



School of Medicine

THE RESUSCITATOR

VOLUME 7, ISSUE 1

SPECIAL POINTS OF INTEREST:

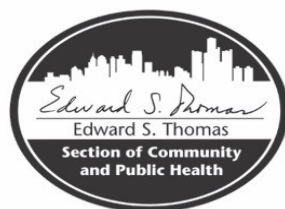
- Research Development and Updates Workshop, November 7, 2016, Detroit Athletic Club
- ACEP Scientific Assembly, October 16-19, 2017, Las Vegas, NV
- EM Grand Rounds, every Thursday, Detroit Receiving Hospital

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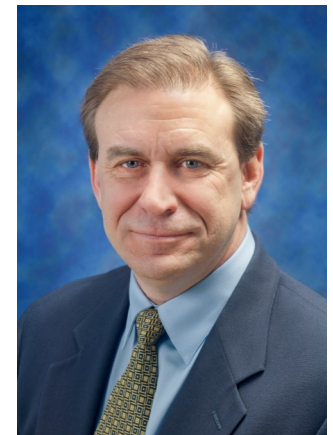
Letter from the Chair

Dear Colleagues, regardless of the tempests that surround us, the Wayne State University Department of Emergency Medicine remains in excellent standing with our two main partners, the WSU School of Medicine and the Detroit Medical Center. Despite these recent challenges, WSU EM has grown remarkably in the past few years with multiple successful grants, cutting edge research, expanded fellowships and superior academic faculty. WSU EM remains well grounded in our mission, "To promote quality medical care through excellence in clinical services, education and research, to respect the dignity of all patients and to promote health, interests and well-being of department members and the department as a whole." I would like to take this article to highlight some of the astounding projects we currently have in our department.



First, The Edward S. Thomas Section of Community and Public Health was formed in 2016 in response to the growing need

for a non profit entity to house our current outreach efforts and compete for resources to improve the health of our community. This section was appropriately named after an amazing man to honor his legacy of improving the health and well-being of the citizens of Detroit. Edward S. Thomas, as the previous President of Detroit Receiving Hospital, achieved great things by doing the right thing, well, and for the right reasons. The Section of Community and Public Health will further his vision to provide outstanding health care to our most vulnerable patients. The mission of the Edward S. Thomas Section of community and Public Health, (EST), is to promote community and public health using the ED as a portal for both initial patient contact and provision of translational care. The vision is to develop community and public health perspectives as an essential component of medical care in the city of Detroit. This will be done by promoting early diagnosis and linkage to primary care for chronic conditions that matter most to our community, such as HIV, hepatitis C, diabetes, and hypertension, and while also working to break the cycle of interpersonal violence. The Thomas Section seeks to reduce disparities in health and improve the quality of life and life expect-



Brian J. O'Neil, M.D., FACEP, FAHA
Munuswamy Dayanandan Endowed Chair
Edward S. Thomas Endowed Professor
Specialist In Chief, Detroit Medical Center

tancy for the citizens of Detroit. The EST board is chaired by Drs. Berk and Levy and is under the capable direction of Bethany Foster, MPH. The EST Section has successfully retained nearly \$900,000 to date to fund its mission.



I would like to highlight a particular initiative of the EST Section, Detroit Life Is Valuable Everyday (D.L.I.V.E.). D.L.I.V.E. is the initia-

(continued on page 2)

Letter from the Chair (Continued from page 1)

tive of our very own, Tolu Sonuyi, MD. Dr. Sonuyi wanted to break the cycle of violence that his patients have fallen into and discovered a model that was effective in other cities and brought it to Detroit. Since its launch in April of 2016, D.L.I.V.E. has made great strides at its current site, Sinai-Grace Hospital. Dr. Sonuyi has been successfully awarded funding from The Skillman Foundation (\$113,636), The DMC Foundation (\$80,900), and The BCBS Foundation (\$9,986). D.L.I.V.E. is ably coordinated by Crystal Wallack and we are privileged to have two very engaged Violence Intervention Specialists', Ray Winans and Calvin Johnson, of the Detroit Lions, whose commitment to the program has been instrumental in creating strong relationships with the participants and addressing the social needs that impact the cycle of violence. D.L.I.V.E. has had many successful stories, from shutting down a sex trafficking ring to enrolling participants in paid internships. This has been great progress in such a short amount of time. D.L.I.V.E. is currently being rolled out at Detroit

Receiving Hospital and Tolu has submitted another grant to The Skillman Foundation. Our department has extensive experience in population health research and interventions and it is why this program has been a great addition and is well aligned with our academic mission. As Chair, there is nothing more rewarding than to watch someone's vision and passion become a reality, particularly if it directly aids those in our community. Congratulations to Dr. Sonuyi and the whole D.L.I.V.E. team!

With an eye toward the future, EST is expanding its patient screening and education services to Sinai-Grace Hospital and the scope of its public mission. EST is actively seeking funding for additional initiatives including: HbA1c testing (DMC Foundation grant), Early Intervention for IVDUs with a pharmacy partnership (Alkermes Grant), Smoking Cessation (Pfizer) and Lifestyle Studies (Health Habits). Our future goal is to weave EST into the fabric of existing community services and outreach programs to aid in the enrollment, retention and enhanced utilization of

these services.

To further supplement EST, the inaugural Edward S. Thomas Memorial Golf Outing was held at the Detroit Golf Club. This event, chaired by former Mayor Dennis Archer Sr., was a wonderful event to support the EST. This event, with the generous support of our benefactors, and in particular, our two major benefactors, MCES and WSU EM, raised \$31,000 in the very first year! Mark your calendars, the 2nd Annual Edward S. Thomas Golf Outing is tentatively scheduled on May 15th, 2017. We hope to see you all next year for this worthwhile and enjoyable event. Details will follow.

Through education, clinical intervention, research and dedicated service, the Edward S. Thomas Endowment for Community and Public Health has, and will continue to achieve, life changing endeavors in the care of medical illness and social struggles within our community.

Donations to the Edward S. Thomas Section of Community and Public Health are welcome. If you would like to donate, you may write a check to Wayne State University Thomas Section and send the check to:

**Jeri Gleichauf
4201 St. Antoine
UHC—6G—Department of Emergency Medicine
Detroit, MI 48201**

If you would like to donate in other ways, please contact Bethany Foster at bfoste@med.wayne.edu or 313-966-8486.

Red Shoe Diaries

Wish we could turn back time, to the good old days

When our momma sang us to sleep but now we're stressed out

Wish we could turn back time, to the good old days

When our momma sang us to sleep but now we're stressed out

-21 Pilots-

There has been a bit of a hiatus for the 'Resuscitator' for a number of reasons; not the least of which was my inability to come up with an idea for my editorial. I finally decided to write about my lack of understanding of the Millennial Generation and my general prejudice that they are a whiny bunch of overly entitled men and women. (Before many of you start cursing me or hit delete, I ask you to please read on.)

As many of you know, I like to use the lyrics of a song that has a similar theme as the editorial to set the tone of the article. Fortunately, I couldn't find a well-known song that expressed such negative emotions toward my younger colleagues, which delayed the editorial further. Thank goodness!

On July 29th, I had the privilege of attending the White Coat Ceremony for Wayne State University



School of Medicine's class of 2020 which includes my daughter, Veronica. It was the first such event that I had attended and a very nice ceremony—both in concept and execution. Placing her white coat on Roni was a very special moment for me indeed. There were other memorable pairings as well, including physician-husbands placing coats on their wives as well as sibling pairs. The biggest round of applause was for a student who had his physician father and grandfather (both WSU alumni) put on his coat.

What does this have to do with my editorial? While the sentiment and meaning of the ceremony was beautiful, it was one of the speakers that really moved me. Dr. Noreen Rossi, Professor of Internal Medicine at WSU-SOM and a Nephrologist at the DMC for greater than 30 years had the key note address. In 10 or 15 minutes, Dr. Rossi was able to sum up for those 290 Millennial Generation students just what a noble, revered and important profession they were entering. Along the way, she reminded this Baby Boomer too. She stressed the tremendous responsibility that we, as physicians bear. To a few chuckles, Dr. Rossi quipped that we see our patients naked. Then she added, "And not just their bodies. Our patients bare their souls to us." The laughter stopped as the realization of what that simple sentence implied. The trust that our patients give us is truly awesome.

That is why it is so important that we Baby Boomers (who are sometimes looked at as tired relics who tell stories about the 'good old days') and you Millennials (who are sometimes looked upon as complainers who 'never had to work as hard as we did') unite to ensure that this great and noble calling we share hangs on to its greatest tradi-



Philip A. Lewalski, M.D.
Assistant Professor
Editor-in-Chief

tions of the past thousands of years, while embracing the amazing innovations on the horizon. (Oh, yeah... We need you Generation X'ers too. Whatever it is 'your generational thing' is about.)

Medicine has always changed and evolved. As a first year medical student, we had lectures from local practicing physicians to encourage us to get through our studies and show us the light at the end of the tunnel. HMO's were just starting at this time. Imagine the school administration's surprise when these attending's started berating us wide-eyed babes to 'get out now before you waste too much time' and that 'medicine is being ruined'. It took the school quite a while to find some physicians (invariable younger) with a more positive attitude. The reality is that I have never known an era without HMO's, so it is no big deal. They didn't ruin my practice or change the way I treat my patients.

Of course, I am now the experienced physician, wondering if the Affordable Care Act is something different that will harm the practice of medicine and who is *truly* worried that this 'corporate thing' with its worship of metrics and dashboards, satisfaction survey's and shareholders is the evil I think it is. (Yes, medicine is also a business, but with a human side, it also does not fit into 'LEAN Initiative' and cold ledger bottom lines in my

"I finally decided to write about my lack of understanding of the Millennial Generation..."

Red Shoe Diaries (Continued from page 3)

opinion.) No matter what side of the aisle you are on, and what form it eventually takes, we will get through Affordable Care and the 'House of Medicine' will not collapse. I pray that like older attendings who cried "the sky is falling" about HMO's, I am wrong in my fear of the corporate invasion into Medicine, but I can't help feeling this is different and that we physicians are surrendering too much control without a fight.

The bottom line is that there are different generations active in the practice of medicine today. We have different outlooks and ways of expressing ourselves, but we all have the same goals. We want to do what is best for our patients. We need to embrace our differences and unite for the sake of our calling. CMS and other third party payers have already driven a wedge between patients and physicians. We must not worsen the divide by allowing a lack of understanding between generations of physicians hinder our ability to fight back.

So, I have advice and some promises for my younger colleagues.

I promise to tell fewer stories about how many hours we older doctors worked when we were residents and say how 'easy' you have it. *We all work hard.* I promise to tell fewer stories about how HMO's ruined medicine, or how much better it was before physician computer order entry or "Obama-Care". *We aren't going back.* I promise to embrace some of the modern technological devices that are second nature to you. *It really can be wonderful and beneficial in patient care.* (But I am not giving up my flip phone!) And I promise to value your point of view more. I believe the Millennial Generation to be a more generous and socially conscious group than a lot of my

age-peers. The true activists of the sixties have largely retired and perhaps the generous compensation and fairly smooth sailing of the 80's and 90's got to the rest of us. Talking to my daughter, the students start volunteering at free clinics in the second week of year one.

My advice is to tone down the rhetoric on how 'abusive' the practice of medicine is and remember that it is really not *that* hard and we get paid very well. Not only do we get the reward of easing suffering and saving lives, but it beats working two manual labor jobs 80 hours a week in brutal weather to just barely survive or provide for one's family. A majority of people have it much worse than we do! This is not to say you must settle for the status quo, but work to change medicine in a positive way.

The practice of medicine is in a state of flux right now. Being a physician, however, hasn't changed. We have a calling and a moral obligation to our patients. They place their trust in us to treat them fairly, humanely and to the best of our ability. If we as physicians work together, we can help to improve the medical system we find ourselves in today. And if we do so, the feeling of burnout, alienation, and dissatisfaction will improve. I think that there are some really deep seated differences in the different generations practicing today—but that is okay. If we work to understand and embrace our differences and come to realize our similarities, we will get along just fine and become a powerful force and voice for our profession.

The White Coat Ceremony, which was developed in 1997, mainly is a Millennial thing—although ties to older generations are made such as when a father helps a daughter don her coat. But one thing unites ALL

physicians... an Oath.

I swear to fulfill, to the best of my ability and judgement, this covenant...

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures which are required, avoiding those twin traps of overtreatment and therapeutic nihilism.

I will remember that there is art to medicine as well as science, and that warmth, sympathy, and understanding may outweigh the surgeon's knife or the chemist's drug.

I will not be ashamed to say "I know not," nor will I fail to call in my colleagues when the skills of another are needed for a patient's recovery.

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I treat with care in matters of life and death. Above all, I must not play at God.

I will remember that I do not treat a fever chart, a cancerous growth, but a sick human being, whose illness may affect the person's family and economic stability. My responsibility includes these related problems, if I am to care adequately for the sick.

I will prevent disease whenever I can, for prevention is preferable to cure.

I will remember that I remain a member of society, with special obligation to all my fellow human beings, those sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help.

~Modern Hippocratic Oath

(Written in 1964 by Louis Lasagna, Academic Dean of the School of Medicine at Tufts University and used in many medical schools today)

"I think that there are some really deep seated differences in the different generations practicing today—but that is okay."

CONGRATULATIONS EMERGENCY MEDICINE RESIDENTS

CLASS OF 2016

Detroit Receiving Hospital

Kevin Belen

Emergency Medicine Physicians

Nile Chang

Emergency Medicine Physicians

Hannah Ferenchick

Critical Care Fellowship

Albert Einstein College of Medicine / Montefiore Medical Center

Lauren Holmquist

MCES

Lyudmila Khait

Ultrasound Fellowship,

WSU DMC & MCES

Sean McCormick

Emergency Medicine Physicians

Justin Stimac

Kaiser Permanente

South Sacramento Medical Center

Jessie Swan

Care Point P.C., Denver, CO

David Viau

Emergency Medicine Team

Marquette Hospital

Henry White

Alleghany Health Network

Emergency Medicine Physicians

Megan Wolf

Kaiser Permanente

South Sacramento Medical Center

Joseph Wollman

MCES & WSU SOM EM

Sinai Grace Hospital

Abdallah Ajani

MCES

Tamara Augustine

Global Health Fellowship

UC—San Francisco

Andrew Berwick

WSU Sport Medicine Fellowship

MCES

Luke Bisoski

WSU Toxicology Fellowship

MCES

Ryan Ernst

Emergency Medicine Physicians

Natalie Hrabec

MCES

Steven Irving

Ultrasound Fellowship

University of Arizona

Sharmin Kalam

EM Fellowship

Yale University

Usama Khalid

Emory University EM Ultrasound Fellowship, Atlanta VA MC

Nicholas Morelli

MCES

Sameed Shaikh

UC Health: Memorial Hospital

EM Specialists

Lindsay Taylor

EM Fellowship

Virginia Commonwealth University

St. John Hospital & Medical Center

Parag Anin

EMP—Columbus, OH

Ashley Bowerman Nosek

Team Health

St. John Providence Hospital

Michael Riley Jakob

Critical Care Fellowship

University of Western Ontario

Trevor Kuston

Swedish Covenant Hospital, Chicago

Marson MA, III

Unknown

Veronica Miles

IEP, Providence & St. Joseph Mercy Hospital

Mohamed Moussa

Team Mental Health

Beaumont, Dearborn

Grant Nelson

Ultrasound Fellowship, WSU SoM

St. John Providence Hospitals

Andrea Patineau

Team Health

St. John Providence Hospitals

Lindsay Richamond-Pruneau

IEP, Providence & St. Joseph Mercy Hospital

Ashwin Sabbani

TeamHealth, Memorial Regional Hospital., Hollywood, FL

Fei Lu Ye

EPMG, Riverside Medical Center, Chicago



Detroit Receiving Hospital



Sinai-Grace Hospital



St. John Hospital & Medical Center

WELCOME EMERGENCY MEDICINE RESIDENTS

CLASS OF 2019

Detroit Receiving Hospital

Amanda Aquino

Michigan State University

David Burkholder

Indiana University

Brittney Rooney

Wayne State University

Marie Deluca

Brown University

Sean Farley

Michigan State University

Laura Kava

Wayne State University

Andrew Loftus

Brown University

Claire Minveditti

University of Washington

Mark Molnar

University of Wisconsin

Joshua Reines

Eastern Virginia

Michael Twiner

Wayne State University

Julia Vaizer

University of Central Florida

Kelsey Vargas

Rush University

Christopher Wahl

Michigan State University

Sinai Grace Hospital

Oluwatosin Aluko-Olokun

Saba University

Charlie Beaupied

Wayne State University

Samantha Chin

St. George's University

Ashley DaPra

Wayne State University

Andrew Feeth

Florida State University

Lauren Gandolfo

Michigan State University

Thomas Hartely

Michigan State University

Elizabeth Jacobs

Wayne State University

Yewande Oladipo

St. George's University

Jacob Simpson

Indiana University

Peter Tai

SUNY Downstate Medical Center

Hanhan Zhang

Wayne State University

St. John Hospital & Medical Center

Kevin Chang

Wayne State University

Scott Evans

Wayne State University

Andrew Frye

University of Toledo

Kiran Gaddi

Chicago-Rosalind Franklin

Marc Goulet

Wayne State University

Aazam Haleem

Wayne State University

Adrienne Malik

SUNY at Stonybrook

Shawn Munafo

Wayne State University

Kyle Nedic

University of Toledo

Michael Owens

Wayne State University

Elizabeth Peacock

University of Washington

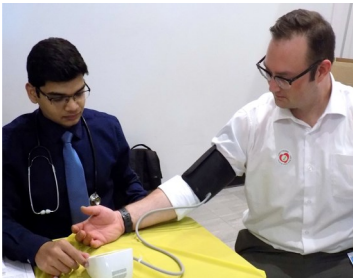
Joseph Sheets

Michigan State University

Douglas Stayer

Wayne State University

World Hypertension Day



On World Hypertension Day—May 17th—members of the WSU Department of Emergency Medicine offered free blood pressure screenings at Detroit Receiving Hospital, Sinai-Grace Hospital and WSU’s Integrated Biosciences Center. The event was open to the public and conducted by student volunteers and a visiting physician from India. The students were trained by ED physicians and supervised by clinical research coordinators.

Participants were given free blood pressure screenings and were asked about their medical history. After blood pressures were recorded, the results were documented on a blood pressure tracker given to the participants for future use. It included diet and exercise tips and local health clinics for follow up. Those with a history of hypertension were offered a free blood pressure cuff like those used at the event to take home so that they could monitor their blood pressure regularly.

“As we were screening people for hypertension, there was a gentle-

man who walked up to us. He had a distressed look on his face and seemed short of breath.” said Rahul Pansare, M.D., the visiting physician who was assisting at DRH. “He had a history of hypertension and his blood pressure was elevated when I screened him. I could tell something was bothering him. In a pained voice, he said ‘I am at the hospital for a follow up visit. I just underwent chemotherapy for lung cancer. I used to go to the CVS to get my blood pressure checked, but now, I feel short of breath even when walking to the bathroom. Please pray for me!’ It was thoroughly disheartening to hear that, and I knew that giving him a personal blood pressure monitor could be just a tiny way I could help him cope with his situation.”

The screenings were performed in low-to-middle income populations. Those who were screened received information about hypertension related diseases such as stroke and cardiovascular disease, as well as importance of physical activity and nutrition in preventing or controlling hypertension.

During the World Hypertension Day program at the three locations, 416 people were screened. Of those, over 54 percent were found to have elevated blood pressures (a pressure greater than 140/90). Nearly 46 percent of those screened that day were already



Bethany Foster, M.P.H, program manager for the WSU Department of Emergency Medicine, left, and Stacy Anderson, clinical research coordinator for the WSU Department of Emergency Medicine

being treated with medications for high blood pressure. Perhaps most surprisingly, 33 percent of those found to have elevated blood pressure were not aware they had hypertension. [Editor’s note: Personal experience leads me to believe this last statistic without questions!]

Event coordinators said that data will be used to develop future research and community health projects to promote hypertension awareness.

[Adapted from an original article found in the WSU-SOM website—author not listed]

“33 percent of those found to have elevated blood pressure were not aware they had hypertension.”



Trip Sitters—Why is Marijuana Illegal?

“The certain first step on the road to heroin addiction”

~Harry Anslinger, Commissioner of the Federal Bureau of Narcotics, 1930—1962

“Sure as marijuana leads to heroin”

~Tom Waits, The Crossroads

These are my two cents and they are worth exactly that, if you find something of value, great, if not, ok, but hopefully you will be able to look at the issue of medicinal and recreational use of marijuana in an objective light. During the past couple of elections, the American populace is declaring themselves more in favor of the approval of the use of marijuana either for medicinal or recreational purposes. I would like to start with a historical perspective on how marijuana became a prohibited substance, then discuss some of the evidence regarding potential risk and benefit in medical use and expected testing and law enforcement issues, should legalization of recreational use occur.

Establishing a historical framework for the prohibition is important to understand why such legislation came to be and if it is still relevant

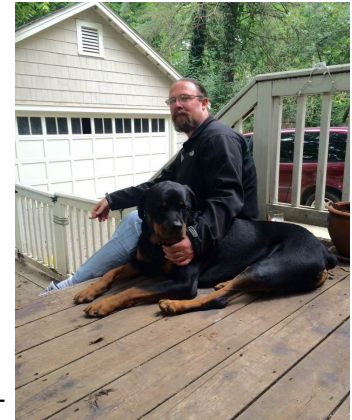


to our society. While there is presently an epidemic of prescription drug abuse, at the turn of the previous century, there was a significantly larger problem with drug addiction in this country than currently. Some estimates suggest between 5-10 percent of the total population was addicted to some chemical substance and by that, I mean opiates and cocaine. The people who were addicted were not the people who you would now typically think of as drug addicts. They were rural, white, largely part of the agricultural work force and the addiction was largely unintentional. The country was largely rural at the time and health care was sparse, by that I mean nonexistent, in much of the country, but there was always a traveling patent medicine salesman selling Dr. Hedge's good-for-what-ails-you-tonic. Rheumatism, gout, constipation, teething, diarrhea, vomiting, seeing things, shakes, I will take care of all of them in one bottle. “But how Dr. Hedge?” My patented mixture of cocaine and opium with an alcohol base and a touch of sugar for the kiddies will solve all your problem. Cases of cocaine and opium addiction had been reported in the US for at least 50 years by then and I'm not sure who thought that cocktail was a good idea.

Eventually the addiction to patent medicines brought about national outcry that something needed to be done on a federal level bringing about the Harrison Act. It was a difficult law to pass, not because of division of the congress, most of the congress and senate set out with the explicit goal of limiting the use of patent medicines. The Harrison Act was one of the early at-

tempts of the federal government to regulate this behavior on a national level. The thought of the federal government passing a criminal law was largely unheard of and the legality of such a law was thought to be very questionable from a constitutional standpoint. The constituencies of the United States had spoken and while it may have been questionable for the federal government to pass a criminal law, the federal government does have a clear constitutional right to levy taxes. The Harrison Act was launched as a tax law. Physicians were taxed a little bit on an annual basis to prescribe medications and the general population was taxed an exorbitant amount for every transaction without a prescription. Violators were then able to be prosecuted for tax evasion. In 1914, the Harrison Act was passed and prohibited general access to opium and coca derivatives and in 1920, the eighteenth amendment was passed, prohibiting access to ethanol.

States started to pass marijuana prohibition legislation starting in 1915 until 1937 when it was banned on a national level. There were 27 states that passed legislation prohibiting cultivation, sale and use of marijuana. These laws were largely in the northeast and the southwest for very different reasons. The northeast portion of the country passed legislation based on the theory of substitution, marijuana would be used as a substitute for these other banned substances, such as cocaine, ethanol and opiates. The other large block of



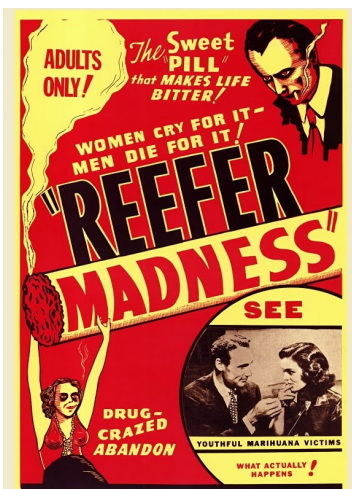
Matthew Hedge, M.D.
Assistant Professor
Associate Medical Director
Poison Control

“...there was always a traveling patent medicine salesman selling Dr. Hedge's good-for-what-ails-you tonic.”

Trip Sitters—Why Is Marijuana Illegal? (Continued from page 8)

states that prohibited marijuana was in the southwest and Rocky Mountain states, largely aimed at the Mexican agricultural labor force who was using marijuana recreationally.

Regarding how marijuana made it on to the schedule I, no medical benefit and high addiction potential, is an interesting tidbit of American politics. Total time in congressional hearings for the prohibition of marijuana was two mornings in committee, for about two hours. The witnesses included the Commissioner of the Federal Bureau of



Narcotics, a pharmacologist from Temple University, representatives of the rope, varnish, bird feed industries and the legal counsel for the American Medical Association. The commissioner quoted the district attorney from New Orleans stating that “Marijuana is an addictive drug which produces in its users insanity, criminality, and death.” End of government testimony supporting the ban of growing marijuana. The pharmacologist had injected cannabis derivatives into dog brains and some of these dogs died. Not sure what to make out of this “evidence” as the active

component was not identified until 12 years after this testimony.

The rope industry was importing hemp from the far east as it was cheaper, so they were not opposed to the ban. It worked out fine for them until 1941, after which the US government planted

large fields of hemp to outfit ships during WWII. The varnish industry representatives were also indifferent as there were hydrocarbon alternatives. The bird feed manufacturer’s representative was strongly for the use of cannabis seeds and the industry received an exemption. The AMA representatives testimony consisted of “The American Medical Association knows of no evidence that marijuana is a dangerous drug.” The AMA was strongly and vocally in opposition of the New Deal and due to political considerations, his testimony was largely disregarded by the majority of congressmen who were elected based on support of the New Deal policies. With that, the marijuana tax bill passed out of committee to a vote on the House of Representatives floor. The bill went to the floor on Friday afternoon at 5:45pm on August 20th, 1937, in a building without air conditioning. It is not clear how many people actually voted for the bill. The bill passed through the senate without any debate or recorded vote and was subsequently signed into law.

Marijuana was placed into schedule I, as having no medical use and high addictive, with relatively sparse evidence to support either of these claims. In intervening 25



years ago or so, not much happened regarding cannabis use and there was always an underground part of the population who were using cannabis recreationally but we as a county had larger fish to fry if you will, WWII, Cold War. It wasn’t until the 1960’s that use started to increase with the counter culture movement that flourished around the Viet Nam Conflict. Near the end of this time frame, the National Organization for the Reform of Marijuana Laws (NORMAL) was formed and through a number of civil suits, have been chipping away at the marijuana laws ever since.

Next time we will discuss the medical evidence regarding the use of marijuana as a therapeutic drug and some of the health concerns of recreational passage, including issues with law enforcement.

[Editor’s Note: This article is Part 1 of a series]

“It is not clear how many people actually voted for the bill. The bill passed through the Senate without any debate or recorded vote and was subsequently signed into law.”

Dr. Levy Appointed to NIH Study Section



Phillip Levy, M.D., M.P.H., professor of Emergency Medicine for the Wayne State University School of Medicine, has been appointed to serve as a member of the National Institutes of Health's Cancer, Heart and Sleep Epidemiology Study Section. Dr. Levy, who also serves as associate chair of Research for the Department of Emergency Medicine, will serve a four-year term that ends June 30, 2020.

Study sections review NIH grant

applications, make recommendations to the appropriate national advisory councils and survey the status of research in their respective fields. Members are selected on the basis of their demonstrated competence and achievement in their scientific discipline as evidenced by the quality of research accomplishments, scientific publications and other achievements and honors.

The Cancer, Heart and Sleep Epidemiology Study Section reviews applications for grants related to epidemiologic research in the areas of cancer, cardiovascular disease and sleep conditions in human populations. Cardiovascular disorders considered include myocardial ischemia and infarction, cardiac hypertrophy and failure, cardiovascular arrhythmia, blood pressure and hypertension, atherosclerosis, heart rate, atrial fibrillation, cardiac arrhythmias, coronary heart disease, dyslipidemia and peripheral arterial disease. Sleep conditions considered include sleep apnea, sleep

disordered breathing, sleep disturbances, fatigue and insomnia. Areas related to cancer include cancer of the breast, prostate, digestive system, reproductive system, head and neck, skin, bone and lung, and hematologic and childhood cancers.

"Being entrusted to evaluate the scientific merit of grant proposals put forth by the top minds in medicine is an honor and privilege," said Dr. Levy, who also directs the WSU Clinical Research Service Center. "I am extremely proud of my appointment to the CHSA study sections and look forward to my next four years of service."

Dr. Levy is leading a number of studies related to high blood pressure and cardiovascular disease, including research to determine how vitamin D affects cardiac structure and function, and vascular function in African-Americans with hypertension. That study, funded by an NIH R01 grant, could identify vitamin D as a safe, effective and inexpensive therapy to stop, and even reverse, cardiac ravages caused by high blood pressure.

"Being entrusted to evaluate the scientific merit of grant proposals put forth by the top minds in medicine is an honor and a privilege."

Letter From An Alumni...

Aloha, Dr. Lewalski,

I always enjoy the great memories that the Resuscitator conjure up, and truly appreciate your efforts. Life is great in Hawaii, and with great joy, I'd like to announce the birth of our third child, Calvin Ray Perry! He was born on August 22, weighing in at 9 pounds. My wife, Tracie and I, welcomed him into the family with our 2 older children, Lucas and Rebecca. We're not quite up to "Lewalski status" but we're working on it!

It's hard to believe it's been 3 years in Hawaii already. We love having visitors and would welcome any residents or staff that would like to come out and stay with us. Plus, we recently acquired the contract for another hospital on Oahu and are looking to hire some more docs. If any of the residents are interested in coming and applying for the positions, please pass my contract information along to them.



Aloha, and keep up your great efforts!

Kyle Perry, M.D.

(DRH, Class of 2011)



Gloria Kuhn, D.O., Ph.D.
Professor Emeritus of
Emergency Medicine

“I was thrilled to be nominated for this award—actually winning it was the frosting on my cake.”

Dr. Kuhn Recognized For Work To Develop Female Leadership

The Wayne State University chapter of the Michigan ACE Network and the President’s Commission on the Statuses of Women recently honored two Wayne State University administrators for their longed and impressive work to support, promote and develop leadership abilities of their female colleagues.

Gloria Kuhn, D.O., Ph.D., professor of Emergency Medicine for the Wayne State University School of Medicine, was awarded the 2016 MI-ACE Network Women of Distinction Award. She was selected based on her exemplary accomplishments as a physician, educator and researcher, and for her positive impact in emergency medicine, particularly junior female faculty.

“I was thrilled to be nominated for this award—actually winning it was the frosting on my cake.” said Dr. Kuhn, a resi-

dent of Farmington Hills and vice chair of Academics in the Department of Emergency Medicine. “It is particularly gratifying to me to support women in medicine and science because they have so much potential and dedication. For a number of reasons, this potential is often not reached, and even when it is, may not be recognized and rewarded. Much has been done to rectify these problems, but more remains.”

The MI-ACE Wayne State chapter Women of Distinction award is awarded annually to a WSU employee who has demonstrated a sustained commitment to women and issues of diversity.

“Commitment” is defined broadly to encompass all areas of university life and levels of employment, from administrative positions of leadership through service as faculty or

staff on campus and in the community.

In nominating Dr. Kuhn, Dr. Brian J. O’Neil, M.D., The Dayanandan Endowed Chair and Edward S. Thomas Endowed Professor of WSU Emergency Medicine, wrote: “She has been a major force for recognition and resolution of the specific challenges women face in emergency medicine and medicine in general. Dr. Kuhn’s philosophy is that for women to make an impact in medicine, it requires them to be intimately involved at all levels—research, leadership and education. She has been a mentor to countless women and has used her large professional network to connect junior faculty to regional and national service.”

Outpatient DVT Program at DRH/HUH

The Emergency Department at Detroit Receiving and Harper University Hospitals recently implemented a new, outpatient program for patients with uncomplicated acute DVT’s (distal to the iliac veins).

In a collaborative effort with the ED, Pharmacy and the CDU (our department’s observation units), these patients leave the hospital with a 30-day supply of Apixiban. Being able to negotiate with Bristol-Myers Squibb (B-MS) to provide ‘pre-activated’ 30-day supply coupons made the project feasible as the process of a

patient activating the card can be quite onerous for some patients. During the hours that the out-patient pharmacies are open, the patient will be discharged directly from the ED. During off hours, the patient will stay in CDU and then get their medication in the am. (Federal regulations do not allow in-patient pharmacies to dispense medication to home).

The Pharmacy provides thorough education that is also CMS compliant for quality measures. A pharmacist also keeps in contact with the patients after discharge. The patients then follow up with their primary care providers who have the 30 days to work

with the patients insurance to get coverage for further Apixiban, perhaps using further vouchers for free co-pays that B-MS make available. If all else fails, the PCP can bridge the patient onto Warfarin. For patients with no PCP or insurance, the patients are sent to a federally supported clinic housed at DRH.

The data from these patients will be looked at closely, but it is anticipated that this program will greatly cut health care expenditures for uncomplicated DVT’s and eventually become the standard of care.

Philip A. Lewalski, MD
Editor-in-Chief



Prescription Strength

As emergency medicine physicians, we have a privileged, exciting, but necessarily skewed perspective on health care. In fact, we don't do much **health care** at all. We excel at **sick care**. Nobody does a better job than us when it comes to taking care of the sickest of the sick, across the entire spectrum of human misery. From cardiogenic shock to multisystem trauma to severe sepsis to agitated delirium—we're the Go-To-Guys when the Ballistic Excrement slams into the Spinning Blades at 2am.

This work is critical, human, heroic, challenging, and satisfying. But nobody practices emergency medicine for long without the gnawing feeling that, for many of our patients, we're making beds in a burning house. We see the end stage of disease: end-stage heart failure, end-stage dementia, end-stage renal failure. The burden of irreversible pathology in such cases confronts us with our own limitations as physicians. It's frustrating. Heartbreaking. Maddening. It's even more frustrating to watch the interim development of these processes. Many of our patients do not seem to respect Nature's greatest gift to them: the irreplaceable and miraculous machine of bone and blood and brain they must inhabit throughout their lives. They're sedentary and obese. They smoke. They do not care of what and how much they eat. They abuse drugs and alcohol. They don't present today for shock or MI or DKA, but for a sprained ankle or a UTI, but we can see that their current complaint is the least of their problems. Or perhaps they present with a harbinger of their grim future: dyspnea, on exertion, degenerative joint disease, fatigue, new-onset diabetes, uncontrolled hypertension. We can put a Band-

Aid on this suffering and make sure they're safe for follow up, but as emergency physicians, we can't come close to treating the underlying cause of their present decline and their future horror. We can **see** that our patient's sick lifestyle is creating a sick body.

Lifestyle medicine lies within the purview of the primary care physician, but when I ask patients if they've ever had a discussion with their doctor about their obesity, their diet, or their lack of exercise, I'm usually disappointed. Emergency physicians **may** have an excuse for glossing over lifestyle factors (I'm not so sure of this). But medicine as a profession in general doesn't seem to be making the needed impact.

Physicians have known since prehistory that the **way we live** is, in itself, a powerful medicine. Hippocrates and Galen both explicitly acknowledged the importance of diet and exercise in the maintenance of health. This perspective, combined with foxglove, mercury, and leeches, was more-or-less integral to medical practice until the late modern era, with the advent of the modern medical model. In this model, the physician's focus shifted from the maintenance of **health** to fighting **disease**, through deeper understanding of pathophysiology, an ever-expanding pharmacopoeia, and a growing arsenal of surgical correctives. And this disease-centric model was fantastically successful... up to a point.

But for some decades now we've seen a growing dissatisfaction with high-tech medicine and **sick care**, as the modern model bumps up against its inherent limitations. We've replaced old scourges with new ones. We've traded syphilis for

heart failure and cholera for cancer. Morbid obesity and adult diabetes have replaced famine, rickets, scurvy, and smallpox. We can and should do fantastic things with our hard-won understanding and technological progress. But the way we live is still a powerful medicine— or a powerful poison.

So now we see a renewed and increasing emphasis on diet, exercise, and other life style factors. But here our knowledge has not kept pace. What diets are more protective against heart disease and cancer? A consensus seems elusive. When I was in medical school, they talked about the Japanese diet. Now it's the Mediterranean. A balanced diet is great... but what's the right balance? Much heat there; little light.

There's even less agreement about exercise. We've known for millennia that a sedentary lifestyle is toxic, and that exercise is a powerful medicine. Indeed, it's become very fashionable of late to say that exercise is a medicine, and doctors should prescribe it. **But we don't**, not nearly often enough, and even those who want to aren't quite sure how.

I've thought a lot about this issue. For me, it's just not academic. It's personal. I'm deep into middle age, and I want to take the exercise medicine that will work best for me. As a rapidly aging dude, and as a physician and physiologist, it seems obvious to me that an effective exercise prescription should get to the root of the chronic diseases of modern aging. So we need



**Jonathon M. Sullivan, M.D.,
Ph.D., FACEP, SSC
Associate Professor**

**“The burden
of irreversible
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physicians.”**

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to understand how “sick aging” happens.

Clearly, the **metabolic syndrome** is a key driver of many of the modern diseases of aging. Metabolic syndrome is the endemic in the population, and overrepresented in the patients we see in the emergency department. This syndrome is characterized by obesity, visceral fat accumulation, dyslipidemia, hypertension, insulin resistance, and hyperglycemia. Systemic inflammation is the ever-present sidekick of the metabolic syndrome, and seems to contribute to the wickedness it inflicts on our bodies, particularly on neurological and vascular tissues. Aging in modern population is also characterized by **sarcopenia**, the loss of muscle tissue; **dynapenia**, the loss of strength; **osteopenia**, and **deconditioning**.

The end stage of this goat rodeo, which I call the Sick Aging Phenotype, is all too familiar: fat, weak, diabetic, deconditioned, vasculopathic, and crippled by pain or heart failure or respiratory disease—or all of the above. Add in polypharmacy and medical dependence, and you have a common avatar of modern aging that suggests we haven't made as much progress in relieving human suffering as we might think.

In the past few years, I've embarked on an enterprise to bring exercise medicine to older adults, in an attempt to help them prevent, arrest, or even reverse this process of dysfunctional aging. I've predicted



my efforts on the idea of the exercise prescription. After all, if exercise is really a medicine, we should be able to prescribe it like a medicine. We should specify the formulation, the route of administration, the dose, the frequency, and the therapeutic targets of that medicine.

These considerations present us with a range of criteria for an exercise prescription of aging adults.

Our exercise prescription must be **safe**. Hurting people to get them healthier would be... well, stupid.

Our exercise medicine must have a **wide therapeutic window**, which means that it should be subject to precise **dosing** over an extensive and effective range.

It should be **comprehensive**—it should address a broad range of fitness attributes (strength, power, endurance, mobility, balance, and body composition) and should produce conditioning improvements across the spectrum of biological energy systems (phosphagen, glycolytic, oxidative).

The exercise prescription should **attack the Sick Aging Phenotype**—it should have activity against obesity, the metabolic syndrome, sarcopenia, dynapenia, osteopenia, and frailty.

Finally, our exercise medicine prescription should be as **simple** as possible... but no simpler.

I believe I have found an exercise prescription that fits the bill: strength training with barbells.

Strength training with barbells is incredibly safe. When properly administered, this form of training loads normal human movement patterns throughout a natural range

of motion, without impulsive or unpredictable forces, impacts, or joint torques. Movements are performed the same way each time, on stable surfaces, at carefully managed loads. Carefully managed loads are a by-product of the exquisite dosing available with this form of training. Both volume (the number of sets and repetitions) and intensity (the weight on the bar) can be precisely modulated



to deliver the correct dose (volume-intensity product) of exercise medicine. When properly programmed and performed, this form of training addresses every fitness attribute. Strength training, unsurprisingly, improves strength. It also improves the first derivative of strength, power, which is strength displayed quickly. Because correctly performed barbell exercises describe a complete and natural range of motion, they promote mobility, and because they are performed standing (and without mirrors!), they promote better balance and proprioception. Many studies confirm that strength training improves body composition in aging adults. And contrary to what you may have heard, properly programmed strength training improves performance across the bioenergetic spectrum, from high-powered cytosolic (“anaerobic”) systems to the high-capacity mitochondrial (“aerobic”) system.

Most importantly, **strength training attacks the Sick Aging Phenotype**. In study after study, strength programs decrease visceral fat, increase muscle mass, improve insulin sensitivity, moderate hypertension, and demonstrate powerful activity against frailty and loss of

“Many studies confirm that strength training improves body composition in aging adults.”

Prescription Strength (Continued from page 13)

independence.

Finally, strength training is simple. Just a few big multi-joint movements performed two or three times a week with simple progressive overload (often called a “linear” or “novice” progression) promote rapid increases in strength and performance.

There may be other effective approaches to exercise medicine. But this is the exercise prescription I have used with great success at my coaching practice, Greysteel Strength and Conditioning, where I have the privilege of working at the other end of medicine — **health care**.



In my medical practice, I’ve been privileged to save lives and limbs, and like all of you, I have stories of great saves that make me fiercely proud to be an emergency physician. But from my other practice, Greysteel, I have different kinds of “saves”: The 67 year-old female who couldn’t stand out of a chair under her own power, but who now deadlifts 140lbs. She’s still osteopenic, but after her last bone scan she no longer carries a diagnosis of osteoporosis.

The 68 year-old male who had trouble standing from his prostrations at church. When I first met him, he kept saying “I’m just an old man,” and seemed to think his life was pretty much done. Now he

puts a 260-lb bar on his back, squats until his hips drop below his knees, and stands up again. **For 5 reps**. His diabetes is under better control, his waistline is slimmer, he stands straighter, and his horizons are broader—he just made a run for State Legislature, and will compete in the Starting Strength Classic in Chicago in a few months. No, he’s not done.

The 52 year-old guy who wanted to stay in shape, but didn’t know how. He squats 320lbs, deadlifts 380, and puts 160 overhead for the standing press, all before doing high-intensity bike intervals for conditioning. There will be no Sick Aging Phenotype for him.

The 90 year-old man who isn’t content to watch his muscle tissue waste away, and just started a two-day program of goblet-box squats, standard deadlifts, and incline presses. He’s still independent, and plans to stay that way.

The 75 year-old widow with back and shoulder pain who recently competed at a powerlifting meet, squatting 130lbs, deadlifting 150lbs, and pressing 52.5lbs over her head. Since she began training, she’s added muscle, lost fat, improved her exercise capacity and stamina and developed a very noticeable twinkle in her eye. That doesn’t sound like a Sick Aging Phenotype to me.

And then there’s the 56 year-old emergency physician, who takes this medicine himself. He has no illusions. He’s **still 56**, and soon he will be 57, and at some point in the future he **will** attain thermodynamic equilibrium. The barbell prescription hasn’t reversed the graying of his hair, the wrinkling of his skin, or his need for spectacles. But he doesn’t have to diet or do endless

cardio to control his weight anymore (not that they ever worked very well anyway). He’s stronger than he was as a 20 year-old Marine Corps sergeant, he has more muscle tissue than at any time in his life, his joints and his back don’t hurt like they did in his 40s, and he can still run three miles and pass the USMC physical fitness test if he wanted to.

More importantly, he’s found another way to do health care for people, and that has been a major boon to the quality and meaning of his life. It’s a privilege to care for the sickest of the sick. It’s also a privilege to coach people, get them strong, and keep them strong.

But to do both?

That is gratifying beyond description. The way practicing medicine **should** feel.

“It’s a privilege to care for the sickest of the sick. It’s also a privilege to coach people, get them strong, and keep them strong.”



Chief Chatter

Welcome to the new academic year! For all of us, this is a time of transition; a time to accept and begin to excel in our newest roles. As chiefs, our goal is to represent and support our fellow residents. We're also tasked with creating the resident schedule, providing readings and online learning, and organizing our conferences. As third years, we're learning to manage a module on our own, and imagining how we might practice without the comfort of being supervised (It's pretty scary!). The second years are excited to finally be in the department almost full time and are adapting to an increase work and patient load. The first years are proud to have a few new letters after their name and are learning to navigate a new hospital system. Many fourth year medical students are experiencing emergency medicine for the first time and are nerv-

ously trying to learn as much as possible while also somehow impressing us. There's even the occasional undergraduate or high school student who is excited to shadow and discover what being a doctor is all about.

At each stage in our development as emergency medicine physicians, there are challenges, and especially during times of transition, it's not uncommon to become overwhelmed. Personally, whenever I become overwhelmed, I remember how excited I was to get into medical school and, a few years later, to open the letter revealing that I matched into emergency medicine at Detroit Receiving Hospital. Above all, I try to remember what a privilege it is to have this job. As emergency medicine physicians, we care for patients in the time that they feel more vulnerable. As emergency medicine physicians in

Detroit, we often care for populations who have been largely forgotten by the rest of society. Sometimes, we are their only support system. We may not always feel as if we're "saving lives", but we should remember that earning a patient's trust, showing them respect, and actually caring for them is an important job. So, when you become overwhelmed, remember the many obstacles you've overcome in the past, remember how excited you were to get where you are today, and remember what a privilege it is to do that work that you do. Enjoy the year!

~Chief Residents, Class of 2017
chiefs@drhem.com



Amy Buth Lee, MD



Barry Kang, MD



Lauren Kroll, MD



Jonathan Najman, MD

Global Health Section: An Update

The Global Health (GH) Section of Emergency Medicine is up and running. Over the last year, the Section has been involved in numerous projects from training paramedics in Laos, to developing telemedicine networks in the remotest places in India, to cross training EM residents from the West Indies on research and working on the development of an EM residency program in Guatemala. EM residents have been actively involved with some of the recent projects. Jake Jensen, MD and Lauren Kroll, MD travelled with Kristiana Kaufmann, MD, to Laos and will be presenting a poster about their project at the Global Health Symposium at Henry Ford Hospital on October 21 and at the 18th Annual Emergency Medicine Conference (EMCON) in Madurai,

India. Zeid Kalarikal, MD and Dr. Jensen will be travelling to India, along with Drs. V. Arun Kumar and Kristiana Kaufmann, to hold a health camp and implement the telemedicine project, along with training community health workers on first aid.

Dr. Kumar held a research pre-conference workshop at the PACE conference in Guntur, India on September 23. Drs. O'Neil and Levy took part remotely and focused on ethics and collaboration in International EM research. Dan Ridelman, MD is traveling to Guatemala to organize the country's first EM Ultrasound conference. The section will develop the GH curriculum for both the School of Public Health and the School of Medicine.

The World Health Student's Organization (WHSO) will be more actively involved with the efforts of this section. Dr. Elizabeth Dubey recently went on a trip to Nicaragua with the WHSO. The interest among medical students and residents is huge but funding has been a major deterrent. The section is in the process of opening a GH fund to help with these causes. This is an exciting time at the Global Health Section and a perfect time for an international EM fellow to join. Active recruitment is going on for the sole International EM fellowship slot. There has been a lot of interest from numerous faculty members from both the Department of EM and elsewhere.

Academically Speaking: The Future of Medical Education

[Editor's Note: Initially intended to be printed over three editions of the Resuscitator, two thirds of this article has already been published. Due to the long delay since the last edition, and the importance of its subject, the entire article is reproduced here.]

I have been asked to discuss the future of medical education. Predicting the future is fraught with difficulties: changes in the present impact the future; making past predications incorrect and also embarrassing. Consider these predictions: "Radio has no future", "x-rays will prove to be a hoax", "heavier than air flying machines will prove impossible" (Lord Kelvin) and my personal favorite, "everything that can be invented has been invented," Charles H. Duell, U.S. patent office, 1899.

So, in the interest of not looking like an idiot in the next five years, I won't attempt to predict the future but I will note three trends that I think will continue into the foreseeable future and become ever more pervasive: 1. Patient Safety and Physician Competency 2. Work Hour Rules 3. The relationship of doctors and patients

Patient Safety and Physician Competency

In 1991, articles in the New England Journal of Medicine and the Journal of the American Medical Association reported on the incidence of adverse events and negligence in hospitalized patients. [1-3](Brennan TA JAMA 1991 Brennan TA 1991 Harvard Leape L Harvard 1991) These were soon followed by another publication that was a retrospective chart review alleging the deaths of 98,000 patients per year due to errors. [4](Thomas E) 1999 Shortly thereafter, the book To Err

is Human was published by the Institute of Medicine. [5] (Kohn To Err is Human) The authors of the book attempted to underscore the fact that many errors were due to systems problems and that blaming physicians and healthcare workers, or "teaching them more" would not ensure "error free" medical care. These publications drew widespread attention by the lay press and a barrage of refutations by physicians. However, the attention of the public and many who worked in health care and related industries began to focus on "preventable" errors, and what was considered lack of knowledge and/or lack of caution on the part of physicians and health care workers. Some called for a state of zero-errors.

Supporting the assertions of error are autopsy studies demonstrating a large percentage of unexpected diagnoses or evidence of incorrect diagnoses over many decades and in multiple countries. [6, 7] Even more alarming was the lack of decrease in the number and continued adverse impact of errors despite improvements in technology and costly health care.[8]

The problem is that even if the percentage of errors is less than one, when a patient suffers harm—sometimes serious and lasting or even fatal—the percentage for that individual is 100. Many of the errors are egregious and receive widespread attention and publicity.

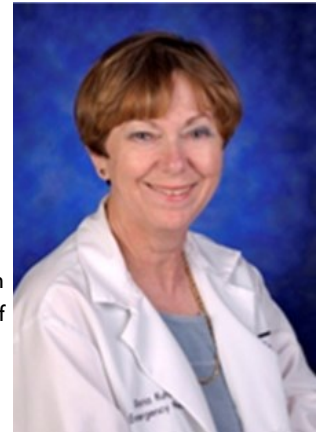
Compounding the allegations is evidence that in the past many physicians did not engage in efforts to remain conversant with changes in medicine: that they know no more, and often less, at the end of their careers than upon graduation from residency or fellowship training. Certainly it is no easy task to keep

pace with the changes in medicine; they occur at a dizzying pace—but that is the price paid to be a good doctor.

The Patient Safety movement began during this period and has continued to gain momentum. Competency of physicians is no longer automatically assumed as it had been historically. The public's faith in medicine was shaken and many individuals, both within the healthcare field and in certifying bodies overseeing health care, began to call for change: asking that physicians "prove competence and knowledge" is one of the biggest and most controversial changes for attending physicians.

In the past doctors could sign up for continuing medical courses (CME), state they attended and be done. There is evidence that simply attending continuing medical education courses and listening to lectures often does not increase knowledge or change or improve behavior. Davis 1995[9]. CME can change behavior but only with a committed individual and when the courses attended follow good educational design. Davis 2009[10].

The American Board of Medical Specialties (ABMS) mandated specialty boards create the process known as Maintenance of Certification (MOC) that forces physicians to periodically review medical literature, keep up with changes in medicine, take examinations, and examine their treatment of patients to ensure improvement. No longer is it enough to attend CME; physicians are required to prove what they know.



Gloria Kuhn, D.O., Ph.D.
Professor Emeritus of
Emergency Medicine

"The problem is that even if the percentage of errors is less than one... the percentage for that individual is 100..."

Academically Speaking—The Future of Medical Education (Continued from page 16)

It has been said that assessment drives learning and I believe this is true. If bright people are told what they need to learn, they will learn what is demanded, by devoting the necessary time and effort. The requirement for engaging in a process to demonstrate competency to remain certified provides the needed incentives to engage in lifelong learning.

Does lifelong learning make a difference? Doctors who know more and maintain certification provide better care to their patients. Homboe and Turchin [11-13]

I suspect that this will not drive errors to “zero” as demanded by patient safety advocates for the reasons cited by Graber [14] Many have criticized MOC, stating that there is “no proof” that it improves safety or even results in better-educated and knowledgeable physicians. I am not one of those critics. As a physician and patient I want a physician who is knowledgeable and whose knowledge is current. In my opinion reading Up to Date for just -in-time information is not up to date enough.

My prediction: There will be continued pressure on physicians to prove competence with ever increasing requirements. The new requirement (already mandated by ABMS) will be taking a test to prove increase in knowledge after attending CME courses.

Work hour rules: The Libby Zion Legacy

In 1984 Libby Zion, daughter of a prominent New York journalist entered a New York Hospital with the chief complaint of fever. Two residents treated her, one an intern

with 8 months of training and the other in the second year of training. Within 24 hours she was dead. There are a number of theories as to cause of death but the most likely is an adverse drug reaction between medication administered during her hospital stay and a medication prescribed by her doctor. It was alleged that her death was the result of lack of knowledge, inadequate supervision, and resident fatigue.

Neither the New York State Department of Health’s analysis nor court documents provided evidence that work hours or fatigue played a role in the death. It was agreed that there was a lack of knowledge on the part of the residents and supervision was inadequate.

The Bell Commission, created to investigate the death, recommended duty hour restrictions resulting in the 80-hour work rules currently mandated, in the name of patient safety, by the Accreditation Council of Graduate Medical Education (ACGME) in 2002-2003. Of interest to me was the lack of prominent mention of the intern’s workload: responsibility for the care of 40 patients resulting in her not having time to periodically examine Libby Zion as her condition deteriorated.

This work rule has created almost as much controversy as MOC. The main justification for the work rules was assertion of improved patient safety as a result of fewer errors committed by residents who are not fatigued. Although the rules were long overdue in a humanitarian sense, in the case of patient safety they appear to be a failure. There is little proof that safety is improved, even according to those who are advocates of restricted

hours. Schenarts, PJ 2006

[15] One reason is that the cause of errors is multifactorial and resident care plays only a small part in causation of error.[15] Another possible reason is that the work rules have created their own opportunities for error. Many of these are related to the increased frequency of transfer of care between teams of physicians or from one physician to another secondary to the shorter duty hours. In fact, an entire area of communications is now devoted to improving “handoffs” to minimize or prevent errors. Here at DMC we have the famous or infamous skull and crossbones icon meant to raise awareness of the dangers inherent in transfer of patient care from one physician to another.

Opponents of the restricted work hours point to loss of continuity of care, erosion of the patient doctor relationship, and loss of an attitude of professionalism. Less patient contact leads to less experiential learning, loss of professionalism, and close relationships with patients due to an enforced shiftwork mentality that mandates leaving “on time” with no regard to patient needs and no opportunity to complete necessary activities to ensure oncoming physicians don’t have loose ends to tie up. [16] Interestingly, emergency physicians engage in shift work with no apparent loss of professionalism and are able to form effective physician patient relationships.

Prediction:

Physicians who have trained with duty hour restrictions will not be willing to work 12 hour-plus shifts resulting in an even more severe physician shortage than that cur-

“As a physician and patient, I want a physician who is knowledgeable and current.”

Academically Speaking—The Future of Medical Education (Continued from page 17)

rently predicted.

Certifying bodies, malpractice attorneys, and society will begin to scrutinize work hours of physicians and perhaps impose work restrictions as they do in many industries in the name of patient safety.

The Relationship of Doctors and Patients

This needs more work:

The profession of medicine is undergoing far-reaching changes at a rapid pace. The doctor-patient relationship is no longer considered inviolate. That relationship now includes suspicion and disenchantment on the part of society as the patient-doctor relationship is eroding. Publicity about errors leading to morbidity and mortality reveal that physicians are not omniscient and many are not knowledgeable. The call for errors to be eliminated is not practical and will likely never be attained. Neither increased use of technology with its attendant increases in costs, increased training, nor increased oversight will ensure that errors don't occur. Medicine is a complex profession with high stakes decisions made in the face of uncertainty.

Critics of medicine often point to the field of aviation as being an example of optimal reduction in errors and yet a careful examination of aviation shows that crashes do occur, usually as a result of pilot error.

Perhaps the Institute of Medicine articulated the problem best when the authors named their publication *To Err is Human*. In the last analysis physicians are "only" human with all of the creativity, knowledge, and competencies of which humans are capable. Some are more com-

petent than others but none approach or can approach perfection.

1. Brennan, T.A. and L.L. Leape, Adverse events, negligence in hospitalized patients: results from the Harvard Medical Practice Study. *Perspect Healthc Risk Manage*, 1991. 11(2): p. 2-8.
2. Brennan, T.A., et al., Incidence of adverse events and negligence in hospitalized patients. Results of the Harvard Medical Practice Study I. *N Engl J Med*, 1991. 324(6): p. 370-6.
3. Leape, L.L., et al., The nature of adverse events in hospitalized patients. Results of the Harvard Medical Practice Study II. *N Engl J Med*, 1991. 324(6): p. 377-84.
4. Thomas, E.J., et al., Costs of medical injuries in Utah and Colorado. *Inquiry*, 1999. 36(3): p. 255-64.
5. Kohn, L., J. Corrigan, and M. Donaldson, eds. *To Err is Human*. 2000, National Academy Press: Washington D.C.
6. Goldman, L., et al., The value of the autopsy in three medical eras. *N Engl J Med*, 1983. 308(17): p. 1000-5.
7. Kirch, W. and C. Schafii, Misdiagnosis at a university hospital in 4 medical eras. *Medicine (Baltimore)*, 1996. 75(1): p. 29-40.
8. Tai, D.Y., et al., A study of consecutive autopsies in a medical ICU: a comparison of clinical cause of death and autopsy diagnosis. *Chest*, 2001. 119(2): p. 530-6.
9. Davis, D.A., et al., Changing physician performance. A systematic review of the effect of continuing medical education strategies. *JAMA*, 1995. 274(9): p. 700-5.
10. Davis, D. and R. Galbraith, Continuing medical education effect on practice performance: effectiveness of continuing medical education: American College of Chest Physicians Evidence-Based Educational Guidelines. *Chest*, 2009. 135(3 Suppl): p. 42S-48S.
11. Holmboe, E.S., R. Lipner, and A. Greiner, Assessing quality of care: knowledge matters. *JAMA*, 2008. 299(3): p. 338-40.
12. Holmboe, E.S., et al., Association between maintenance of certification examination scores and quality of care for medicare beneficiaries. *Arch Intern Med*, 2008. 168(13): p. 1396-403.
13. Turchin, A., et al., Effect of board certification on antihypertensive treatment intensification in patients with diabetes mellitus. *Circulation*, 2008. 117(5): p. 623-8.
14. Graber, M., R. Gordon, and N. Franklin, Reducing diagnostic errors in medicine: what's the goal? *Acad Med*, 2002. 77(10): p. 981-92.
15. Schenarts, P.J., K.D. Anderson Schenarts, and M.F. Rontondo, Myths and realities of the 80-hour work week. *Curr Surg*, 2006. 63(4): p. 269-74.
16. Charap, M., Reducing resident work hours: unproven assumptions and unforeseen outcomes. *Ann Intern Med*, 2004. 140(10): p. 814-5.

~Gloria Kuhn, D.O., Ph.D. Professor Emeritus

2016 STUDENT, RESIDENT, TEACHING, SERVICE AND HUMANITARIAN AWARDS

Academic Teacher of the Year—SGH

Anne Messman, MD

Alumni of Year Award

Robert Wahl, MD

Attending Teacher of the Year—SGH

Anne Messman, MD

Clinical Teacher of the Year—SGH

Michael Kramer

Distiniguished Teacher of the Year

Erik Olsen, MD

Faculty Teacher of the Year

Ross Tabbey, MD

John Skjaerlund, MD Endowed Scholarship Award

Sean Blackburn & Jacob Oblak

Mark W. Braugtigan, MD Leadership Award—SGH

Marc Anthony Velilla, MD

Medical Student Resident Teaching Award—DRH

Derek Kennedy

Munuswamy Dayanandan, MD Humanitarian Award

Erik Olsen, MD

Norman Rosenburg, DO Award

Luda Khait, MD

Scholarly Achievement Awards—DRH

1st Year—Zachary Baker

2nd Year—Khoa Nguyen

3rd Year—Jeffrey Van Laere & Josphe Wollman

Scholarly Achievement Awards—SGH

1st Year—Ian Walker, DO

2nd Year—Corey Fellow, DO

3rd Year—Andrew Berwick, MD, Steven Irving, MD & Sharmin Kalam, MD

Resident Humanitarian Award

Megan Wolf, MD

Resident Teacher of the Year—SGH

Lindsay Taylor, MD

Resident of the Year—DRH

Luda Khait, MD

Resident of the Year—SGH

Andrew Berwick, Md

Voluntary Teacher of the Year Award

Anoop Majjhoo, MD

Congratulations!



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We at the Resuscitator would like your input. We would love to hear from both our faculty and our graduates scattered throughout the country. If any of you have any gripes, concerns or comments, please submit them to me or Cari Williamson for publication in the “Ventilator” column. If you have any funny stories or anecdotes, we will try to include them in the “Doctor Aware” column. For the creative among you, please feel free to send me any artistic pursuits you would like to share. Finally, to our core faculty and researchers, please send me information about your on-going or future projects.

Kudos

- Drs. Claire Pearson and Anne Messman hosted the WSU SOM Women in Medicine and Science Group with an interactive group discussion about “Work-Life Balance—A Women’s Problem?”
- Thomas Sanderson, MD, received enough citations on his publications to place in the top 1% of its academic field
- Robert Wahl, MD, received the Distinguished Alumni Award from the WSU SOM Alumni Association
- Rebecca Bajkowski, Class of 2017, received first place for the medical student award with her project titled “Electrocardiogram Interpretation Errors Made by Emergency Physicians”. Dr. William Berk was the faculty mentor
- Maik Hutteman and Thomas Sanderson secured a \$2.7 million grant from the DOD
- The 2016 National HIV Testing Day was a success. 194 individuals were tested which found 2 newly positive patients
- Rob Wahl was names Alumni of the Year for the WSU SOM Alumni Association
- Dr. Vijaya Arun Kumar will be moderating 2 of the electronic poster sessions this year at ACEP
- Dr. Cynthia Aaron was published in the Annals of Emergency Medicine for “The Tipping Point:” in the Toxicology / Editorial section
- Christian Reynolds received an innovation fellowship grant for ~\$25,000 to develop the business end of IRL. Dr. Thomas Sanderson is the mentor on the grant
- The newly minted Edward S. Thomas Section of Community Health received a Gilead Grant for \$270,000
- Dr. Marc Rosenthal has been appointed to a 3 year appointment for the American Nurses Credentialing Center (ANCC), National Healthcare Disaster Content Expert Panel in Silver Springs, MD and has also been recognized as a disaster expert by the ANCC.