EM Advocate

A publication by and for EM Residents in the Commonwealth of Massachusetts

Emergency Department Based Violence Intervention: Experience from Boston Medical Center

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Violence was recognized as a major public health concern long before the World Health Assembly convened in 1996 to call for increased action from the public health sector. In 2002, the WHO outlined the far reaching social and economic implications of violence with the first World Report on Violence and Health.[1] Today, there is still a lot of work to do. Nationally, in 2010, 4828 young people between the ages of 10 and 24 died as a result of intentional violence. That is roughly 13 each day. In 2011, there were 707,212 ED visits by young people aged 10 to 24 for injuries related to physical assault.[2] In Massachusetts, homicide was the second leading cause of death for individuals between the ages of 10 and 24 from 2008 to 2010.[3] Additionally recidivism is high in this vulnerable population. In some studies, 35- 49% of patients who were victims of violence were reinjured as a result of violence and up to 20% were dead within 5 years of the initial injury.[4-6] These are staggering numbers and emergency physicians frequently take care of victims of violence as they present in this potentially life changing window of intervention.[7]

In the 1990s, communities around the country recognized a need and developed hospital based violence intervention programs on the trauma-informed framework.[8] This model recognizes behavior after victimization as a survival strategy rather than pathology. Trauma triggers a complex biopsychosocial cascade of fear, hyperawareness, and insecurity that can lead to retaliation as a means to restore a sense of safety and security.[9,10] The trauma informed model takes a multidisciplinary approach involving emergency physicians, social workers, nurses, family members and others from the community to support victims of violence and aim to break the cycle of violence. Trauma informed care has been shown to decrease re-victimization and facilitate recovery.[10-13] It is on this model that Boston Medical Center's Violence Intervention and Advocacy Program (VIAP) was developed.

VIAP at Boston Medical Center was started by Dr. Thea James in 2006 at the request of the late Mayor Thomas Menino and with the help of a grant supported by the City of Boston. Since that time it has grown to a team of nine passionate providers who help to bring VIAP's mission to life. With 72% of Boston's penetrating trauma victims presenting to the Emergency Department each year, Boston Medical Center is uniquely suited to reach this vulnerable population. After each victim of a shooting or stabbing arrives at the hospital, they are automatically referred to the VIAP program. From there, they are assigned an advocate who coordinates their care. Separate from the medical team and social workers available to all patients in the hospital, the advocates work to address the specific needs of these patients. From coordinating follow-up medical appointments, to providing applications for GED or driver's licenses, to accompanying clients to court dates, the needs are case specific and services vary widely. The advocate's work continues long after the patient is discharged from the hospital, often lasting for years. Using the trauma informed care model of service delivery, the advocates provide the social support these clients need most. Research has shown that outcomes are much more positive when at-risk youth maintain a meaningful relationship with a caring adult.[7, 14] Additionally, after recognizing the need to involve the entire family in the healing process, the Family Support Department was developed to provide family members of clients with access to a support coordinator, behavioral health clinician and a case manager. Any family member impacted by violence can access these services. Since its inception, VIAP has seen an amazing decrease in recidivism amongst its clients - from 30% to 7%.

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VIOLENCE CONTINUED FROM COVER

On a weekly basis, the VIAP team comes together with its partners to discuss every client and his/her specific needs. One such partner is the Community Violence Response Team (CVRT), who provides mental health services to the clients and their families throughout their hospital stay and into the community. Another is the Boston Partners Advancing Communities Together (PACT) Initiative. This multidisciplinary, comprehensive service delivery strategy works to increase positive outcomes for youth who are the most at risk of being victims or perpetrators of gun violence. Partners work together to connect youth to long-term, meaningful relationships with trusted adults and to education and employment services. VIAP also partners with the City of Boston Streetworkers Program. Streetworkers are involved in outreach activities for at-risk youth and gang members. A team of five streetworkers are considered part of VIAP. They will respond to the hospital 24 hours a day, 7 days a week, either minutes before or after a young person arrives injured from violence. They provide critical crisis stabilization for families and are a bridge of information sharing with the VIAP team, particularly during off-hours. Finally, VIAP is also a founding member of the National Network of Hospital Violence Intervention Programs (NNHVIP). This network brings together nearly forty programs from around the United States to share knowledge, develop best practices, collaborate on research, and affect policy change.

Violence prevention and intervention programs are a powerful way to stop the revolving door of violent injuries that present to our EDs. Engaging patients in the hospital, during their recovery, is a golden opportunity to change their lives and reduce retaliation and ongoing violence in our communities. For more information on trauma-informed care and resources related to violence intervention in your community, visit www.nnhvip.org.

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Do you want to write for the EM Advocate?

The *EM Advocate* is looking for intelligent, creative, and interesting articles to highlight resident thoughts and opinions throughout the Commonwealth of MA. Subject matter can include topics of social responsibility, interesting cases, scientific advances, emergency medicine subspecialty issues, grass roots activism, and opinions regarding public or hospital policies, etc.

Please contact your residency's MACEP representative (listed on front page of this newsletter) or the EM Advocate Editor (Jesse Schafer, MD at Jesse.schafer@bmc.org) for opinions, ideas, and article submission.

We look forward to hearing from you!

Fatigue Lessons from the Logbook

Malcolm Schongalla, MD, PGY-2
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You've probably heard the old joke, "What's the worst thing about Q2 call? Missing half of the good cases!" Unfortunately for generations of residents, some founding fathers of American graduate medical education were raging cocaine addicts who paid little regard to sleep[1]. If only we never needed rest! But I'm human, you're human, and we are doomed to suffer our mortal limitations. Since time immemorial, there haven't been enough of us for all the patients who need help. And as a result, "toughing it out" with little sleep has long become a respected and necessary attribute. Changing duty hours have made progress toward improving resident well-being,[2] reducing how often we crash our cars,[3] and most importantly the safety of our patients[4]. But even with duty hours, fatigue will never go away in the high-demand, 24-7 world of medicine.

If fatigue is inevitable, what is the hapless resident to do? Well, we can draw lessons from other professions that depend on fail-safe practices. Take pilots, for example. They've been studied extensively, both on the job and in human performance laboratories. Pilots may not have been around as long as doctors, but they seem better at managing fatigue, despite their time-zone hopping and constant tempo. And we, as clinicians, can take some cues from their logbook.

RECOGNIZE WARNING SIGNS. Do you struggle with vocabulary after a busy overnight? Do you doze off in conference? Do you routinely fall asleep as soon as your head hits the pillow? Someone reading this is thinking, "that's me every day!" And it might very well be. It may also be that you are chronically sleep-deprived, and didn't even know it. Good pilots watch themselves and their colleagues for warning signs like these. Recognition is the crucial first step.

YOU ARE NOT SUPERMAN (OR -WOMAN). Respect your limits, and keep your ego in check. In aviation, terms like "machismo," and "get-home-itis," refer to well-known, dangerous attitudes – pitfalls of over-estimating one's abilities, and disregarding caution. Though we may feel subjectively acclimated to sleep deprivation, objective performance data proves otherwise. "I have taken plenty of call, it doesn't get to me anymore," is a common but misconceived attitude among doctors. In reality, your familiar fatigue prevents you from accurately assessing your own performance decline![5] Realizing this is a vital step, and you might think twice before getting behind the wheel, overly-tired.

TAKE NAPS. Airline pilots who sign out to their copilots, to take a short nap in flight, have fewer episodes of "microsleep" during critical phases of the approach and landing[6]. Similarly, ACGME guidelines explicitly encourage "strategic napping."[7] A quick 30 to 45 minute nap before or during an overnight can help you stay sharp, and a nap afterwards can help you drive home safer and more alert. Next time your jet lands in a blizzard at 3 AM, won't you be glad your pilots caught some rest when they could? Do yourself and your patients the same favor.

LEARN YOUR SLEEP CYCLE. Consider the effects of "sleep inertia." Flight deck crewmembers know that beyond 45 minutes of napping, the brain enters "slow-wave sleep," or deep sleep. Waking up from deep sleep can be tough. After 80-90 minutes of total sleep, your brain will begin emerging again to a lighter phase that is easier to awaken from. Eventually, you dip cyclically back into deep sleep, every 90-120 minutes. This phenomenon should not discourage you from taking naps, but be aware of its effects. If you can, strategically time your naps to awaken during light or REM sleep. Oh, and, switching from days to nights? It takes a week to fully adjust.

RESPECT YOUR REST TIME. "Crew rest" is one of the most sacred tenets of Air Force pilots and airline crews alike. Even when I was flying around-the-clock combat airdrops in Afghanistan, never once did the squadron commander ask me to break crew rest. Protecting your time strategically before work – and afterwards – will pay off. Practice good sleep hygiene: make your room dark and quiet, and avoid alcohol before bedtime to improve your sleep quality. Know that after an overnight on call, you need two full nights of sleep, not just one, to fully recover.

HAVE A WINGMAN, BE A WINGMAN. Modern medicine is a team activity, so be a team player. It's not a sign of weakness or conceit to check each other's work. If someone points out a mistake you made, they are trying to help you and your patient. Put your ego aside and thank them! Likewise, if you see that someone on your team is showing effects of fatigue, offer a hand. If you share a team census, take turns covering so that each person can catch some shut-eye, if your job allows it. Just like pilots do, on a long-haul.

EMBRACE CHANGE. Medicine boasts many distinguished traditions, often unhampered by progress. We've all heard some attendings poo-pooh work hour rules, but they trained in a different era. Our medical environment is ever more complex and fast moving. Aviation has similarly grown, and aircrews have a workflow that would be alien to the early pioneers. Flight safety has evolved beyond "one size fits all" rules of resting, to complex models called Fatigue Risk Management Systems (FRMS)[8]. An effective FRMS ensures that the risks of fatigue are guarded against, while giving flexibility to get the job done.

FATIGUE CONTINUED ON P 4

FATIGUE CONTINUED FROM P 3

We, too, need to recognize opportunities to grow beyond old ways of thinking that don't fit with human physiology or the evolving needs of the healthcare system.

As a pilot friend recently commented on resident hours, "You wouldn't want me flying your plane on that little sleep, and I don't want someone treating my child that tired, either!" I couldn't agree with him more. Generations of doctors have trained under an old mentality that would be terrifying if not for its familiarity. Fatigue will always be a part of medicine and surgery, but managing it smartly can make a world of difference for somebody.

Dr. Schongalla is a second year Emergency Medicine Resident, and an Air National Guard cargo pilot with over 2,500 flight hours.

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EMRA EDDA Scholarship Website:
http://www.emra.org/content.aspx?id=1442

ACEP EDDA Website:
http://www.acep.org/edda/

My ED Directors Academy Experience

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Have you ever wondered how you can jumpstart your ambitions of being an Emergency Department Director? Well, ACEP has the perfect course for you. I attended the Emergency Department Directors Academy (EDDA) and was amazed at the extent of the course and speakers who were involved.

The EDDA consists of four phases. The first phase is a 4.5-day didactic course that provides a resounding foundation for the remaining three phases. The course takes place in Dallas and is usually offered twice a year (February and November). Subsequent phases involve a management team (it is recommended a nurse manager go with the ED Director to phase II), and then Phase III and IV, which are more project/discussion based with one-on-one mentoring. Topics range from billing and coding, patient satisfaction, patient flow, peer review, negotiating, risk management, and complaints are all discussed. What is interesting is that most of the people that attend the course voice the exact same concerns that other EDs have.

In an interview with Dr. Kevin Klauer, he mentioned that, "EDDA gives young physicians a better fundamental understanding of the operational world and infrastructure of the practice of emergency medicine." In addition, "creating the wheel is an exciting process, but recreating the wheel unnecessarily is not efficient." Thus, "learning from others and incorporating innovative solutions to common issues is of great value for EDDA attendees."

Dr. Robert W. Strauss is the Program Chair and has a tremendous background in ED operations. He has written several books on ED Management and is very passionate that every participant has an amazing experience. Dr. Strauss truly has been able to bring together an all-star lineup for everyone to learn from.

At the end of each day, there is a networking reception where participants can speak directly to faculty and colleagues about particular issues in their ED's (with leaders in the EM world such as Jay Kaplan, Thom Mayer, Kevin Klauer, Greg Henry, Mike Granovsky, and numerous others). In addition, after the course, participants can also take part in an live interactive listserv.

An exciting thing to note is that residents can apply for an EDDA scholarship to attend Phase I through EMRA and ACEP, as they have about ten scholarships available each year. The scholarships cover the course registration fee and a travel stipend.

This truly is a fantastic course and everything you need to know about being an ED Director is incorporated into one course. And while you are there feel free to check out all the exhilarating things that Dallas has to offer!

Critical Care: End of Life in the Emergency Department

Lauren Westafer, DO, Baystate Medical Center

While we fight with laryngoscopes and central lines, emergency physicians are specialists in death and dying. There's been an increasing push for increased palliative care training in medical education and Emergency Medicine yet most of us are inadequately equipped (1). We feel uncomfortable in these situations; our instinct remains resuscitate first, ask questions later. It's time to acknowledge that end of life care in the emergency department is critical care.

ABCs with ABCs

We run the ABCs – airway, breathing, circulation with ease. In these crucial moments, however, consider running these ABCD's in tandem. It turns out that the trajectory that we launch patients on matters – whether it's to the ICU with an endotracheal tube, to dialysis with a line, or a palliative care consult (1-6).

Advance Care Directives (does the patient have one?) – ask the patient/caregivers what they want.

- Identify if a patient has a health care proxy or physician order for life sustaining treatment (POLST).
- Use appropriate language and avoid jargon. The phrase, "Do Not Resuscitate (DNR)," is inadequate and major societies now use "Allow Natural Death" (7). A DNR only speaks to whether a patient would want CPR initiated and can be confused with "giving up." Try replacing DNR with "It sounds like she would want a natural death."
- Dying patients, even those on palliative care or with Do Not Hospitalize directives come to the hospital because dying is hard, uncomfortable, and stressful. Figure out what they or their caregiver want and need, it's not always a tube or a line.

Better - Make the patient feel better.

Turn off monitors or beeping pumps, prescribe opioids for dyspnea or pain, offer various means of respiratory relief (non-rebreather, nasal cannula, non-invasive ventilation).

Caregivers - identify the patient's caregivers and Communicate with all parties in appropriate language.

- Appropriate language is crucial; avoid jargon. A favorite phrase, effective with most patients, "What is most important right now?"

Decisions - offer medically appropriate decisions in ways patients and caregivers can understand. Aggressive resuscitation and cardiopulmonary resuscitation (CPR) are appropriate in many situations, but not all. Communicate downstream consequences, positive and negative, of various courses of action.

- The public perception of CPR is largely misinformed and studies show that most people overestimate the success of CPR to hospital discharge. One study of patients over 70 years of age found over half believed survival after CPR was >50% and 23% believed survival to discharge was >90% after CPR (8). Furthermore, people may not understand that CPR does reverse the underlying process and a patient is typically sicker after CPR than they were before. Let patients know the implications of these decisions. For example, once someone dies, CPR involves chest compressions which often result in broken ribs but sometimes may restart the heart. There's no guarantee that if we restart the heart that we will get his/her brain function back.
- If appropriate, offer more than one option and recognize the power and responsibility associated with being a physician. People do listen to provider recommendations (9). For example, some patients may want aggressive testing and treatment for etiologies of dyspnea, some may want oral antibiotics for a pneumonia if it may improve their shortness of breath, and some may opt solely for opioids.

For more, check out these free open access resources:

- EMCrit with Dr. Ashley Shreves "Critical Care Palliation"
- Boring EM - An Approach to Palliative Care in the ED
- The Geripal Blog - The Importance of Language

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Medication Disposal Receptacles at Health Care Centers and Pharmacies: A Novel Initiative in the Fight Against Prescription Medication Misuse

Megan Rybarczyk, MD, Boston Medical Center

According to the 2012 National Survey on Drug Use and Health, approximately 6.8 million individuals in the United States are nonmedical users of psychotherapeutic drugs, including 4.9 million users of pain relievers, 2.1 million users of tranquilizers, 1.2 million users of stimulants, and 270,000 users of sedatives[1]. In 2011, the Drug Abuse Warning Network (DAWN) estimated that approximately 2.5 million ED visits resulted from medical emergencies involving unspecified 'drug' misuse or abuse and approximately 1.24 million of these visits involved the nonmedical use of pharmaceuticals (a 132 percent increase from 2004). Opioid pain relievers were involved in 29 percent, or 359,600, of these medical emergencies (a 183 percent increase from 2004)[2]. In 2010, there were 38,329 unspecified 'drug'-related deaths in the US.[3] Among these, opioid pain relievers accounted for 6,631 deaths in women and 10,020 in men, a 415% increase for women and 265% for men, and since 2007 more women have died from unspecified 'drug' overdoses than from motor vehicle crashes.[4]

It is clear that there is a public health crisis that has yet to be addressed: the nonmedical use of prescription medications, particularly of controlled substances. Part of the issue is merely the increase in number of prescriptions written (sales of prescription opioids have quadrupled since the late 1990s), and therefore, the amount of potentially unused medication that is stored in homes – especially when it comes to misuse by children.[5-6] Additionally, most patients do not know how to properly dispose of their medications – the majority of individuals believe flushing medications down the toilet is sufficient.[7] One simple and likely easy-to-implement strategy that may make it more convenient and more environmentally safe for persons to dispose of their unused or unwanted medications would be through secure disposal receptacles for medications in health care facilities and pharmacies.

Until recently, the Controlled Substances Act (CSA) had been fairly prohibitive in only allowing patients to turn in controlled substances to law enforcement, which is often stigmatizing and inconvenient.[8]

An amendment to the Secure and Responsible Drug Disposal Act of 2010 in September 2014 now allows for:

...authorized manufacturers, distributors, reverse distributors, narcotic treatment programs, hospitals/clinics with an on-site pharmacy, and retail pharmacies to collect pharmaceutical controlled substances from ultimate users by voluntarily administering mail-back programs and maintaining collection receptacles. In addition, the regulations allow authorized hospitals/clinics and retail pharmacies to voluntarily maintain collection receptacles at long-term care facilities....[9]

Unfortunately, there is still little state or federal direction regarding the practical implementation of this amendment. Before this amendment, the major initiatives instituted by the federal government to date only include promoting an annual 'National Drug Take-Back Day,' the responsibility of which lies predominantly with the states and which is only once a year, and instructions for patients released in 2007 by the Office of National Drug Control Policy (ONDCP) on suggested disposal methods.[10-11] Some states have tried to implement various take-back programs and initiatives on their own in addition to the federal efforts, with varying success. Nine states allow pharmacies to distribute naloxone, and several states are allowing first responders, police, and firefighters to carry and administer the medication. 'Mail-back' programs can be costly to patients who occasionally have to purchase disposal materials, and can be dangerous if packages are intercepted. Additionally many states have done the opposite and have implemented laws prohibiting, or at least making very difficult, such take-back programs, especially for pharmacists.[12-13] The Center for Substance Abuse Research (CESAR), has compiled a database of many of these laws.[14]

Studies from other countries show that more individuals dispose of medications properly and safely if there are clear and consistent federal and/or state guidelines.[15] Studies in the US have shown that when people are more likely to return medications to health care providers or pharmacies if counseled to do so.[7] Since studies suggest that patients would likely use disposal methods at pharmacies and health care facilities if provided with them, and since we now have the legislation to do so, federal, state, and/or local protocols flexible enough to be individualized to institutions are needed. Receptacles in health care facilities and pharmacies that are available to patients and that dissolve medications instantly making them irretrievable may provide a safe and convenient method for patients to dispose of medications, and specifically controlled substances, without putting health care providers at risk. Not only may this help combat the public health crisis regarding prescription opioid misuse but also, if applied to all medications, may decrease the growing morbidity and mortality of intentional and unintentional medication misuse.

MEDICAL DISPOSABLE RECEPTACLES CONTINUED P 7

MEDICAL DISPOSABLE RECEPTACLES CONTINUED FROM P 6

According to Burghardt et al., prescription medication exposures and poisonings in children, especially in young children (ages 0-5 years), show a positive association with the increasing number of adult prescriptions, and according to Col et al., almost 30% of hospital admissions of the elderly are related to prescription medication use or misuse.[6, 16]

In summary, the legislation is there, we need to act. Health care facilities throughout the country must register to be able to accept medications, including controlled substances, and to develop protocols to provide, regulate, and monitor medication disposal receptacles, that, given studies of patient's behavior in the US and other countries regarding drug disposal, have a high likelihood of success.

Upcoming Events in 2015

MACEP Monthly Board Meeting
Tuesday, March 24, 2015
4:30-6:30 pm
Holiday Inn, 265 Lakeside Ave, Marlborough, MA
Residents are welcome to attend

MACEP Monthly Board Meeting
Tuesday, April 28, 2015
4:30-6:30 pm
Holiday Inn, 265 Lakeside Ave, Marlborough, MA
Residents are welcome to attend

ACEP Leadership & Advocacy Conference
May 3-6, 2015
Grand Hyatt, Washington, DC

MACEP Annual Meeting
Wednesday, May 20, 2015
9 am-3 pm
Massachusetts Medical Society, Waltham, MA
Free to all Massachusetts EM Residents

MACEP Monthly Board Meeting
Tuesday, June 23, 2015
4:30-6:30 pm
Holiday Inn, 265 Lakeside Ave, Marlborough, MA
Residents are welcome to attend

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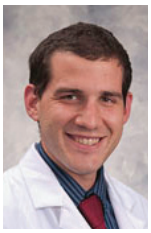
My EM CC Application

Fraser Mackay, MD, Baystate Medical Center



After the 2014 application cycle ended, the landscape for Critical Care Medicine (CCM) programs remains dynamic and competitive. At some hospitals, people are not even aware of the ability of Emergency Medicine Providers (EMPs) to do fellowship. In other areas, EMPs are welcomed as core learners and faculty. Indeed, much has changed in just the last four years for EMPs who expect to graduate with an American CCM certification. A large number of obstacles still remain, however, and as I was applying in 2012 there was a paucity of actual published information on the subject. There were also very few EMPs who had described their personal process and experiences.

Since 2013, however, many have published online resources that nicely synthesize the available opportunities after residency. [1,2] An EMP can now obtain American certification via three main tracks, administered by the American Board of Internal Medicine (ABIM), the American Board of Surgery (ABS), and the American Board of Anesthesia (ABA). These three fellowships are two-year commitments. There is also a neuro-critical care track, as well as some fellowships that, while not accredited, are based in resuscitation science. Each track differs from the other, and they all have independent timelines. It was in December of 2013 that I sat down as a PGY2 to compose my first applications to CCM programs in Anesthesia.

I explored all three avenues, at least in the beginning. The first step for me involved reflecting about what I wanted as an ED-intensivist. Some ICUs are either all medical or surgical patients, whereas at other hospitals mix the two. Some institutions place limits on the type of ICU in which one practices based on fellowship training. For me, there was also a question of personality; with whom was I going to be most comfortable as peers and teachers? As with any program, each track has its own nuances, requirements, and character. While many do not mention it, this last aspect may deeply affect an applicant's future satisfaction.

At the time of this article's writing the field remains competitive, and so I applied broadly. I literally sat down with a map and made a list of every CCM program in my geographical range (Northeast and Mid-Atlantic). After that, I called every program coordinator. It was amazing how variable programs were about considering EMPs (particularly with surgery and anesthesiology fellowships). Many were completely closed. Some fellowships, while "considering" EMPs, had no experience having them as fellows or had not made funding/curriculum commitments to accommodate EMP requirements. Still others were highly prepared, multidisciplinary, and had robust records of graduating EMPs. Again, the only way to know for sure was to go online, and then call.

Back in 2012, I was flirting with the Match a second time. Unlike ABIM and ABS, anesthesia fellowships now accept all fellows via the San Francisco Match. This requires application a full 18 months ahead of a fellowship's starting date. Despite my (and my fiancé's) rather tepid feelings about the match process, I began typing away at the forms required for this very early part of my application experince[3-4]. For this I applied only to programs in Massachusetts. At the time, very few Massachusetts surgery or anesthesia programs had made provisions for EMPs as fellows. While I received exactly zero interview offers, I at least had a nice, early start on my personal statement.

Next came a big decision: Surgery or Medicine. Having trained at a hospital with a separate MICU and SICU, practice styles and patient populations had some contrast. I very much liked practicing in both units, and had wonderful experiences in the SICU and Trauma ICUs at my alma mater, University of Maryland. However, I had done residency research and had mentors in the MICU, and (at the time) there remained some resistance to EMPs doing CCM in the SICU staff. Eventually, I felt training under an ABIM program would provide slightly more experience with decompensated multi-system disease. Given that, and the newly instituted ABS requirement of a surgical "preliminary year," I began to focus on ABIM fellowships exclusively[5].

As an aside, surgeons (particularly trauma surgeons) have been a major (if not the main) group of advocates for EMPs becoming intensivists. Incredibly talented surgeon educators at places such as University of Maryland and University of Pittsburgh have been graduating EMPs from their fellowships for decades. I credit my love for critical care, in part, to the leadership displayed at some of these amazing institutions. The decision to pursue ABIM and not ABS training was a personal choice.

ABIM programs became my focus, though, so I registered with ABIM's site, ERAS[6]. In all, I applied to about ten programs, and was thrilled to get five interview offers. Notably, Baystate Medical Center's ABIM program is the only Massachusetts CCM program that considers (and has hired) EM graduates. The intensivists here provided invaluable support and advice during my process, and expertly run a very busy ICU program. Also worth noting is that Baystate operates like all other ABIM CCM programs, which means they exist outside the match. Offers at any ABIM program have highly variable time-tables. Sometimes a program will even make an offer at the end of an interview only to have it expire days later. This added a new atmosphere to the process for me; now I had to focus not only on what I wanted, but for what I could settle if faced with a tough decision.

APPLICATION CONTINUED ON P 9

APPLICATION CONTINUED FROM P 8

ABIM programs also have a 25 percent cap on non-IM trained graduates averaged over five years. This gives a huge advantage to IM applicants, who often apply to the vast number of Pulmonary-CCM fellowships (which operate within the match, and are closed to EMPs). This cap, combined with the fluid time-tables of offered positions, complicates things a great deal. Now any offer becomes precious, particularly if it happens early in the interview season. A highly sought-after prospect may be weeks away, and circumstances may force an applicant either to leverage a position, or simply to settle.

After months of interviews, tenuous airport connections, and waiting I accepted a position at Cooper Medical Center in Camden, New Jersey. I actually could not be happier; it was one of my original top choices. Applying successfully to CCM requires dedication and effort on anyone's part, but for EMPs the process is not nearly as linear as for other specialties. Because of this variance, any EMPs hoping for CCM positions must advocate for themselves. There is no one Match, website, or "way things are done," at least not yet. That requires constantly checking in with programs and mentors as well as a willingness to be flexible. Through it all, though, the most important thing to remember is that Emergency Medicine trains residents well for the ICU.

1. https://www.acep.org/_Critical-Care-Section-MicroSite/Critical-Care-Section–-FAQs/
2. http://www.emra.org/committees-divisions/critical-care-division/
3. www.socca.org
4. www.sfmatch.org
5. http://www.absurgery.org/default.jsp?certsccce_abem
6. https://www.aamc.org/students/medstudents/eras/

Call for Annual Award Nominations

April 24, 2015 is the deadline to submit your nominations for the following MACEP Annual Awards:

Emergency Medicine Physician of the Year
Recognizes and honors an emergency medicine physician who has made significant contributions to the advancement of emergency medicine in Massachusetts.

Emergency Medicine Resident or Fellow of the Year
Recognizes and honors an outstanding emergency medicine resident whose combination of clinical promise, leadership, ability to think outside the box, and commitment to their patients and emergency medicine separate them from majority.

Medical Student of the Year
Recognizes and honors an outstanding medical student with an interest in Emergency Medicine. The award is intended to recognize students who excel in compassionate care of patients, professional behavior, and service to the community and/or specialty.

To submit a nomination, please complete nomination forms found at www.macep.org/nominations and submit to the MACEP office. All materials must be e-mailed, postmarked or faxed by April 24, 2015.

Awards will be presented at MACEP's Annual meeting May 20, 2015.

MACEP Announces 2014-15 Resident Grant Recipients

For its sixth year, MACEP offered all Massachusetts Emergency Medicine residents and fellows the opportunity to apply for three grants of a maximum of $2,000 each to help cover the costs associated with a resident EM research project. All three recipients will be presenting their research at MACEP's Annual Meeting on May 20, 2015. Congratulations to...

Kristen Dwyer, MD
Pulmonary Embolism Diagnosis using bedside Ultrasound

Viktoria Koskenoja, MD
A randomized trial of ultrasound guided peripheral IV placement with and without modified Seldinger Technique in the ED

Ken Bernard, MD, MBA
Inventory and Operating Characteristics of EDs within the Indian Health Service (IHS)

If you are interest in applying for a 2015-16 resident/fellow grant, the deadline is October 15, 2015. More information can be found on MACEP's website at macep.org/residentgrantprogram.

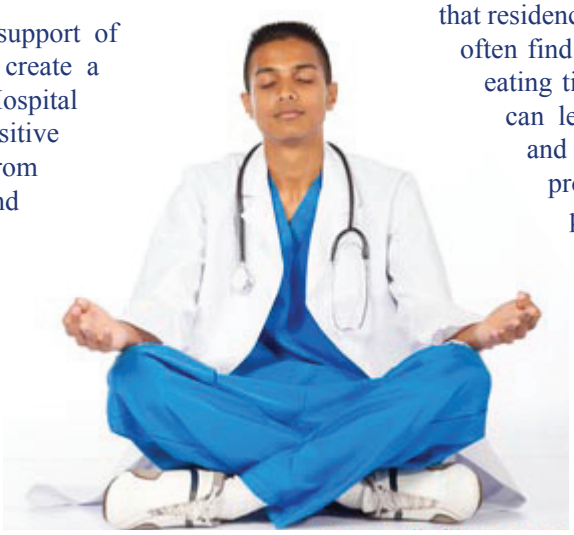
Managing Stress as a Resident Physician

Nissa Ali, MD, M.Ed, Beth Israel Deaconess Medical Center

Managing stress as a resident physician is something that every resident deals with. Whether you are a first year or senior resident, each individual has his or her own set of circumstances that can lead to excessive stress. Resident stress has been shown to affect health care and patient safety, with studies demonstrating that residents become more cynical (61%), less humanistic (23%) and 42-45% meet criteria for depression. Studies also suggest that resident physicians may not be able to adequately detect maladaptive responses to stress in themselves or colleagues.[1] If you combine the stress of residency with the lack of sleep and often managing new life situations, one quickly realizes stress can take a major toll on a physician's physical and mental health.

Stress may be defined as the brain's response to any demand or change. Rapid changes or unfamiliar situations, which happen frequently in a hospital setting, are a tremendous source for mental demand and anxiety. Changes can be positive or negative, real or alleged and sometimes short term or long-term events. Potential sources for stress also include routine events such as commuting to work every day, renting an apartment in a new city or simply going to the grocery store. However, there are some events that are major and come with large repercussions, such as divorce, serious illness, or a sudden death. There are other scenarios directly related to residency that can increase one's stress level, such as the recurrent scrutiny of your decisions or the anxiety of frequent "pimping" questions. Although these methods may make one a stronger physician, they can be taxing in real time. Additionally, sleep deprivation can enhance the stress factor beyond the normal realm in these events. Learning to deal with stress within residency is paramount to the success of a physician. Identifying methods to better cope with these situations and the stress of residency is the goal of this article.

So what can help? Teamwork and support of fellow residents can lower stress and create a better condition of overall well-being. Hospital stressors can be counteracted by the positive aspects at work, such as support from colleagues and seniors. One study found that well-being increased when residents felt high levels of team support and experienced valued learning opportunities. It is important for senior residents to realize they are role models and supportive mentors for junior residents. Effective senior residents should be available, approachable, give constructive feedback, make strong efforts at teaching and give clear expectations.[4] Residents should engage as much as possible with other residents and attending physicians in work situations that have a heightened level of stress to encourage support and teamwork. It is equally important to socialize outside of the hospital. Breakfast or dinners after shifts are a great way to relieve stress and develop camaraderie. "Family dinners" once a month is one example of how our class at Beth Israel has strengthened a sense of teamwork and created an outlet for stress.



Exercise or some sort of physical activity is highly recommended for relieving stress. Exercise has been shown to reduce depression, improve self-confidence, attenuate cardiovascular and neurohumoral responses to mental stress and reduce some type A behaviors. There are many forms of exercise that can exist within the hospital. Residents do not have to rely on expensive gyms to manage their fitness levels. Simply taking the stairs or biking/running to work is one way to obtain exercise throughout the day. Push ups and sit-ups in your resident lounge or call room are also quick ways to exercise. One particular study showed that activities that can be done while in a hospital, such as qigong, have been effective in reducing stress levels. Qigong is an exercise technique that originated in China over 3,000 years ago, which synchronizes precise physical movements with specific breathing techniques.[6] In addition, many hospitals have gyms available on campus, making access for workouts more convenient.

Athletic events with other residents can serve not only as physical activity, but also as team building. This can be as simple as running a few miles together prior to a shift. At our program, attendings organize athletic activities, such as soccer and fencing. Other residents have formed teams to compete in organized city leagues. These types of structured exercise can help greatly to reduce stress and promote a healthier atmosphere.

Nutrition also plays a part in heightened stress. Given that residency work schedules are so erratic, residents often find a lack of control over food choices and eating times. Poor nutrition and lack of exercise can lead to mood swings, poor productivity, and may also contribute to lifelong health problems and concerns. Residency programs should keep residents on the go providing healthy, nutritional snacks. Residents should also take a break, even if it's just a couple minutes, for hydration and a small nutritional snack during shifts. This will help reduce poor eating habits, such as visits to a candy drawer, and excess eating after a shift.

MANAGING STRESS CONTINUED ON P 11

MANAGING STRESS CONTINUED FROM P 10

Not surprising, sleep loss has been shown to also impact mood, stress and performance. Residents should try to maintain adequate sleep when possible. However, the quality of sleep is just as important as the quantity. Good sleep hygiene is imperative. Set yourself up for successful sleep by having a dark, quiet room with no distractions. This is particularly important in daytime sleep.

It is also important to put things in perspective while at work, as developing a positive frame of mind will allow one to better handle stress. Residency is a time for learning. Take advantage of the knowledge of those around you. Take constructive criticism with appreciation, using the feedback to become a stronger physician. Realize that any mistakes pointed out by your attending or senior residents are mistakes that you will likely not make again in the future. In theory, the more mistakes that one makes in residency the less that will be made as an attending physician. Be prepared for your shifts and arrive early to minimize unnecessary logistical stress. Study one condition per night after a shift to improve your knowledge base, making you better prepared for future question and answer sessions, as well as better prepared to care for your patients.

In conclusion, there is no perfect remedy for handling stress. Issues of heavy work-load, sleep deprivation, financial concerns and information overload will likely never change. However, it is imperative that residents develop methods for relieving stress, as the stress level of physicians can affect provider burnout as well as the quality of patient care.[7] In addition, statistics show that 7 to 10% of physicians are affected by depression, suicide, alcoholism, drug abuse, or unhappy marriages. Therefore, physician wellness and developing early strategies for handling stress during residency is important to help mitigate these risks. Stress is inevitable. Keys to coping with stress such as teamwork, exercise, sleep and nutrition are ways to culminate a better working environment and manufacture a more effective and skilled physician.

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MACEP Leadership and Advocacy Fellowship

The Massachusetts College of Emergency Physicians (MACEP) is looking for individuals who would like to get involved in emergency medicine advocacy and shaping health policy to become future MACEP leaders. This program now in its third year, was developed by MACEP to combine elements of mentoring, organizational education, skills, training and guided experiences to selected participants. Between 2-4 participants will be selected each year. This is a competitive process and the Leadership Development Review Committee will carefully review each application that is received by the November 15, 2015 deadline.

MACEP's Leadership and Advocacy Fellowship Program provide both an orientation to organized medicine and leadership development for future leaders. The fellowship is a great learning and networking opportunity for final year residents and practicing physicians early in their career.

Participation in the program includes: MACEP Leadership/Orientation Session, participation at a MACEP Board Meeting, Doctor's Day at the State House, participation at MACEP's Annual Meeting, attendance at the annual ACEP Leadership & Advocacy meeting in Washington DC (funded by MACEP), attendance at an annual ACEP Council meeting as an alternate Councillor (funded by MACEP).

A program overview & application can be found at www.macep.org or contact the MACEP office at 781-890-4407 or tpearson@macep.org.

MACEP Announces Resident/Fellow Grant Opportunity

MACEP will once again provide all Massachusetts Emergency Medicine residents and fellows with the opportunity to apply for a grant to help fund their research project in 2016. After a careful review of all applications, a total of up to three grants will be awarded for $2,000 each. **Resident Grant Application deadline is October 15, 2015.**

APPLICATION PROCESS

MACEP will provide three grant awards for up to $2,000 each to those recipients chosen after a review of all submitted applications by a panel of MACEP members. The purpose of these grant awards is to encourage EM residents to use their energy and creativity to advance the field of emergency medicine in our state and beyond. Residents can apply in areas that are not routinely funded to pursue projects in public policy, international emergency care or to initiate a research study.

Specific requirements include:

1. **Public Policy and Emergency Medicine:**
An application should address a current topic of importance to emergency medicine in Massachusetts. The award recipient will identify a topic that could include such areas as emergency department crowding, care of those with behavioral health issues, disaster preparedness, access to care and "liability." A grant could provide support in order to work with an appropriate state government official appropriate for the selected topic. Appropriate mentorship from the MACEP Chair of the Legislative Committee and the MACEP Lobbyist is encouraged. The proposal will define a topic, planned work product (legislation, policy report appropriate for distribution to key policy makers, etc).

2. **International Emergency Medicine:**
Applicants should define a project that will advance the field of emergency medicine research in a developing country or similar setting. The proposal should include explicit goals and objectives (example: educational program on pre-hospital care evaluation and treatment, resuscitation, injury prevention etc) as well as a letter of support from the proposed site of the project. If formal data are gathered, the grant will require approval from the host IRB and institutional IRB. The proposal must define a specific objective. Support for clinical rotations will not be considered.

3. **Emergency Medicine Research:**
A resident can submit an application for an original research project. Such an application should follow standard grant applications (EMF, NIH) and include a detailed budget for the use of the award. Analyses of existing data as well as pilot studies to explore novel research hypotheses will be considered. Award is contingent on IRB approval from the institution. The proposal (2 pages max) should indicate the hypothesis, methods, planned analysis and required resources.

Project descriptions should be concise on what is planned and why this research project would be important. All completed applications should be submitted by October 15, 2015. Applications will be blinded for the review with final decisions to be made by November 15, 2015. In addition, grant recipients should seek IRB approval and inform MACEP when that process has been completed. MACEP is committed to advancing emergency medicine and supporting the future leaders of our specialty.

If you have any questions in regards to the application process please contact Tanya Pearson, MACEP Executive Director tpearson@macep.org or 781-890-4407. More information can be found on MACEP's website at www.macep.org.

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c/o MACEP, 860 Winter Street, Waltham, MA 02451