HOSPITAL EMPLOYEE HEALTH

THE PRACTICAL GUIDE TO KEEPING HEALTH CARE WORKERS HEALTHY

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INSIDE

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Ebola aftershock: HCWs suffer lingering symptoms

Virus may persist in 'immune privileged' sites

By Gary Evans, Senior Staff Writer

U.S. healthcare workers who survived Ebola after acquiring it from patients have suffered a wide variety of symptoms and maladies, with only one survivor considered symptom-free at five months after discharge, according to the Centers for Disease Control and Prevention (CDC).[1]

Though it is not completely clear in all cases if post-Ebola symptoms are the result of damage inflicted during infection or reflect some lingering presence of the virus, none of the healthcare workers are considered an infectious threat to patients or the public and most have returned to work or other activities.

However, Ebola clearly does not end at discharge, as survivors report a panoply of recurrent pains, aches, nerve tingling, hearing and vision problems, extreme fatigue, anxiety, and depression. For example, one of the U.S. nurses occupationally infected with Ebola described nightmares and fears about a future recurrence of the virus or some unintended consequences of novel treatment.[2]

> [S]URVIVORS REPORT A PANOPLY OF RECURRENT PAINS, ACHES, NERVE TINGLING, HEARING AND VISION PROBLEMS, EXTREME FATIGUE, ANXIETY, AND DEPRESSION.

"There are many unanswered questions about post-Ebola virus disease symptoms," says **Tim Uyeki**, MD, MPH, a CDC epidemiologist who has co-authored several papers on the Ebola response. "Prospective, longitudinal research studies of Ebola virus disease survivors — along with a comparison group of persons who did not have

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Ebola virus disease — are needed to better understand the frequency, severity, duration, and pathogenesis of the complications, sequelae, and symptoms experienced by Ebola survivors."

In one of the more shocking cases, a Scottish nurse who had been successfully treated for Ebola in January 2015 was readmitted last October for meningitis thought to be caused by surviving virus in her brain.[3] She recovered again, but joins the cases of Ebola viral persistence in the eyes, semen, and other so-called "immune privileged" body sites which may have evolved to mitigate collateral damage during an inflammatory immune response.

In one of the U.S. cases included in the CDC report, a physician who had completed treatment and was discharged from Emory University Hospital in Atlanta later developed vision problems and almost went blind in his left eye. He eventually recovered, but not before the affected iris actually changed color from blue to green and the virus was recovered in mutated form from the infected eye.

When compared to the Ebola in the patient's blood during hospitalization, the virus sequenced from ocular fluid by researchers[4] "identified a single nonsynonymous mutation, as well as two silent mutations and two mutations in noncoding regions. The significance of these mutations is unknown. However, these findings are in contrast to results that showed no changes in viral consensus sequences acquired over several days from a single patient.[5] All personal protective equipment and materials that were used during paracentesis and laboratory testing were sterilized by means of autoclaving before disposal."

Overall, 11 patients with Ebola were treated in U.S. hospitals and nine survived. The dead include Thomas Duncan, a Liberian man who developed symptoms after arriving in the U.S. from Africa. He died Oct. 8, 2014, in a Dallas hospital after infecting two nurses who survived. The other fatality was Martin Salia, MD, a surgeon who was a native of Sierra Leone and a U.S. citizen. He died Nov. 17, 2014, at the University of Nebraska biocontainment unit. The two deaths among the 11 U.S. cases translate to a 15% mortality rate, nearly four-fold less than the 58% rate of deaths in healthcare workers who acquired Ebola in West Africa and remained there for care. As of Nov. 1, 2015, the World Health Organization reported that a total of 881 healthcare workers have been infected with Ebola during patient care and 513 of them have died. With a few threads of possible transmission still being followed, the WHO reports 28,598 Ebola cases with 11,299 deaths in the outbreak.

8 U.S. survivors surveyed

In a breakdown of the U.S. cases, two healthcare workers acquired Ebola in the U.S.; two — Duncan and a U.S. physician — became symptomatic after travel from West Africa; and the remainder were infected in Africa and became symptomatic before being flown in for treatment.

The U.S. survivors are primarily healthcare workers, but also include a photojournalist and a missionary aid worker who helped disinfect personal protective equipment in West Africa.

"Among the eight U.S. survivors who we surveyed, most reported that

their symptoms resolved or improved over time," says CDC lead author **Lauren Epstein**, MD, an officer in the Epidemic Intelligence Service. "However, only one survivor reported complete resolution of all symptoms at the time we conducted the survey in March 2015. We did not specifically assess whether survivors returned to medical work — however, 75% of the survivors returned to normal daily activities within eight weeks after discharge."

The CDC administered a questionnaire by telephone or in person to the U.S. survivors about symptoms, diagnostic testing, and treatment occurring any time during the recovery period. Medical records were not reviewed and the CDC determined that the survey did not meet the definition of human research that would require oversight by an institutional review board.

The median interval from hospital discharge and survey administration was five months. All survivors reported having had at least one symptom during the recovery period. These symptoms ranged from mild to more severe complications requiring rehospitalization or treatment. The most frequently reported symptoms were lethargy or fatigue, joint pain, and alopecia, an autoimmune disease that causes hair loss. Five patients (63%) reported having eye problems, including pain, discomfort, or blurriness. Of these patients, four underwent ophthalmologic evaluation, and two were treated for unilateral uveitis, an inflammation of the iris or other parts of the eye that can cause blindness. They were diagnosed with uveitis from two weeks to eight weeks after hospital discharge for Ebola treatment.

Six patients (75%) reported having psychological or cognitive symptoms, including short-term memory loss, insomnia, and depression or anxiety, the CDC reported. Three patients (38%) reported having paresthesia or a tingling sensation in the peripheral nerves, and one received treatment for peripheral neuropathy nerve damage. Two patients (25%) were rehospitalized briefly for febrile illness that was not related to Ebola.

Survivors need specialty care

Given the findings, some Ebola survivors "may benefit from psychological and subspecialty assessment — rheumatologic, musculoskeletal, neurologic and ophthalmologic — in addition to primary care," Epstein says.

> SIX PATIENTS REPORTED HAVING PSYCHOLOGICAL OR COGNITIVE SYMPTOMS, INCLUDING SHORT-TERM MEMORY LOSS, INSOMNIA, AND DEPRESSION OR ANXIETY, THE CDC REPORTED.

Hospital Employee Health asked Uyeki if there are any particular precautions or special measures that Ebola survivors who are healthcare workers need to take to return to patient care?

"Our survey did not address these issues," he says. "However, persons who have recovered from Ebola virus disease who are asymptomatic do not pose any risk of Ebola virus transmission to the general public or to close contacts."

In light of a study[6] finding that Ebola can persist in semen for at least nine months, the CDC recommends male survivors abstain from unprotected sex until semen tests negative twice.

This next stage of control could be a formidable challenge, as there are tens of thousands of African men among the estimated 18,000 Ebola survivors. The WHO recently reported that a cluster of cases in Liberia were the "result of the re-emergence of Ebola virus that had persisted in a previously infected individual. Although the probability of such re-emergence events is low, the risk of further transmission following a re-emergence underscores the importance of implementing a comprehensive package of services for survivors that includes the testing of appropriate bodily fluids for the presence of Ebola virus RNA."[7]

The governments of Liberia and Sierra Leone, with support from partners including WHO and CDC, have implemented voluntary semen screening and counselling programs for male survivors in order to help affected individuals understand their risk and take necessary precautions to protect close contacts. In addition, the Ministry of Health of Liberia and the U.S. National Institute of Allergy and Infectious Diseases are conducting a five-year study of thousands of survivors in Liberia and their close contacts. The findings and other research might change the treatment and follow-up of healthcare workers or other Ebola survivors, possibly developing ways to stave off or mitigate the aftershocks through interventions

earlier in the course of treatment.

REFERENCES

1. Epstein L, Wong KK, Kallen AJ, et al. Centers for Disease Control and Prevention. Post-Ebola Signs and Symptoms in U.S. Survivors. *N Engl J Med* 2015; 373:2484-2486December 17, 2015DOI: 10.1056/NEJMc1506576.
2. Lupkin, S. Life After Ebola: Nurse Nina Pham Says She Has Nightmares, Aches, Hair Loss. ABC News Mar 2, 2015.
3. Paddock, C. British nurse Pauline Cafferkey defeats Ebola — again. *MNT* Nov. 13 2015: http://www.medicalnewstoday.com/.
4. Varkey JB, Shantha JG, Crozier I, et al. Persistence of Ebola virus in ocular fluid during convalescence. *N Engl J Med* 2015;372:2423-2427.
5. Gire SK, Goba A, Anderson KG, et al. Genomic surveillance elucidates Ebola virus origin and transmission during the 2014 outbreak. *Science* 2014;345:1369-1372.
6. Deen GF, Knust B, Broutet, et al. Ebola RNA Persistence in Semen of Ebola Virus Disease Survivors — Preliminary Report. *N Engl J Med.* October 14, 2015 DOI: 10.1056/NEJMoa1511410.
7. WHO. Ebola Situation Report — 16 December 2015: http://bit.ly/1YMz16y. ■

Patients alarmed after newborns exposed to TB

One HCW exposes a thousand patients, co-workers

A California hospital continues a high-stakes tuberculosis follow-up of more than 350 newborns exposed to an infected healthcare worker. With testing reliability questionable in such infants, the babies are essentially being treated empirically with isoniazid (INH) for a TB strain that is susceptible to the first line drug. Hundreds of mothers and hospital employees are also being tested.

"No one has tested positive for TB from this possible exposure," says **Joy Alexiou**, public information officer for Santa Clara Valley Medical Center in San Jose, CA. "The vast majority of infants have been in or have been scheduled for their screenings and to receive the antibiotic treatment."

Concerns have included that even if the babies are treated successfully now, there could be a risk that TB could remain latent in their systems, returning later in life if they become immunocompromised.

"That is highly unlikely because they are being treated before a latent infection takes place," Alexiou says. "When it comes to a person with latent TB, INH greatly reduces the risk they will ever become active."

The hospital notified patients by phone and letter on Dec. 11 that some 350 infants and their mothers may have been exposed to a healthcare worker with active tuberculosis between mid-August 2015 and mid-November 2015. Now on leave for treatment, the employee worked in the newborn nursery in the hospital's Mother & Infant Care Center.

Low risk, severe outcomes

"While the risk of infection is low, the consequences of a tuberculosis infection in infants can be severe," **Stephen Harris**, MD, Chair of Pediatrics at Santa Clara Valley said in a statement. "That's why we decided to do widespread testing and start preventive treatments for these infants as soon as possible."

The hospital is doing both diagnostic testing and preventive daily treatments of isoniazid on the infants, which are being monitored closely for any signs of active infection with *Mycobacterium tuberculosis*. Elements of risk include that the newborn immune system is not fully developed and may not respond to testing. Thus, X-rays and preventive treatment will be done, and of course clinicians will act quickly if there is any sign of reduced susceptibility of the TB strain to the first line drug administered.

Parents of newborns, often hypervigilant in any scenario involving their baby, expressed enough concern to elicit a second hospital notice to patients on Dec. 15, stating, "We understand that people are concerned about this unusual situation and we apologize for the anxiety it may have caused."

In addition to the babies, 368 mothers and 338 hospital employees were also potentially exposed to the infected worker. All patients, visitors, and employees who were potentially exposed to the infected worker have been identified. The employee underwent her annual tuberculosis test in September 2015. The screening was negative and the employee did not show symptoms at any time. Her personal physician discovered her TB when she underwent evaluation for an unrelated medical condition.

However, the hospital reports the nurse was asymptomatic at work and

showed no classic signs of active TB infection such as cough.

"The employee had no symptoms of TB and the risk for infection from this possible exposure remains low," Alexiou says.

High TB rate

Santa Clara County has one of the highest TB rates in California. There were 163 cases of active TB in Santa Clara County in 2014, a 10% decline from 181 cases the year prior. The TB case rate is 8.8 per 100,000 residents, ranking Santa Clara County fourth among all jurisdictions in California. The case rate is 1.5 times higher than the overall state rate (5.6) and almost three times the national rate (3.0). While recent immigrants accounted for almost one-third of TB cases among foreign-born individuals, the majority (70%) of TB cases among foreign-born individuals occurred among those living in the U.S. for more than five years, the state health department reported.

Nationally in 2014, a total of 9,412 new TB cases were reported in the United States, with an incidence rate of 3.0 cases per 100,000 persons — a decrease of 2.2% from 2013. Although overall numbers of TB cases and rates continue to decline, the percentage decrease in rate is the smallest decrease in over a decade, the CDC reported. The rate among foreign-born persons in the United States in 2014 was 13.4 times higher than among U.S.-born persons. Racial/ethnic minorities continue to be disproportionately affected by TB within the United States. Asians continue to be the racial/ethnic group with the largest number of TB cases. Compared with non-Hispanic whites, the TB rate among Asians was 28.5 times higher, whereas rates among non-Hispanic blacks and Hispanics were each eight times higher. Four states (California, Texas, New York, and Florida), representing approximately one-third of the U.S. population, accounted for half of all TB cases reported in 2014, the CDC reported. ■

TB Q&A for patients after exposure incidents

With the hope you never need it

As part of notifying patients of a possible TB exposure to an infected employee, Santa Clara Valley Medical Center in San Jose, CA, issued the following "frequently asked questions" TB information for patients. Employee health professionals may want to consider something like this should they find themselves facing a similar situation:

What is Tuberculosis (TB) and how is it spread? Tuberculosis is an infectious disease that usually affects the lungs but can affect any part of the body. It is caused by a very small bacteria that lives in the lungs of an infected person and gets into the air when the infected person breathes or coughs, making it possible for others to potentially inhale it.

How could I have been exposed? A person can be exposed if there is a shared breathing space with a person who has the infection in their lungs. Usually a person has to be in close contact with someone with active TB for a long period of time to become infected; however, some people do become infected after shorter periods of contact.

How will I know if I have been infected with the TB bacteria? A blood sample is taken to test if you have the TB bacteria in your body.

What are the symptoms of TB? It depends where the TB bacteria begins to grow, but most often the TB bacteria infects the lungs. These are the most common symptoms in adults:

- a cough that lasts three weeks or longer,
- pain in the chest,
- coughing up blood or phlegm,
- weakness,
- weight loss,
- chills, and
- fever, sweating at night.

Will everyone who gets infected develop these symptoms? No, sometimes the infection lives inside your body but your immune system will stop the TB bacteria from multiplying. In this case, you would not have any symptoms. Because some people will not show symptoms, it is important that anyone who was potentially exposed get tested.

What if I have a positive test for TB infection? A positive test result does not mean you have TB disease. Your doctor may decide to do other tests such as a chest X-ray and a test of your sputum (phlegm). You will also likely be asked about any symptoms you may be experiencing. Based on the demographics of Santa Clara Valley Medical Center, approximately 1 in 5 patients already have a positive test for TB and were exposed in the past. Your doctor will review your tests and determine how

to proceed. People who test positive may be prescribed medication. Your physician will decide if medication is appropriate for you.

If I have a positive test for TB, will my family be affected by this? If you have developed the disease and have symptoms, then there is a risk your family may be affected. If you do not have symptoms, your family will likely not be affected. The County Public Health Department will assist with any necessary follow-up for your family after you have been tested.

If someone stayed with me in the hospital while I was in the Mother-Infant Care Center, are they at risk for exposure to TB disease? We are screening all patients who may have had contact with the TB infected individual. Generally, a healthy person who stayed with you in the hospital has very little risk of getting TB. If that person is concerned or has a condition that weakens their immune system, they should contact his/her primary care provider after you get the results of your TB test. ■

VA hospital system may mandate staff flu shots

150-hospital system well short of 90% rate by 2020

With a new study finding that virtually none of the nation's 150 Veterans Health Administration hospitals have mandatory flu shot policies for healthcare workers — leaving vaccination rates languishing in the 55% range — the VA system is considering a vaccine mandate to protect patients and coworkers, *Hospital Employee Health* has learned.

Given the repeated calls by leading medical groups for mandatory flu vaccination of healthcare workers to protect patients, the issue has taken on an air of historical inevitability that suggests the controversial matter is all but resolved. Not by a literal long shot. The recently published study[1] suggests that healthcare worker immunization levels at VA hospitals have plateaued well below the Department of Health and Human Services goal of a 90% vaccination rate by 2020. Overall flu vaccination rates for healthcare workers nationally were estimated at 75%, but exceed 95% at facilities with mandatory policies, the authors reported.

Researchers at the University of Michigan Medical School and the Ann Arbor VA Healthcare System surveyed infection preventionists (IPs) at 386 non-VA hospitals and 77 VA facilities. Of the non-VA hospitals, 43% of the IPs responding said their facility mandated flu vaccination of all healthcare providers. Though the hospitals were not named, a 1.3% level of mandatory policies at the VA hospitals translates to a single outlier among the 77 federal facilities. Something short of a mandate appears to be in place at many hospitals, though the survey did not ask respondents to go into detail about the specifics of their policies. Overall, about one-fifth of hospitals without mandatory policies said unvaccinated staff had to sign declination forms and/or wear a mask while seeing patients during flu season. For example, the Ann Arbor VA has such a masking policy for care givers who decline immunization.

Unions in place

There are also pockets of entrenched resistance, as 28% of the IPs at VA hospitals said worker unions were a factor in the lack of a flu vaccine requirement. That could set the stage for labor negotiations and legal challenges if a mandate is enacted. Currently, the VA system does not have a national policy to mandate flu immunization of healthcare workers, and many hospitals are apparently waiting for the green light before pushing such policies. More than half of IPs in the 77 VA hospitals said they could not mandate the vaccine because they were part of a federal system that had no such national directive.

Since the survey was taken in 2013, the VA system has continued to encourage its hospitals to work toward near-universal vaccination by 2020, but voluntary immunization efforts historically have shown little evidence of the kind of dramatic, sustainable increase that would be necessary to take the health system from 55% to a 90% vaccination rate.

"I can tell you in conversations with our people at the Ann Arbor VA that they believe there have been recent developments at the [VHA] National Leadership Council — they may be moving toward mandatory vaccination of VA employees in the near future," says **M. Todd Greene**, PhD, MPH, lead author of the study and a research investigator at the University of Michigan and the Ann Arbor VA.

There are tens of thousands of healthcare workers in the VA system,

so mandating flu seasonal shot would no doubt be controversial. It would also be a monumental endorsement of public health in the face of a national anti-vaccine movement that has brought measles out of exile and threatens to erode critical coverage of other vaccines. The VA national office had not responded to a request for comment as this issue of *HEH* went to press, but it is no secret the VA has been considering a mandate for several years — particularly after it fell well short of an 80% immunization goal in 2011.[2] Among the obstacles that have been cited are that the VA is larger than any organization that has implemented mandatory flu vaccination, adequate supply of vaccine could be an issue, and there are limited data definitively linking vaccination of healthcare workers with reduced influenza-related illness in patients.[3] Another factor is the unwillingness of some hospital administrators to open this can of worms, as about 22% of those surveyed overall said simply that hospital leadership would not mandate the vaccine.

"To put it bluntly, American hospitals have a lot of work to do," says **Sanjay Saint**, MD, MPH, senior author of the study.

In that regard, the VA system may conclude that it is time to get on the right side of history as more and more facilities mandate seasonal flu shots. Among the continuing calls for mandatory flu vaccine policies were two by highly influential groups in 2015; the American Nurses Association and the American Academy of Pediatrics (AAP).[4,5] *(See the Oct. 2015 and Jan. 2016 issues of* HEH *for more information.)*

REFERENCES

1. Greene MT, Fowler KE, Krein SL, et al. Influenza vaccination requirements for healthcare personnel in the U.S. hospitals: Results of a national survey. *Infect Control Hosp Epidemiol*. Published online: November 27 2015. DOI: http://dx.doi.org/10.1017/ice.2015.277.
2. U.S. Department of Veterans Affairs. Office of Research & Development. Why do some health care workers decline flu vaccination? http://www.research.va.gov/news/features/flu_vaccination.cfm.
3. Schult TM1, Awosika ER, Hodgson MJ, et al. Innovative approaches for understanding seasonal influenza vaccine declination in healthcare personnel support development of new campaign strategies. *Infect Control Hosp Epidemiol* 2012 Sep;33(9):924-931.
4. American Nurses Association. Position Statement on Immunizations. July 21, 2015: http://bit.ly/1hsszCU.
5. Bernstein HH, Starke JR. American Academy of Pediatrics Committee on Infectious Diseases, 2015–2016. Influenza Immunization for All Health Care Personnel: Keep It Mandatory. *Pediatrics* 2015;136:809-818. ■

Defuse hostile nursing work culture by speaking up immediately, directly

HR expert says don't let resentments linger and turn toxic

Listening to human resources expert **Laura MacLeod**, LMSW, describe the dysfunctional work cultures she has observed in healthcare and other industries, one is immediately reminded of the truism: "Every system is perfectly designed to get the results it gets."

Nurses, for example, sometimes fall into a toxic work culture full of mistrust and unexpressed resentments. But too often they lack the supportive leadership and tools to communicate openly to defuse conflict and reinforce positive interactions, explains MacLeod, founder of the From the Inside Out Project® (http://fromtheinsideoutproject.com/). She teaches conflict resolution in the workplace, problem-solving, and listening skills using a method that addresses human interactive challenges.

"In all workplaces, there are very basic issues that are not being addressed," she says. "A lot of issues directly affect the culture, customer service, employee relations, and productivity of the business. [These issues include] the specifics of communication, relationships, bullying — the way people are dealing with conflict, or not."

Hospital Employee Health asked MacLeod for some tips and strategies to improve the work culture among nurses and in healthcare settings in general.

HEH: We have written articles previously on the potential for an unhealthy culture among nurses, which can affect worker mental health, impair patient safety, and even set the stage for violence. What is

your take on this phenomenon when you look at nursing?

MacLeod: Simply the circumstances they are in — working in a hospital, working under high-stress conditions, surrounded by pain and trauma, disease and death — all of these things are very difficult on their own to handle. Then I think there are a lot of other layers. In the last several years there have been a lot of budget cuts, which means fewer people on the floor, fewer hands, fewer people doing all the work that needs to be done. That adds a number of stressful pieces to it — "Am I going to lose my job?" — plus the stress of having to pick up the slack. You used to have 10 people doing this work, now the work is the same but you have five people. Those are all factors.

The other thing is that hospitals have gotten into a kind of customer service [emphasis]. They are doing patient surveys and they are looking at things and pushing employees to take more of a kind of hospitality slant to their patients and patient families. That's a whole other skill set. You are a nurse and you know that [field] — now you are supposed to be like a greeter in a restaurant. That is another pressure that has been added to the workplace.

HEH: Medicine has also had an engrained hierarchy and some lingering gender issues between the traditional predominance of male physicians and female nurses.

MacLeod: Then you have the things that frankly I see everywhere where there is race, hierarchy, seniority, and those kind of things that tend to put people in cliques. I believe in a hospital situation the hierarchy and the way things work is different and more stressful. You have the doctors, physicians coming down on the nurses. The nurses are unable to do much about this because they are in a subordinate position. So they take their stress on the nurses' aides or each other. So you have basically a circle of dysfunction.

HEH: Nursing work culture is rife with a bullying, hazing atmosphere have given rise to the infamous phrase, "Nurses eat their young."

MacLeod: I feel like there's this feeling that nurses are not nice people, they're bullying, hazing or harassing and all of these things. But it's not because they are not great nurses and professionals. All of these factors that I just described — it's a lot. And I think there are no [tools] for them if nobody is really putting anything in place to manage these stresses. Therefore, they are just behaving in the only kind of dysfunction they really know, which is this dysfunctional culture that has been going on forever.

"[T]HEY ARE JUST BEHAVING IN THE ONLY KIND OF DYSFUNCTION THEY REALLY KNOW, WHICH IS THIS DYSFUNCTIONAL CULTURE THAT HAS BEEN GOING ON FOREVER."

HEH: Do you have any tips or thoughts on how to defuse these situations before they worsen, perhaps some kind of open communication or transparency about the issue?

MacLeod: Certainly transparency, communication — those things are extremely important, particularly for management, administration, anyone in a position of setting expectations and communicating them. Expectations need to be made absolutely crystal clear. For example, one of the things that comes up with nurses is with the managing clinical nurse in charge of scheduling. Sometimes that person shows blatant favoritism in giving people the hours they like, the best shift, vacation time — that kind of thing. There are some instances where those types of managers even cover for employees who are coming in late on a chronic basis — kind of looking the other way.

This type of thing sends a horrific message and creates infighting. It is clearly a management issue, a matter of [emphasizing] the rules that, for example, vacation goes by seniority and here's how we are going to do these things [equitably]. It may be a union issue if they have certain things in place. But the expectations have to be made clear and then followed up on. If I know I am at the bottom and I am not going to get the vacation that I wanted, OK, that's fine. But those have to be clear-cut rules. Whatever your rules and policies are need to be clear and followed.

HEH: Can you say a little more about the "specifics of communication" you mentioned earlier?

MacLeod: It may seem small, but one way to make a difference and start to improve things is for someone to model direct communication. And what I mean by that is, say there is something you're confused about — a supervisor, a coworker — something that is upsetting to you and you don't understand why they did that. Say something. This is not an easy thing. Nobody likes conflict, but confront things immediately in a rational way. You might say directly to that person, "Earlier today I didn't like the way

you spoke to me in front of a patient, it felt a little dismissive."

Have that conversation as opposed to what is happening now, which is that people let it go and it festers and they are angry. Now it is just going to escalate. The person who was dismissive may not even realize that it came off that way. Maybe they were just trying to get the job done and they didn't realize their words offended you. But if people model [direct communication] it continues on because if you see it or it is done to you then you are going to get it.

The other thing I would say is as simple as showing appreciation and thanking people. One complaint from patient care assistants is that they are treated like servants. Many of them are highly skilled and may come from other countries where they might have been a high-level professional. A nurse may be in a rush and tell them to go clean up a room or whatever, but you can come back to somebody and say, "Thanks so much for helping me with that when I needed it." It can make a huge difference.

HEH: When you go into a worksite, do you recommend these approaches to hospital leadership or talk to workers in a group setting?

MacLeod: I recommend these sorts of things to administrators. It can be difficult get nurses together because of their schedules, but I also like to work with a group of employees and get them to talk about what is going on [in their work culture]. This is a deeper piece. It takes some time and a building of trust, there are confidentiality issues, but the idea is to get to what is going on. There is resentment and old grudges from years ago that haven't been addressed. There may be a passive-aggressive kind of behavior pattern where everybody is very defensive.

This would be a meeting only with employees — not with management or anybody else but me. My goal is not to put a Band-Aid on it, but to talk about these things and find a constructive way as a group to problem-solve. What we try to foster in these groups — especially for a group like nurses — is the idea of how much better it would be if I actually trusted and looked to my colleagues for help and support when it was needed. The idea of breaking all this down is to foster some kind of a mutual support system. I model and teach that in problem-solving. The way to deal with things is to confront them immediately and deal with them directly. It's great and it is the best way to resolve things quickly, but not everybody does that and not everybody knows how to do it. That's where the modeling and teaching comes in. ■

Physician flameout: It's time to heal the healers

Leadership that empowers physicians is needed

American medicine is nearing a tipping point with physicians that could adversely affect broader populations of both patients and healthcare workers. More than half of U.S. physicians are experiencing professional burnout and the problem is getting worse, researchers report.[1]

Burnout reflects a life-job imbalance that manifests as emotional exhaustion, "loss of meaning" in work, and feelings of ineffectiveness, explains lead author **Tait Shanafelt**, MD, a leukemia clinician with a research interest in physician well-being at the Mayo Clinic in Rochester, MN. "We found that more physicians in almost every specialty are feeling this way. [This is] concerning, given the strongly established links between physician burnout and quality of care and medical errors."

Physicians experiencing burnout may understandably decrease their work hours, which could compound a projected doctor shortage over the next decade. The recently published study[2] follows a similar one in 2011, as the burnout trend is being followed in three-year increments. The current study found that 54% of U.S. physicians are now experiencing at least one symptom of burnout, up from 45% in 2011.

"The highest risk specialties continue to include emergency medicine, family medicine, and general internal medicine," Shanafelt says. "But large increases have been observed for orthopedic surgeons, radiologists, and rehabilitation physicians. These groups are also now in the highest risk category."

In contrast, burnout measures in the general workforce were stable over the period, suggesting that doctors are flaming out faster than other professions. Though the data are not as empirical, a poll taken at a nursing meeting last

year found similar burnout rates among nurses. At the American Association of Critical-Care Nurses (AACN) meeting in San Diego last May, 60% of some 500 attendees said they had "moderate to severe" burnout due to such issues as increasing work complexity, conflict with colleagues, time and outcome demands, and expectations from patients and families, as well as ethical challenges. The AACN has developed a healthy workplace barometer of sorts that can help employee health professionals assess the mental health of staff and their work culture. *(See related story, page 23.)*

The physician study netted 6,880 (19.2%) responses to a nationally distributed survey. The researchers used the Maslach Burnout Inventory (MBI), finding that satisfaction with work-life balance also declined in physicians between 8% from 2011 and 2014. The MBI assesses measures of emotional exhaustion, depersonalization from patients and colleagues, and sense of personal accomplishment and competence at work.

The MBI scores revealed that 47% of physicians had high emotional exhaustion; 35% high depersonalization; and 16% reported a low sense of personal accomplishment in 2014. Suicidal ideation was an identical 6.4%, but that still means 438 respondents had thoughts of killing themselves within the last year in the 2015 study and 466 in the prior report. In that regard, an accompanying editorial[3] to the 2015 study said the findings underscore the deteriorating mental health of a profession with a high rate of physician suicide (which is in part driven by a very high "success" rate because clinicians know precisely how to end life). The public and patients are becoming more aware of the issue, as the editorial cited a recent *Time* magazine article[4] that "addresses many troubling facts about the state of physicians in the United States, including that as many as 400 U.S. physicians are dying by suicide each year, a number comparable, the author points out, with the graduating classes of two or three medical school classes annually."

In light of the findings, the researchers recommend that health organizations should focus on improving support in the practice environment and developing leaders with the skills to foster the following:

- physician engagement;
- help physicians optimize "career fit;"
- create an environment that nurtures community, flexibility, and control, all of which help cultivate meaning in work.

THE CURRENT STUDY FOUND THAT 54% OF U.S. PHYSICIANS ARE NOW EXPERIENCING AT LEAST ONE SYMPTOM OF BURNOUT, UP FROM 45% IN 2011.

Organizational approaches to help physicians self-calibrate and promote their own wellness may also be beneficial.

There are also a number of steps physicians can take at the individual level to promote their own wellness, the authors noted. This often begins by identifying personal and professional values and determining how they will be prioritized when conflicts between personal and professional responsibilities arise. This exercise requires self-awareness, limit setting, and reframing, they noted.

Training in mindfulness-based stress reduction, which involves self-awareness, a focus on the present, and intentionality in thoughts and actions, has also been shown to be an effective approach to reduce physician stress and burnout. Scientific studies have also identified the habits and qualities that promote resilience in challenging situations, which are skills that can be learned and developed. Attention to self-care, developing personal interests, and protecting and nurturing relationships are also essential, the authors noted.

More than 75% of the physicians are now employed by large healthcare organizations and meaningful progress will require an effective response at both the individual level and the organization or system level. A related study[5] published by the same lead author last year found that physicians have lost some level of autonomy and are more vulnerable to the effects of the department-level leaders that hold them accountable in the new paradigm. In this sense, physician burnout factors may parallel those of their nurse colleagues, who have long cited problems with lack of empowerment at the workplace.

"On a simple level, leadership matters," Shanafelt says.

The leadership study, which drew

responses from 2,813 physicians, found that "leadership dimensions" strongly correlated with the burnout and satisfaction scores. The findings have important implications for the selection and training of physician leaders and provide new insights into organizational factors that affect physician well-being.

"The effective leaders kept their physicians informed, they helped individuals develop professionally, they provided objective feedback, and perhaps most importantly, they asked physicians for their ideas and suggestions on how to solve the problems in the local work unit," he says. "Then they empowered the physicians to actually implement those solutions."

REFERENCES

1. Shanafelt TD, Hasan O, Dyrbye LN. Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. *Mayo Clin Proceed* 2015; 90:1600–1613.
2. Shanafelt TD, Boone S, Tan L. et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med* 2012; 172:1377–1385.
3. Ariely D, Lanier WL. Disturbing Trends in Physician Burnout and Satisfaction With Work-Life Balance. Dealing With Malady Among the Nation's Healers. *Mayo Clin Proc* 2015 Dec;90(12):1593-1596.
4. Oaklander, M. Life/Support: Inside the movement to save the mental health of America's doctors. *Time* 2015;186:42–51.
5. Shanafelt TD, Gorringe G, Menaker R, et al. Impact of Organizational Leadership on Physician Burnout and Satisfaction. *Mayo Clin Proc* 2015 Apr;90(4):432-440. ■

A burnout barometer to assess your work culture

Tools available at AACN website

The American Association of Critical-Care Nurses' (AACN) has created tools to address issues associated with a healthy work environment, including burnout and "compassion fatigue," available at http://www.aacn.org/.

For example, the following is used as a work environment assessment where healthcare workers give a range of answers from "strongly agree" to "strongly disagree." Obviously, the more of the latter you have on this list the more concern is warranted about the work culture.

• Administrators, nurse managers, physicians, nurses, and other staff maintain frequent communication to prevent each other from being surprised or caught off guard by decisions.

• Administrators, nurse managers, and physicians involve nurses and other staff to an appropriate degree when making important decisions.

• Administrators and nurse managers work with nurses and other staff to make sure there are enough staff to maintain patient safety.

• The formal reward and recognition systems work to make nurses and other staff feel valued.

• Most nurses and other staff here have a positive relationship with their nurse leaders (managers, directors, advanced practice nurses, etc.).

• Administrators, nurse managers, physicians, nurses, and other staff make sure their actions match their words — they "walk their talk."

• The right departments, professions, and groups are involved in important decisions.

• Support services are provided at a level that allows nurses and other staff to spend their time on the priorities and requirements of patient and family care.

• Nurse Leaders (managers, directors, advanced practice nurses, etc.) demonstrate an understanding of the requirements and dynamics at the point of care, and use this knowledge to work for a healthy work environment.

• Administrators, nurse managers, physicians, nurses, and other staff have zero-tolerance for disrespect and abuse. If they see or hear someone being disrespectful, they hold them accountable regardless of the person's role or position. ■

COMING IN FUTURE MONTHS

- Biomechanics 101: Is there a safe way to manually lift patients?
- CDC drafting Infection Prevention in Healthcare Personnel guideline
- 'Fatigue makes cowards of us all' — safe ways to keep HCWs alert
- Employee health tools and tips from the Occupational Health Safety Network

HOSPITAL EMPLOYEE HEALTH

CE INSTRUCTIONS

To earn credit for this activity, please follow these instructions:

1. Read and study the activity, using the provided references for further research.
2. Scan the QR code to the right or log on to AHCMedia.com, then select "MyAHC" to take a post-test.
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the test, your browser will be automatically directed to the activity evaluation form.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly.

CE QUESTIONS

1. In a study by the Centers for Disease Control and Prevention, how many U.S. healthcare workers who survived Ebola were considered "symptom-free" after a median of five months follow-up?

A. 1
B. 2
C. 3
D. 10

2. When compared to the Ebola virus in a patient's blood during hospitalization, the virus sequenced from which body site identified mutations with "unknown significance?"

A. Testes
B. Brain
C. Eyes
D. Lungs

3. A California hospital is following up aggressively on more than 350 newborns exposed to a healthcare worker infected with a strain of tuberculosis resistant to isoniazid.

A. True
B. False

4. Researchers estimated the flu vaccination rate of healthcare workers in the VA hospital system is:

A. 67%
B. 55%
C. 80%
D. 40%

CE OBJECTIVES

After reading each issue of *Hospital Employee Health*, the nurse will be able to do the following:

1. Identify particular clinical, administrative, or regulatory issues related to the care of hospital employees;
2. Describe how the clinical, administrative and regulatory issues particular to the care of hospital employees affect health care workers, hospitals, or the healthcare industry at large;
3. Cite solutions to the problems faced in the care of hospital employees based on expert guidelines from relevant regulatory bodies, or the independent recommendations of other employee health professionals.