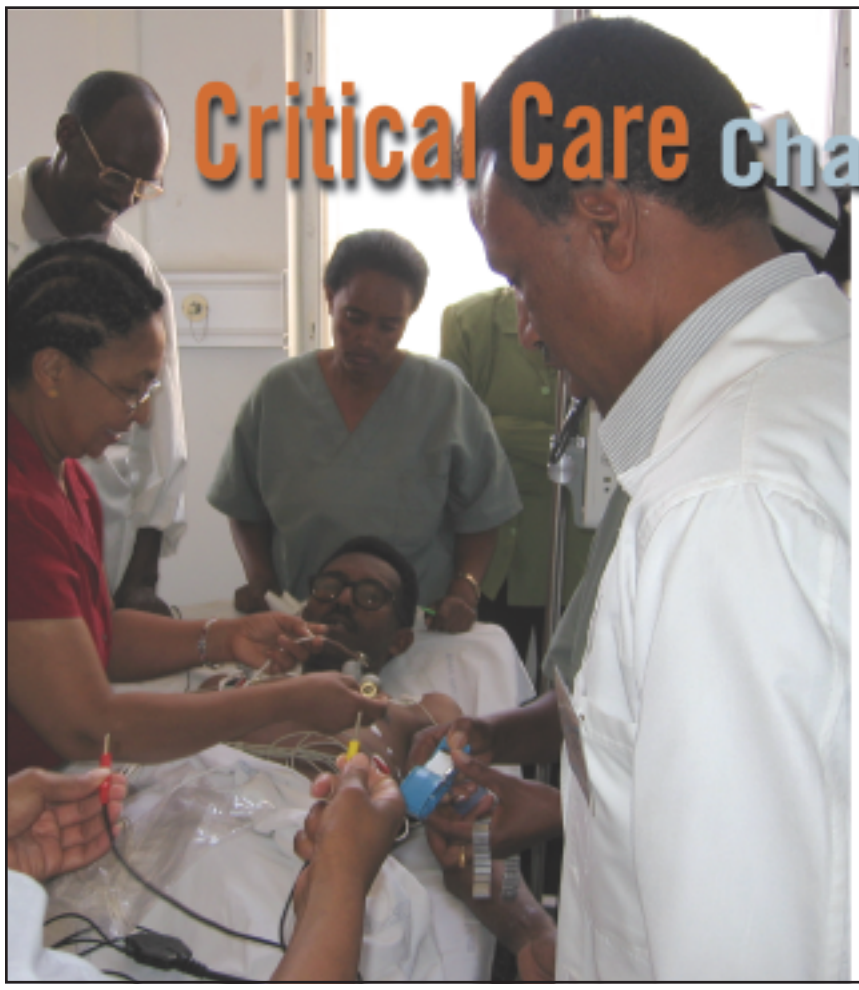


Critical Care Challenges in AFRICA

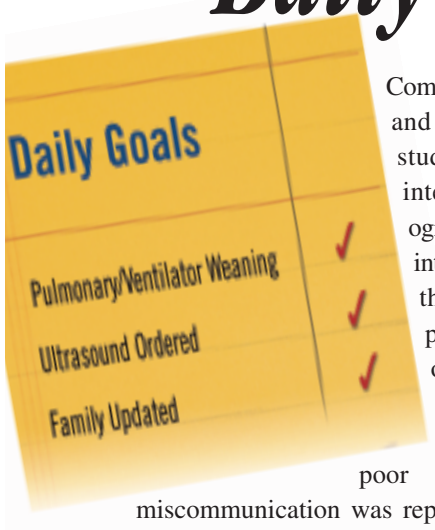
Critical care nurses teach EKG, monitoring and defibrillation skills during an FCCS skill station.

This summer, the Society of Critical Care Medicine (SCCM) took additional steps in its growth as a worldwide organization by collaborating with Doctors for United Medical Missions (DrUMM) to hold its first Fundamental Critical Care Support (FCCS) course in East Africa. Through contributions from SCCM members, the Society's Critical Care Education and Research Foundation (CCERF) provided funding for the project, which took place in June.

In Sub-Saharan Africa, the need for improved critical care services is often overshadowed by the need for basic primary and preventive medical care. Western healthcare professionals often maintain the perception that critical care

(see Critical Care Challenges in Africa, page 8)

Effective Communication is a *Daily* Goal



Communication is the oldest and probably the most studied form of human interaction. Anthropologists and others have been intrigued for centuries by the progression and perfection of all kinds of communication from hieroglyphics to the spoken word. Yet, poor communication or miscommunication was reported as a contributing factor in 31% of incidents submitted to the ICU Safety Reporting System (ICUSRS) from July 1, 2002 to June 30, 2003. Moreover, upon reading these cases, the ICUSRS Team identified that communication problems contributed to most errors, though this factor was often not considered the primary cause by the person reporting the incident. In addition, communication problems contributed significantly to most of the sentinel events reported to the Joint Commission on Accreditation for Healthcare Organizations (JCAHO).

Today, communicating is quick and easy and can be established by emailing, text paging, beeping, or calling on a cell

(see Effective Communication is a Daily Goal, page 15)

Journeys with Children and Families

Palliative care in the pediatric intensive care unit (PICU) is a fundamental part of practice and affords the opportunity to journey with families as their children approach the end of life. In taking the time-honored pediatric focus on the family to its ultimate position, the pediatric palliative care team is family-centered, embracing the child and family as a unit, with all the resources and potential impediments that accompany it. Pediatric palliative care is collaborative, combining the expertise of multiple disciplines and providers with the thoughts and goals of the child and family.

Most importantly, pediatric palliative care is flexible, offering care to children at any stage of illness, coordinating therapies to manage any discomfort, assessing goals and translating them into cohesive treatment plans, and competently addressing new symptoms or new issues as they arise.

(see Journeys with Children and Families, page 9)

Relying on Providers as Heroes

Peter J. Pronovost, MD, PhD
The Johns Hopkins University School of Medicine
Baltimore, Maryland, USA

Christine G. Holzmueller, BLA
The Johns Hopkins University School of Medicine
Baltimore, Maryland, USA

Sandra P. Bagwell, MD, FCCM
Maine Medical Center
Portland, Maine, USA

The duty of reporting incidents has been an integral part of healthcare administration for decades.

Traditionally, reports are gathered by nurse managers or other unit leaders and shipped to risk management or quality assurance for investigation and appropriate action. Typically, the action targets an individual who is judged and disciplined.

"To Err is Human,"[1] helped healthcare turn the corner and move away from blaming a person. This Institute of Medicine (IOM) report and other researchers[2-4] led the Intensive Care Unit Safety Reporting System (ICUSRS) to look at how care is organized (system factors) and how it may contribute to harm. It showed that healthcare providers are heroes, not enemies. In fact, nurses, doctors, pharmacists, and others work hard every day to limit and prevent broken systems from harming patients. In the first year of reporting to the Web-based error reporting system, the ICUSRS staff found that providers limited harm in 57% of incidents (488 of 854) and perceived that providers could have prevented 49% of incidents (414 of 854).

To improve safety and reduce errors, we must standardize processes of care. Healthcare providers reduce defects through their use of double-checking and independent redundancy. Double-checking can be done by two people at the same time or by one person who returns to recheck his or her work. One example of the success of double-checking involved two nurses who noticed before administering a unit of fresh frozen plasma to a male patient that the number on the bag was different than the number on the paper attached to the plasma bag. They returned the unit of blood to the blood bank. Another institution participating in the ICUSRS implemented a double-check program in an adult and pediatric ICU and improved medication safety in both units.

Independent redundancy, while similar in nature to double-checking, is a different process. An independent redundancy involves two separate people checking independently of each other and then comparing their findings to see if they match. While double-checking is efficient, independent redundancy is more effective in eliminating errors because it removes the bias engendered when two people simultaneously share the same conclusion. Indeed, the value of independent redundancy is that checks are truly independent. In the real world, however, double-checking may be more feasible in many institutions since coordinating two individuals to separately perform checks could pose staffing challenges.

Another way to standardize processes of care is by bar coding. The Food and Drug Administration recently passed a requirement for bar code labeling of human drug and biologic products.[5,6] This rule has the potential to reduce medication errors in that scanning adds a method of verifying right drug, dose, administration route, patient, and/or blood product.

While technology, such as bar coding, as a standardized process of care can help improve patient safety, it may also pose a new set of safety hazards. As such, healthcare must always rely on dedicated and qualified providers who work in complex medical systems to mitigate and prevent patient harm.

References are available at SCCM's Web site, www.sccm.org/publications.

Critical Care Challenges in AFRICA

John B. Sampson, MD
Johns Hopkins Hospital
Baltimore, Maryland, USA

Haile Mezghebe, MD
Howard University Hospital
Washington, D.C., USA

Mark Walker, MD
Surgical Health Collective
Atlanta, Georgia, USA

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does not exist and is not needed in African countries. However, most healthcare providers would agree that basic fundamental concepts in fluid resuscitation, shock management, and the treatment of life-threatening infections are paramount to any primary care or emergency care practitioner.

In Eritrea, East Africa, the continent's newest country, there is a progressive Ministry of Health who is addressing the healthcare challenges faced by his country. Saleh Meky was trained as a nurse anesthetist in the United States and has efficiently worked toward equitably distributing Eritrea's limited healthcare resources to both the rural and urban areas of this emerging democracy. He has received assistance from benevolent countries, such as the People's Republic of China, which constructed Orotta Hospital, a new state-of-the-art facility in Eritrea's capital of Asmara. The beautiful and utilitarian facility includes medical/surgical wards, an intensive care unit (ICU), an emergency department, four operating rooms, recovery room, and conference center. China's generous gift to Eritrea is inclusive of such equipment as three new mechanical ventilators, monitors, infusion pumps, and defibrillators.

This modern equipment is of little use without accurate operating knowledge, however. The lack of previous knowledge of such equipment, as well as untranslated Chinese instructions has inhibited Eritrean healthcare professionals from effectively utilizing this equipment for the improvement of quality healthcare.

The Ministry of Health sought the help of DrUMM, a nonprofit, humanitarian organization, to address this challenge. The organization identified SCCM's FCCS course as the best-suited tool for improving critical care knowledge in Eritrea. Many of DrUMM's members, including the president, are active critical care practitioners and SCCM members.

The original plan was to host a class of 26 FCCS participants. After reviewing the curriculum, the Ministry of Health strongly felt that physicians and nurses working in rural hospitals needed a critical care knowledge base almost as much as those who actually worked in Eritrea's only tertiary intensive care unit. The Ministry of Health disseminated information about the FCCS course to hospital directors throughout the country and allowed 13 hospitals to choose two individuals to attend the course.

Even with such national representation, DrUMM volunteers were inundated with requests asking to expand the number of people permitted to attend the course. The desire for knowledge was strong and after discussing the matter with the Ministry of Health, the duration of the course was increased from two days to three days to allow for greater hands-on experience, question/answer periods and in-depth explanation. The total number of attendees increased to 45. Others were also allowed to audit the lectures, but not participate in the skill stations.

Dr. John Sampson (Left) engages participants in an intense ventilator management case discussion during the mechanical ventilation skill station.

The first day's response was overwhelming. The American Ambassador, the director of the U.S. Agency for International Development (USAID), and the Eritrean news media officially recognized the course. Participants took the pre-test with such intensity that it set a very serious tone for the course to follow.

(see Critical Care Challenges in Africa, page 16)

Effective COMMUNICATION is a Daily GOAL

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specific therapies. Not surprisingly, the Daily Goals Sheet is now being used in hundreds of ICUs around the world.

The Daily Goals Sheet was first implemented in the intensive care units at The Johns Hopkins Hospital in July 2001. By week seven, more than 95% of residents and nurses reported they understood the daily goals for their patients. In addition, the ICU length of stay (LOS) dropped by one day in the two ICUs that implemented it. While implementation of the goals sheet correlates with a reduction in LOS, other studies focusing on quality improvements in the ICUs were occurring at the same time and may have contributed to this reduction.

The essence of the Daily Goals Sheet is its ability to structure patient care rounds and facilitate communication between care team members about the desired outcomes for a patient. All members of the multidisciplinary, multiprofessional critical care team—physicians, nurses, respiratory therapists, pharmacists, and others—review the goals for each patient multiple times during the course of the day and leave the form by the patient's bedside to ensure the plan is explicitly followed. As goals of care change, so does the form. The goals sheet facilitates collaboration and helps practitioners focus on the patient's needs. Furthermore, the establishment of clear goals improves a provider's personal effectiveness and efficiency, thereby leading to more effective and efficient patient care.

References are available at SCCM's Web site, www.sccm.org/publications.

Critical Care Challenges in AFRICA

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At the conclusion of the three days, everyone relaxed and expressed deep appreciation for the FCCS course. One of the participants felt that this was the most organized course ever held in Eritrea. Many participants excitedly explained that they could not wait to return to their institutions to pass on the information they had received. And others stressed the need for another FCCS course in Eritrea for those who were not chosen to attend or who needed reinforcement.

Course participant Dr. Goitom Berhane wrote, "I am one of the participants of the seminar that you gave on critical care medicine at Orotta Hospital in Eritrea and one of the surgeons assisting you at the Halibet Hospital. This is to give my words of appreciation and to thank all of the members who have participated in teaching the Eritrean medical community such important concepts regarding the care of critically sick patients. The knowledge and skills that your group provided us will help to improve the quality of care that we provide to our patients." The FCCS course offered the tools for improving the quality of care provided to the sickest patients in Eritrea. Both DrUMM and SCCM plan to continue their collaboration and are planning additional FCCS courses in Ghana and Nigeria.

We extend our gratitude to the SCCM members who made donations to the CCERF to help fund this FCCS course. This course would also not have been possible without the individual sacrifice of the physicians and nurses who dedicated their time to travel to East Africa at their own expense. We would like to send a special thanks to all members of the DrUMM team, including Ingrid White, BS; Tsion Sergot-Michaels, RN; Celia Hightower, RN; Pam Copeland, RN, Esq; and Femi Akinnagbe.

Society Members John B. Sampson, MD, was the course director for the FCCS course held in Eritrea, and president of DrUMM; Mark Walker, MD, was the FCCS Course Consultant; and Haile Mezghebe, MD, served as the liaison to the Eritrea Ministry of Health.