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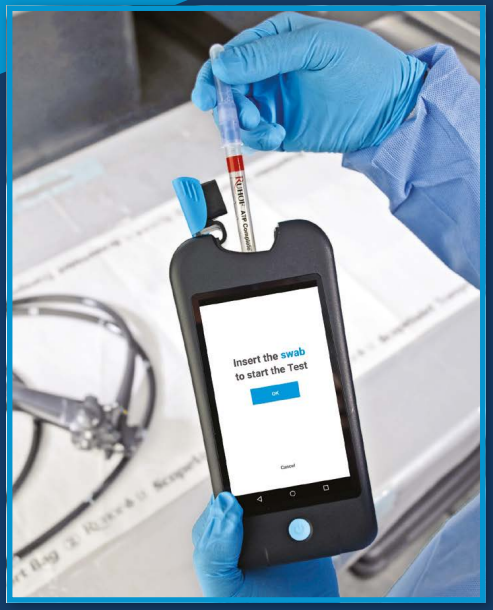

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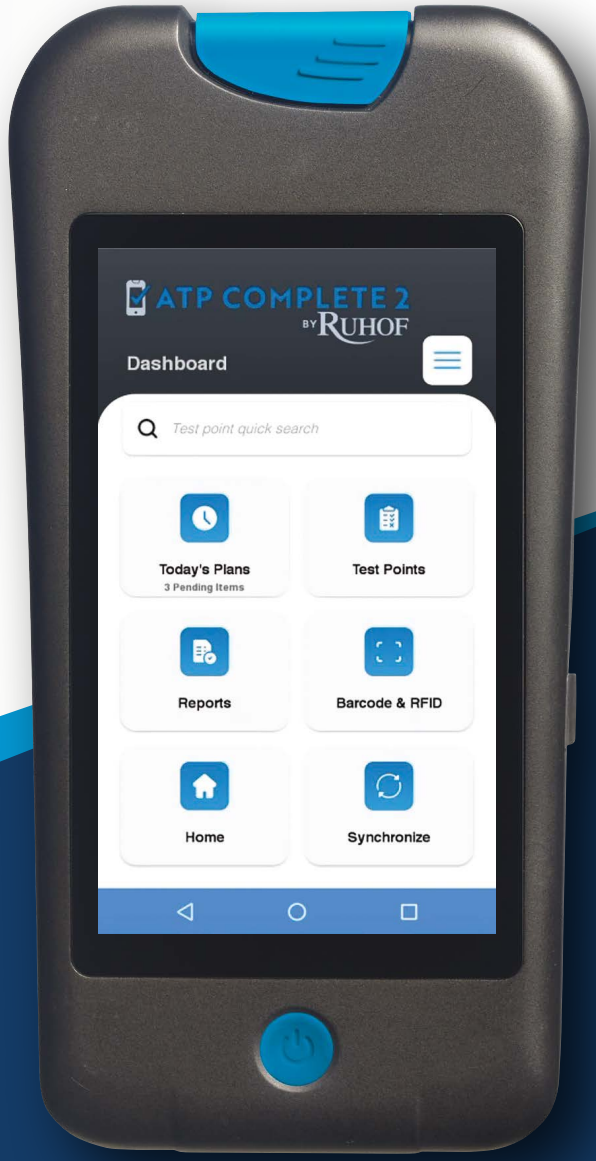

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Healthcare Burnout

Are You Too Burned Out to Even Read This?

I've long empathized with healthcare workers, and then the pandemic happened, and my empathy multiplied exponentially. You were already people from whom too much was asked, and then as a society we tripled down in asking too much of you.

Anytime I hear about medical professionals experiencing healthcare burnout, I think, "Of course. Why wouldn't they?"

The list of what would burn you out is way too long. Just a smattering:

- Long hours
- Rude patients
- Insurance companies
- Bureaucracy
- Staff shortages
- Working on your feet all day
- Having to continually renew your education
- Rushed appointments
- Cyberattacks
- Pressure
- Problematic health systems
- Occupational hazards
- Fatigue

I have no idea how each of you manages to care for patients and/or equipment (technicians) all day and then come home and care for others. Even if you don't provide care outside work, it's still hard to do your job and then care for yourself, your home, and maybe some pets.

I simply couldn't do what you do—for many reasons, one being how high-stakes your profession is. For instance, let's say I make a mistake in my job. I could cause people to receive the wrong information, and there could be consequences, but no one will die. Let's say a healthcare professional has a bad day and makes a mistake: That mistake could kill someone.

My mom was a nurse, my husband's parents are nurses, a great many others on my husband's side are in healthcare, and I have several friends who are doctors or physician's assistants. Through them, and you, I see the many conditions that might lead healthcare professionals to experience burnout.

Because healthcare burnout is increasing, we've compiled a cover package on this topic in this magazine issue. If you're feeling overwhelmed, I hope the articles help you feel less alone. For better or worse, when it comes to burnout, you're in good company. And if none of this applies to you and you're still bright-eyed and bushy-tailed, three cheers to that!

To find the burnout article, visit p. 18, and may you find the rest you need, burned out or fresh-eyed.

Michelle Beaver

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Simply One of the Best

Athens-Clarke County Endoscopy Center in Athens, Georgia

By Lisa Hewitt, MA

At Athens-Clarke County Endoscopy Center in Athens, Georgia, the focus is on teamwork and excellent patient care. Lynn Tobin, endoscopy manager, said the team consists of a receptionist, four endoscopy techs, three endoscopy RNs, one endoscopy LPN, an endoscopy manager, four CRNAs, and four gastroenterologists.

"Our center performs colonoscopies, esophagogastroduodenoscopy (EGD), esophageal dilations, and Bravo pH Test. We have four pre-op bays, four post-op bays, two procedure rooms, and one scope room," Tobin said.

Gastroenterologists include Doctors Kelly Grow, Lori Lucas, Erik Person and Bradley Shepherd, all of whom are board-certified. A member of United Digestive, Athens-Clarke was named one of the highest performing ambulatory surgery centers (ASCs) in the country by U.S. News & World Report. Factors used to evaluate ASCs included whether patients

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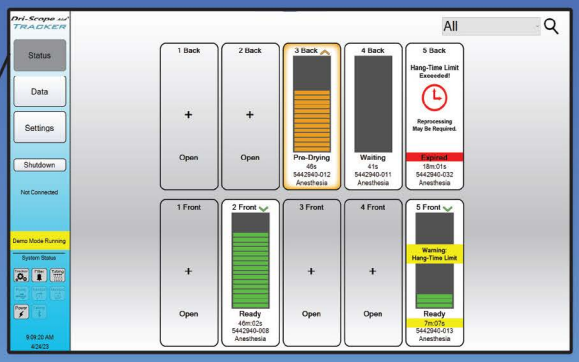

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avoided complications like ER visits and unplanned hospitalizations.

"Everyone works together as a team to ensure that we are providing the best care to our patients," Tobin said. "We share the same goals, and everyone is required to maintain competency and practice according to the standards of care. Our staff is very versatile, as each staff member is cross-trained in multiple areas of the center."

They're a team personally as well as professionally. Tobin described the group as "very close," detailing how team members check in on each other and celebrate personal events, holidays and milestones. "On one occasion, one of our endoscopy nurses used his personal day off to support the staff by smoking barbecue and bringing it for the team to enjoy a nice lunch," said Betsy Hefner, endoscopy LPN.

As with all teams, Tobin admitted it hasn't always been smooth sailing. "We have had some staffing challenges in the past, which brought us all closer as a team because we had to support each other to ensure that we continued to provide excellent care to our patients." Tobin said communication is key. Team members are welcome to share ideas for improvement, ensuring that the team is able to provide patients the best possible care.

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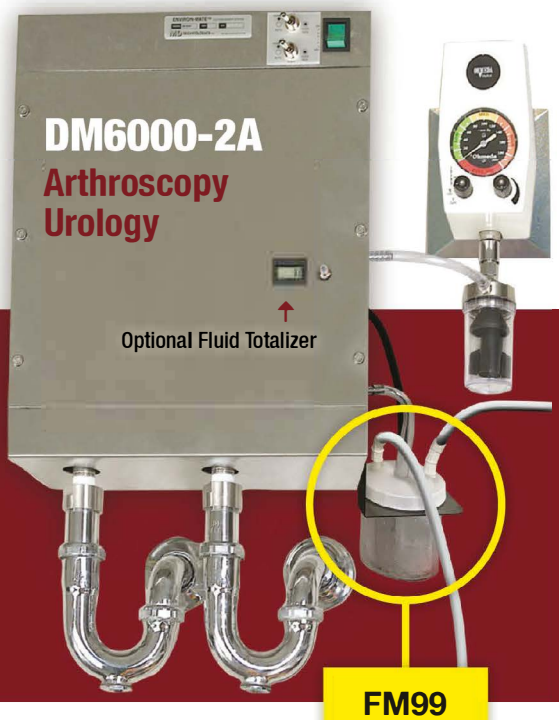

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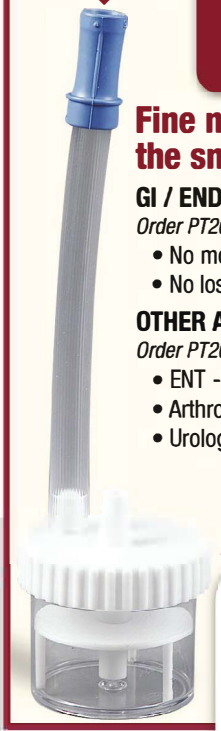

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Personal Protective Equipment

PPE Advice for Processing Flexible Endoscopes

By Nancy Chobin, RN, AAS, ACSP, CSPM, CFER

The Occupational Health and Safety Administration's regulation on occupational exposure to bloodborne pathogens requires employers to identify employees and tasks that might put them at risk for exposure to blood and/or other body fluids, and to take appropriate measures to protect them from exposure. The regulation includes requirements for appropriate personal protective equipment (PPE). The type of PPE might vary, according to the tasks to be performed.

According to OSHA, however, the PPE selected must "not permit blood or other potentially infectious materials to pass through or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used" (29 CFR 1910.1030).

The use of PPE is not optional. It is the employer's responsibility to provide appropriate PPE, ensure that it is used, and document and investigate any failure to comply. All employees should be trained in the appropriate protective attire to be worn for the tasks they perform and also in the potential health and disciplinary consequences if they fail to do so. This training should be documented and routinely verified as part of departmental competencies.

Recommended PPE

The Emergency Care Research Institute's 2022 List of Healthcare's Top Ten Hazards include two that are specific to endoscopy: when poor duodenoscope processing ergonomics and workflow in endoscopy puts healthcare workers at risk; and when disposable gowns with insufficient barrier protection puts wearers at risk. Because of the potential for soaking clothing, splashing and the aerosolization of fluids and contaminants, and the consequent need to protect employees from exposure to both microorganisms and chemicals, appropriate PPE in the scope-cleaning area includes the following items per ANSI/AAMI ST91:

- **General-purpose utility gloves** and a liquid-resistant covering with sleeves (for example, a backless gown or surgical gown). Processing personnel should use a glove style that prevents contact with contaminated water. Gloves that are too short, do not fit tightly at the wrist or lack cuffs might allow water to enter when the arms move up and down. Many companies offer longer length (18-inch) decontamination gloves. Exam gloves should not be used for decontamination. General-purpose utility gloves fitted at the wrist or above should be used. Note: The gloves should be designated as "decontamination gloves," which are thicker and provide additional support from punctures.

- **A long-sleeved, impervious (fluid-proof) or fluid-resistant gown or jumpsuit**. When there is a possibility that attire can become soaked with blood or other potentially infectious material, as when items are being washed by hand, a Level 4 gown (as defined by ANSI/AAMI PB70) should be used.

- **A fluid-resistant face mask and eye protection.** PPE used to protect the eyes from splash could include goggles, full-length face shields, or other devices that prevent exposure to splash from all angles. Note: Masks with visors do not meet these criteria because a splash could occur from the top of the visor.

- **Fluid-protective shoe covers with slip-proof bottoms.** Shoe covers are recommended when there is the potential for shoes to become contaminated with blood or other body fluids. Shoe covers should be removed before leaving the scope-cleaning area in order to contain microorganisms and other contaminants (OSHA 29 CFR 1910.1030).

- **Hearing protection.** If noise levels exceed OSHA-permissible levels for the OSHA-designated time duration, hearing protection should be available (29 CFR 1910.95 g).

Reusable gloves, glove liners, aprons and eye-protection devices should be decontaminated according to the manufacturer's written instructions for use (IFU) at least daily and between employees. If the integrity of an item has been compromised, it should be discarded. Personnel should remove torn gloves and thoroughly wash their hands before donning new gloves. They should remove PPE worn during processing and wash their hands. Before handling disinfected endoscopes, personnel should don clean PPE (ANSI/AAMI ST91).

Before leaving the cleaning area, employees should remove all protective attire, being careful not to contaminate the clothing beneath or their skin. Then they should perform appropriate hand hygiene. Designated areas with the necessary containers should be provided for donning and removing protective attire (ANSI/AAMI ST91). PPE should be located at the entrance to the decontamination area so staff and visitors can don it without walking through the area. In addition, PPE should be protected from contamination by keeping it in closed carts or bins.

A study by Kang, et al., discovered that healthcare personnel contaminated themselves in almost 80 percent of PPE

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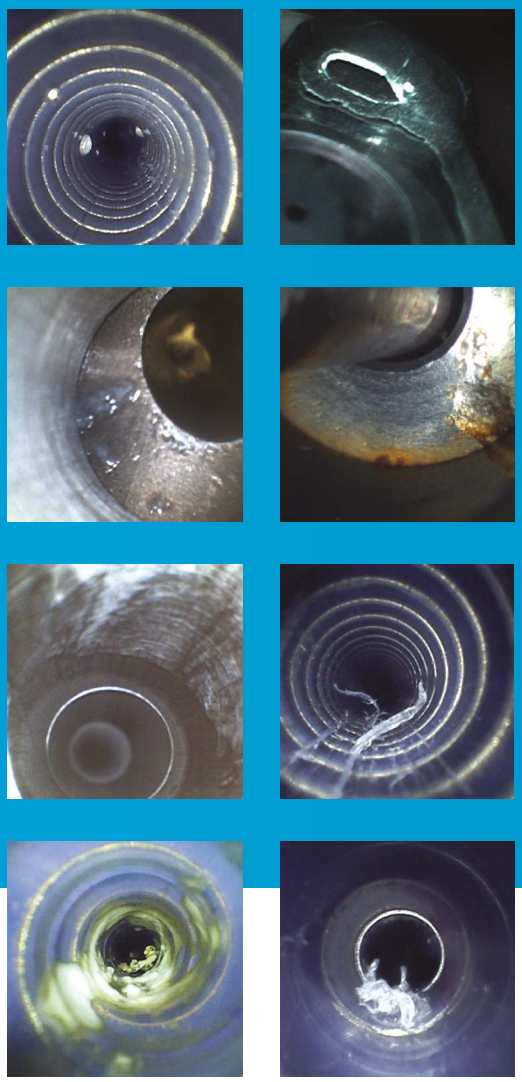

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simulations—an astonishing statistic. Therefore, endoscopy departments should establish competencies for donning and doffing PPE. Training and annual competency assessments should be documented in each employee's record.

Donning (Applying) PPE

The CDC offers a poster with instructions for donning and doffing PPE. It does not include shoe covers, as the poster was developed during the Ebola outbreak; however, shoe covers were added in this listing below. When applying PPE, the recommended sequence is based largely on CDC guidelines.

1) Shoe covers should be donned first. Then wash your hands.

2) Gown should be donned next.

- To don a gown, first select the appropriate type for the task and the right size.
- The gown should open in the back. Secure the gown at the neck and waist.

3) Mask should be put on next; ensure it is properly adjusted to fit.

- Some masks are fastened with ties, and others with elastic. If the mask has ties, place the mask over your mouth, nose and chin. Fit the flexible nosepiece to the form of your nose bridge. Tie the upper set of ties at the back of your head and the lower set at the base of your neck.

4) Goggles or face shield should be donned next.

- Position either the goggles or the face shield over your face and/or eyes and secure it to your head using the attached earpieces or headband. Adjust it to fit comfortably. Goggles should feel snug but not tight. *Note: Safety eyeglasses are not a substitute for goggles or a face shield.*

5) Gloves are donned last.

- Insert each hand into the appropriate glove and adjust as needed for comfort and dexterity. If you are wearing an isolation gown, tuck the gown cuffs securely under each glove to provide continuous barrier protection for your skin.

Doffing (Removing) PPE

To remove PPE safely, it is first necessary to identify which sites are considered "clean" and which are considered "contaminated." In general, the shoe covers, the outside front and sleeves of the gown, and the outside front of the mask and goggles or face shield are considered contaminated, regardless of whether there is visible soil. The outside of the gloves is also contaminated. The areas that are considered clean are the parts that will be touched when removing PPE: the inside of the gloves; the inside and back of the gown, including the ties; and the ties, elastic or earpieces of the mask and goggles or face shield. The sequence for removing PPE is intended to limit opportunities for self-contamination.

1) Shoe covers are considered to be the most contaminated pieces of PPE and are therefore removed first.

2) Gloves are removed next. With a gloved hand, grasp the opposite glove and peel the glove off. Hold the removed glove in the gloved hand. Carefully slide the fingers of the ungloved hand under the top of the remaining glove (at the wrist) and peel that glove off over the first glove removed. Discard the gloves.

3) Goggles or face shield should be removed next. Because the outside of the goggles or face shield is considered contaminated, remove goggles or face shield by grasping the earpieces or headband. Using ungloved hands, grasp the "clean" earpieces or headband and lift them away from your face. If the goggles or face shield are reusable, place them in a designated receptacle for subsequent reprocessing. Otherwise, discard them in the designated waste receptacle.

4) Gown should be removed next. Unfasten the gown ties with the ungloved hands. Slip your hands underneath the gown at the neck and shoulder and peel away the gown from your shoulders. Slip the fingers of one hand under the cuff of the opposite arm. Pull your hand into the sleeve, grasping the gown from the inside. Reach across and push the sleeve off the opposite arm. Fold the gown toward the inside and fold or roll it into a bundle. (Only the "clean" part of the gown should be visible.) Place the gown into a waste or linen container, as appropriate.

5) The mask is next. Do not touch the front of the mask to remove it. Untie the bottom tie and then, using the upper tie, lift off the mask. Discard it in a waste container.

6) Although not considered part of the PPE, the head cover should be removed last before leaving the decontamination area. Lift the head covering off the head by grasping it in the center and lifting it upward. Discard in a waste container.

7) Thoroughly wash hands.

Personnel should remove PPE and head coverings when they leave the scope-cleaning room and then immediately wash their hands. A poster depicting the process of donning and doffing PPE can be obtained on the CDC website (www.cdc.gov) and placed in a prominent space in the endoscopy department. The type of PPE should be based on the potential for exposure. PPE samples should be obtained before purchasing or changing to another type of PPE to ensure it meets the requirements. However, the correct procedures for donning and doffing PPE are just as important and need to be addressed for staff safety.

Nancy Chobin, RN, AAS, ACSP, CSPM, CFER, is the president and CEO of Sterile Processing University, LLC, an on-line education and continuing education website (www.spdceus.com). Reach her at Nancy@SPDCEUS.com.

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Merci du Complément

The Best Alternative to Alternative Medicine

By Patricia Raymond, M.D., FACG (retired)

Yarg.

I hate "alternative medicine." Alternative medicine suggests that the patient has turned their backs on conventional/Western/boring medicine and has headed out on a fantastical pathway of crystals, oils and unresearched herbals. As a Western medicine practitioner, I respect that my medical care is backed with peer-reviewed articles. I also recognize the validity of Eastern medicine, with its centuries of empiric evidence, and more recently, published data as well. And I heartily embrace complementary medicine—more on that in a bit.

My dislike—nay, hatred—of alternative medicine comes via the deaths of two friends. Early in my gastroenterology career, my roommate, Stephanie, had found a breast lump. After a non-diagnostic needle biopsy of the mass, she elected to "go alternative," although her medical team strongly encouraged a second biopsy via ultrasound guidance. She drank hot potions of stewed balls of something noxious (that I swear, based on the smell, was manure) and juiced alfalfa and carrots—half our shared refrigerator was full of bags of carrots and sod. I bit my tongue firmly and was ready to offer medical insight and advice when asked—yet she didn't ask. The end of her story was death by metastatic breast cancer, despite last-ditch efforts of surgery, radiation and chemotherapy.

Another vibrant friend, Sandy, died of "dunno what." She began to waste away, weakness progressing and eventually rendering her unable to walk and confined to her second-floor bedroom. She continued to see her alternative medicine practitioner, who treated her with oils and crystals, but without any Western medicine testing or evaluation. Was it autoimmune? Cancer? My differential diagnosis without any exam or testing was vast. I visited Sandy with a mutual friend mid-course, and the changes wrought by her illness were shocking. She also died, but I continue my belief that the culprit may have been manageable or curable with the application of science.

However, I have no beef with—and even joyously embrace—complementary medicine. The American Heritage Dictionary defines complementary medicine as "a method of healthcare that combines the therapies and philosophies of conventional medicine with those of alternative medicines, such as acupuncture, herbal medicine, and biofeedback."

In fact, finding complementary medicine practices that have medical science to support them gives me a head rush. They are a positive action that you as patient might adopt, with little chance of a downside, side effect or complication—and you get to assume some measure of ownership of your health. There are a slew of data-supported complementary practices; here are some of my favorites that you might incorporate into your life as a healthcare professional, or into your patients' or family's lives.

Probiotics and Cranberries to Reduce Chronic UTI

Use of probiotics, specifically lactobacillus rhamnosis and lactobacillus reuteri, have been demonstrated in the spinal-cord injury population requiring intermittent catheterization, and in the mainly female recurrent/chronic UTI population, to reduce the bacterial counts (mainly gastrointestinal E. coli), reduce adherence of pathogenic bacteria to the urinary mucosa, reduce recurrent infections, and reduce antibiotic resistance of the pathogenic bacteria.

The data isn't perfect,[1,2,3] but I was moved to go online and put Mom on a daily probiotic of lactobacillus rhamnosus GR-1 and lactobacillus reuteri RC-14 strains for her chronic multidrug-resistant UTI. Oh, and her daily fresh cranberry orange relish that Mom swears by helps too, just as she said. The recipe follows.

Nancy Raymond's Cranberry Orange Relish Recipe

- 3 cups fresh or frozen cranberries
- 2 navel oranges, washed, unpeeled and quartered
- 1 cup sugar, or less to taste (I prefer about 1/3 cup—it's easy to add more later)
- 1/2 cup pecans, finely chopped

Add the oranges to a food processor and whiz until they are finely ground to pulp. Add the cranberries and sugar, and pulse until just coarsely ground. Remove to a storage bowl and stir in the pecans. Cover and refrigerate.

Dietary Strawberries for Osteoarthritis of the Knees in Overweight Postmenopausal Women

Yikes. The title says it all.

However, in Schell's elegant, double-blind crossover study, participants drank either faux strawberry milkshakes or those

made with freeze-dried strawberries (equivalent to about a pound of berries daily) for 12 weeks, with a two-week washout period. The results showed significant decrease of serum biomarkers of inflammation and cartilage degradation [interleukin (IL)-6, IL-1β, and matrix metalloproteinase (MMP)-3] after daily strawberry ingestion. Eating strawberries didn't just improve labs; the berries also significantly reduced constant, intermittent and total pain and improved a quality-of-life assessment score (HAQ-DI).

Some studies suggest that strawberries reduce the proinflammatory and glucose surge effect when acutely taken with a non-nutritious meal and can downgrade the histologic grade of dysplastic esophageal lesions, which your Barrett's patients might like to hear.[4,5]

Yup, I'm enjoying my daily berries, be they fresh, frozen, or freeze-dried from Trader Joe's. Nope, no untoward side effects so far. (Hint: they're strawberries.)

Boswellia (Frankincense) for Knee and Hip Pain as an Alternate NSAID

Here's a particular favorite: Boswellia serrata, an extract from the frankincense plant, is an anti-inflammatory that works via a different pathway that the standard NSAIAs. It's slow in onset (don't expect the rapid relief you can achieve with a dose of ibuprofen); it seems to reach efficacy in about five to seven days, in my personal experience. As it follows a different pathway, it doesn't cause the gastrointestinal irritation and ulcers common with other anti-inflammatories.

Studies show efficacy pain relief in knee and hip osteoarthritis,[6,7,8] and it's been trialed for pancreatitis and for treatment-induced swelling by irradiation of brain tumors, among other inflammatory processes. In the osteoarthritis studies, they reported a reduction in C-reactive protein, and in radiographs, improved knee joint gap and reduced osteophytes.

Researchers believe it may have efficacy in a plethora of chronic diseases, which raises a major red flag for me: "chronic diseases like arthritis, diabetes, asthma, cancer, inflammatory bowel disease, Parkinson's disease, [and] Alzheimer's." This gets a little Middle Earth to me, as in "One Ring to rule them all, One Ring to find them, One Ring to bring them all, and in the darkness bind them" (JRR Tolkien). A worrisome overpromise, in my opinion.

When I suggest the use for arthritis pain and stiffness, target dosage is 600 milligrams daily, and I suggest initial trial use for a month. It is difficult to determine the absence of discomfort, so at the end of month one, I recommend stopping the Boswellia. In most, the missing discomfort is uncovered after several days of abstinence. Useful information for your arthritis-ridden ulcer patients, no?

Turmeric for Ulcerative Colitis Maintenance of Remission

I'm passionate about this complementary move, not only for my erstwhile patients, but also because a family member was recently diagnosed with ulcerative colitis. I frequently suggested to my patients that turmeric had a studied beneficial effect on their colitis course. In this recent meta-analysis of seven turmeric studies, combining use of curcumin with mesalamine in mild-to-moderate UC yields both a superior clinical and endoscopic response.[9] Yes, it actually works "for realz."

Their analysis was:

- Odds ratio (OR) for clinical remission with curcumin was 2.9
- OR for a clinical response with curcumin was 2.6
- OR for an endoscopic response and/or remission with curcumin was 2.3

Yes, that's makes success about two to three times more likely for your patients, no matter how you've defined success.

Type 2 Diabetes and the Vegan Diet

Although the vegan diet is rich in high-fiber carbohydrates, this whole-food, plant-based diet is now widely understood to prevent, treat and even reverse Type 2 diabetes.[10] And the complications, cardiac and renal disease and diabetic neuropathy all also improve with a vegan diet.

Why wouldn't you offer this information and the support to make this choice for your diabetics?

There are uncountable others—it's worth going to Dr. Google to see what's the buzz, and then into PubMed and entering your disease du jour and seeing what complementary agents have been studied. If you feel moved to add some complementary medicine to your practice or your life, peruse the medical literature yourself and weigh the risks and benefits. For me, the risks (usually a modest expense) versus the benefits (somewhat soft data, but data nonetheless) make complementary medicine worth trying.

After all, what's the alternative?

Patricia Raymond, MD, FACG, is a retired gastroenterologist and educator savoring the third third of her life in coastal Virginia. She completed her gastroenterology fellowship at the Medical College of Virginia oh, so long ago, and after a 30-year GI practice in southeastern Virginia and thriving professional-speaking and broadcast career, is a popular provider of second opinions in gastroenterology for 2nd MD, now educating people one by one. You will likely find her in her greenhouse or gardens, either propagating fig trees or growing much of her vegan diet organically with donated rabbit poo.

For article references, visit www.EndoProMag.com.

Health-Worker BURNOUT

Surgeon General Advisory Sounds the Alarm

By EndoPro Magazine staff

It's a safe assumption that most people who go into healthcare enter the field to help people. They know the profession is difficult, high pressure, hard on the body, and that there are occupational risks. However, the average healthcare worker probably doesn't start their career thinking they'll end up overwhelmed and overworked, and often feeling unsupported. And yet, unfortunately, that's where a great many medical professionals have arrived.

The result: Burnout.

Recently, United States Surgeon General Dr. Vivek Murthy issued a surgeon general's advisory highlighting the urgent need to address the health-worker burnout crisis across the country. Health workers—including physicians, nurses, community and public-health workers, nursing aides, etc.—have long faced systemic challenges, such as burnout, in the healthcare system. The COVID-19 pandemic further exacerbated burnout, with many workers risking and sacrificing their own lives in the service of others while responding to the public health crisis.

The surgeon general's advisory addressing health-worker burnout lays out recommendations to address the factors underpinning the crisis, improve health-worker well-being, and strengthen the nation's public health infrastructure.

"At the height of the COVID-19 pandemic, and time and time again since, we've turned to our health workers to keep us safe, to comfort us, and to help us heal," said U.S. Secretary of Health and Human Services Xavier Becerra. "We owe all health workers—from doctors to hospital custodial staff—an enormous debt. And as we can clearly see and hear throughout this surgeon general's advisory, they're telling us what our gratitude needs to look like: real support and systemic change that allows them to continue serving to the best of their abilities."

The nation's health depends on the well-being of our health workforce, said Surgeon General Murthy in his advisory. "Confronting the long-standing drivers of burnout among our health workers must be a top national priority. COVID-19 has been a uniquely traumatic experience for the health workforce and for their families, pushing them past their breaking point. Now, we owe them a debt of gratitude and action. And if we fail to act, we will place our nation's health at risk. This surgeon general's advisory outlines how we can all help heal those who have sacrificed so much to help us heal."

Even before the COVID-19 pandemic, health workers were experiencing alarming levels of burnout, broadly defined as a state of emotional exhaustion, depersonalization, and low sense of personal accomplishment at work. Burnout can also be associated with mental-health challenges such as anxiety and depression.

In 2019, the National Academy of Medicine (NAM) reported that burnout had reached "crisis" levels, with up to 54% of nurses and physicians, and up to 60% of medical students and residents, suffering from burnout. The pandemic has since affected the mental health of health workers nationwide, with more than 50% of public health workers reporting symptoms of at least one mental-health condition, such as anxiety and depression, and increased levels of post-traumatic stress disorder (PTSD).

Health-worker burnout not only harms individual workers, but also threatens the nation's public health infrastructure. Already, Americans are feeling the impact of staffing shortages across the health system in hospitals, primary care clinics, and public health departments. With more than half a million registered nurses anticipated to retire by the end of 2022, the U.S. Bureau of Labor Statistics projects the need for 1.1 million new registered nurses across the U.S. Further, within the next five years, the country faces a projected national shortage of more than 3 million low-wage health workers.

The Association of American Medical Colleges (AAMC) projects that physician demand will continue to grow faster than supply, with the most alarming gaps occurring in primary care. Health-worker burnout affects the public's ability to get routine preventive and emergency care, and our country's ability to respond to public health emergencies.

Consider the following from a U.S. Department of Health and Human Services webpage: "The realities of our healthcare system are driving many health workers to burnout. They are at an increased risk for mental-health challenges and choosing to leave the health workforce early. They work in distressing environments that strain their physical, emotional, and psychological well-being. This will make it harder for patients to get care when they need it."

HHS wrote, "Workplace systems cause burnout among health workers. There are a range of societal, cultural, structural, and organizational factors that contribute to burnout among health workers. Some examples include: excessive workloads, administrative burdens, limited say in scheduling, and lack of organizational support."

According to Dr. Murthy, we should all be on the lookout for detecting burnout in our colleagues and the medical professionals we know in our personal lives. "Check in with the health workers you know," Dr. Murthy advised in a Q&A on the HHS website. "Help them stay connected. Ask them how they are doing and how you can help them. Pay attention to warning signs that indicate that they may need professional support from a mental health provider. Common behaviors to watch out for are: increased irritability, withdrawal from friends and family, impaired judgment, excessive alcohol or substance use, reduced ability to manage emotions and impulses, and decreased personal hygiene."

To help address burnout on a wide scale, topline recommendations from the surgeon general's advisory include:

- Transform workplace culture to empower health workers and be responsive to their voices and needs. We can begin by listening to health workers and seeking their involvement to improve processes, workflows and organizational culture.
- Eliminate punitive policies for seeking mental-health and substance-use-disorder care.
- Ensure that on-demand counseling and after-work care are more accessible to health workers to promote and preserve their well-being.
- Protect the health, safety and well-being of all health workers.

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- Provide living wages, paid sick and family leave, rest breaks, evaluation of workloads and working hours, educational debt support, and family-friendly policies (including childcare and care for older adults) for all health workers.

- Ensure adequate staffing—including surge capacity for public health emergencies—that is representative of the communities they serve. This is critical to protect and sustain health workers and communities.

- Organizations, communities and policies must prioritize protecting health workers from workplace violence and ensure that they have sufficient personal protective equipment. In a national survey among health workers in mid-2021, eight out of 10 experienced at least one type of workplace violence during the pandemic, with two-thirds having been verbally threatened, and one-third of nurses reporting an increase in violence compared to the previous year.

- Reduce administrative burdens to help health workers have productive time with patients, communities and colleagues. One study showed that on average, for every hour of direct patient care, a primary care provider will spend two hours a day on administrative tasks. That is time that could be spent with patients, in the community, and building relationships with colleagues, which is essential to strengthening the health and well-being of both health workers and patients.

- Prioritize social connection and community as a core value of the healthcare system. This enhances job fulfillment, protects against loneliness and isolation, and ultimately improves the quality of patient care. Include peer and team-based models of care to strengthen collaboration and create opportunities for social support and community.

- Invest in public health and our public health workforce.

- Diversify and expand the public health workforce and improve disease surveillance systems to help address social determinants of health and health inequities, counter health misinformation, and strengthen partnerships across clinical and community settings.

Until we address at least some of the above problems, we can expect healthcare worker burnout to increase and patient satisfaction to move in the opposite direction.

Most of the above article is part of a recent surgeon general's advisory. These advisories are public statements that call the American people's attention to a public health issue and provide recommendations for how it should be addressed. Advisories are reserved for significant public-health challenges that need immediate attention. To view the advisory in full, visit https://www.hhs.gov/surgeongeneral/priorities/health-worker-burnout/index.html

Physician Shortage

A Problem That Exacerbates Healthcare Burnout

By Adedayo Akande, MBA, EdD

Shortages are rampant throughout healthcare staffs—so extreme that there is a projected shortage of more than three million essential low-wage health workers in the next five years, according to the U.S. Department of Health and Human Services. The problem, however, doesn't stop with lower-wage positions: There is also a huge shortage of physicians, a problem that contributes to overall healthcare burnout.

According to the Association of American Medical Colleges,[1] the United States could see a shortage of 54,100-139,000 physicians by 2033. Many reasons for the shortage are being bandied about, but most experts surmise that the requirements and journey to becoming a physician play a large part in the problem. On top of this, there is currently only a 37% acceptance rate[2] for premed students seeking entrance to medical school. A main reason for this low acceptance is a high MCAT failure rate. With several causes for the physician shortage, schools, students, and medical-industry experts will have to address the issue soon if they hope to curb it.

Delays in Care

Anecdotal evidence is mounting about the long waits to see a specialist, or issues regarding family physicians not taking new patients. During the recent RSV and influenza[3] spike among children, many people reported waiting for hours—sometimes over a day—in emergency rooms to have their children seen by a staff worn thin.

Delays in care—whether prompted by the doctor shortage or other factors like affordability—are already having some devastating effects. Mortality rates in the United States are higher than those of peer countries, and the overall life expectancy[4] of the U.S. population has dipped. Some may be quick to blame COVID-19 for these statistics, but studies show[5] that the writing was on the wall for the U.S. long before the pandemic. Chronic health conditions such as diabetes have become more prevalent and require a lot of the healthcare industry's already strained resources. More family physicians are needed for preventative care

and specialists are needed for regular targeted follow-ups. All of this exacerbates the physician shortage.

The Road to Becoming a Doctor

On average, a medical student can expect to pay between $157,000 and $254,000[6] for medical school. Add to that any undergraduate cost, and the investment can be out of reach for many students. Even though physicians can eventually expect higher-than-average salaries, massive student-loan debt can cripple medical students financially for many years after graduation and residency.

Admissions are historically competitive, and the current ratio of applicants to admissions[7] is about 16:1. Although graduation rates are relatively high for medical-school students (likely due to the overall investment), standing at roughly 81% to 84%[8] overall, there is no guarantee that a student will complete their residency after they graduate.

According to studies, an average of 55%[9] of doctors complete their required residency programs. This means just under half of would-be doctors do not go on to practice, contributing greatly to the supply-and-demand problem in the medical field. Even as the number of medical school graduates has risen, an outdated and ineffective residency-application software program was filtering out talented students, leaving many without residencies and deep in debt. According to one study, roughly 10,000 "chronically unmatched" doctors in the United States are floundering without jobs or residency appointments, being kept away due to a technical discrepancy. Students who study abroad fare even worse, with only 61%[10] of those students eventually matching to a residency program in the United States.

This issue of discriminatory and technically inept practices in the matching process contributes significantly to the problem of physician shortages. Talented doctors are being kept from practicing, even if they are able and willing to do so. Without a residency, doctors cannot qualify for a medical license. Still, residency directors continue to defend the idea of software filters that remove candidates for reasons such as the length of time between medical school graduation and residency application, or a foreign-school diploma.

With thousands of applicants for a set number of residency placements, directors are counting on this software to do the legwork of reading applications and sorting out who should be disqualified—even if there is no merit to the disqualification.

Solving the Problem

If the physician shortage is going to be solved, those with the power to change it will have to start thinking outside the box. No single solution will put the country back on the right track, but a number of answers can certainly help lessen the blow.

The issue of supply and demand concerning residency spots should be one of the first issues addressed. The need for increased funding for hospital systems to allow them to open more residency spots has already been discussed among government and private medical groups. However, the small changes brought by the trickle of funding have not kept up with the population demands in the medical field. Increasing numbers of graduates apply for residencies each year, and there need to be more openings for them.

With the cost of medical school remaining one of the main contributors to the physician shortage, government officials have also proposed federal funding programs that would help alleviate some of the cost burden for new doctors.

Technology is increasing the availability of doctors, especially telemedicine. Further investment and innovation in medical technology will increase access to doctors, thereby allowing more doctors to practice with a wider patient base. Currently, telemedicine is being used to ease burdens placed on overscheduled physicians, especially in urgent-care facilities and emergency rooms.

Many medical organizations are expanding the available care team for patients. Millions of patients still regularly choose to see nurse practitioners or physician assistants as their primary medical contact. This multidisciplinary approach is helping many healthy systems serve more patients.

The concept of international medical schools needs to be revisited and rethought, as well. Residency programs regularly discriminate against students who received degrees from international schools, even if those schools carry the same credentials and stringent requirements as schools in the U.S. If we are going to solve the doctor shortage crisis, we need to give students broader options.

Going Forward

The physician-shortage issue will not be solved overnight. However, many government entities, healthcare facilities, and schools have made great strides in dealing with this issue head-on, helping doctors connect with patients. The more work that is done to curb the physician shortage, the better health outcomes will be. Therefore, mitigation strategies benefit everyone in the United States—not just hopeful doctors. The time to act is now, and with a multifaceted approach to the supply-and-demand problem, significant positive changes will arise.

Dr. Adedayo Akande is a Chicago-born, Antigua-raised businessman and academic. He is the chairman and president of the Caribbean-based Medical University, the University of Health Sciences Antigua. During his tenure as president, UHSA successfully moved online during the pandemic, and Akande developed several international partnerships with hospitals, universities and high schools, creating pathways for interested students to pursue medicine.

Survey:

CEOs Cite Workforce Challenges as a Top Concern

Workforce challenges are a big part of healthcare burnout.

Indeed, "workforce challenges" ranked first on the list of hospital CEOs' top concerns in 2022, according to the American College of Healthcare Executives' annual survey of issues confronting hospitals. The survey results were released in February 2023.

The category of workforce challenges includes personnel shortages. This marks the second year in a row that workforce or personnel challenges has been the top-ranked issue. Before that, financial challenges ranked first in the survey for 16 consecutive years.

"Hospitals need to take both long- and short-term measures to address critical workforce issues so they can continue to provide safe, high-quality care now and in the future," said Deborah Bowen, FACHE, CAE, president and CEO of ACHE.

"Longer-term solutions include strengthening the workforce pipeline through creative partnerships, such as those with colleges to grow the number of nurses and technicians," Bowen added. "More immediate solutions include supporting and developing all staff, building staff resilience, organizing services to reflect the realities of the labor market and exploring alternative models of care."

In the survey, ACHE asked respondents to rank 11 issues affecting their hospitals in order of how pressing they are and to identify specific areas of concern within each of those issues.

The American College of Healthcare Executives is an international professional society of more than 48,000 healthcare executives who lead hospitals, healthcare systems and other healthcare organizations. ACHE's mission is to advance their members and healthcare management excellence.

Burnout Solutions

Can Psychology Help With Stress?

By Dr. Janna Koretz

Millions of people suffer daily from burnout and work-related anxiety, especially in high-pressure careers such as healthcare. In 2019, the World Health Organization recognized burnout as an "occupational phenomenon" that deserves priority research focus. A 2023 Work

In America survey by the American Psychological Association found that more than half of the U.S. working population is experiencing stress-related symptoms of burnout, such as emotional exhaustion, lowered productivity, and a desire to quit.

Many professionals—in healthcare, for instance—feel stuck, with no way out. Typical coping tools don't always cut it—we've all tried to eat more plants, do more exercise, have more social time. It seems the stress is too much, even with the aforementioned remedies.

One reason these tools aren't always useful is because we haven't adequately defined the problem. "Stress" is an overloaded term; it's a good idea to dig deeper into what that actually means for each individual. That way, we can apply the right evidence-based interventions. Psychological science has some powerful tools at its disposal, but the tools need to be deployed in the right context to be helpful.

Let's look at a specific example, drawn from my team's clinical experience treating those in high-pressure careers: in this case, the medical field. "Ted" was in his second year as an attending orthopedic surgeon in a major hospital system. He had made it through competitive and selective programs in college, medical school, residency and a fellowship. He chose orthopedics because he loved the feeling of "fixing problems," such as by helping people get healthy and back on their feet.

But suddenly, almost overnight, Ted felt that his interest in his work had disappeared. He was exhausted, deeply unmotivated, and apathetic in a way he had never been before. Reading up on the science of stress and burnout, he thought maybe he needed to exercise more, get out of the house, or catch up from years of sleep deprivation. Shifting into the same problem-solving mode that had gotten him this far in life, he carved out time for the gym, tried to go to bed a half hour earlier each night, and cut out processed foods (a real challenge when most of his meals came from the hospital cafeteria).

It didn't help. At first glance, Ted seemed like he was suffering from classic burnout symptoms related to work stress. In our sessions, though, it emerged that the driving force behind this mindset shift was more fundamental than that.

Ted had never wondered why "fixing" his patients' problems was so motivating for him. But when he began to dig into his personal values in our sessions (using the techniques of Acceptance and Commitment Therapy (ACT)), he realized that his underlying motivation was to demonstrate his own competence—to others, but also to himself. Ted was struggling with significant impostor syndrome, which he self-medicated by choosing a field where he felt he could demonstrate concrete and direct impact. However, the field never truly satisfied his intellectual curiosity or emotional needs.

In fact, Ted had always been fascinated by oncology, but had built it up as being somehow above his skills and capabilities—an inaccessible specialty filled with MD/PhDs and biochem geniuses. He worked on his cognitive distortions through Cognitive Behavioral Therapy (CBT), and was able to address these automatic negative thoughts about his abilities. This therapy helped him gain an accurate reflection of himself that allowed him to pivot into a research field that incorporated both oncology and orthopedics. With this change in place, he found he was much more energized. His mood lifted and he was excited about going to work again.

Ted was able to use specific tools from psychological science to improve his situation, but only once he dug in to figure out why he was struggling. Gaining self-knowledge about your values, needs, and motivations lets you deploy a targeted combination of evidence-based approaches (such as CBT, ACT, and others), rather than relying on a one-dimensional diagnosis and treatment pattern.

This is a challenge we see again and again in our field: People want to know what "the science" says about fixing their problems, but it's far more complex and individualized than that. The only commonality is that self-discovery is the first step; before you can know which direction to go, you need to know where you are.

Dr. Koretz is the founder of Azimuth, a therapy practice specializing in the mental health challenges of individuals in high-pressure careers. She has spent over a decade helping her clients overcome their mental health issues by developing a unique understanding of industry-specific nuances. Koretz has been featured in many publications, including Harvard Business Review and the Wall Street Journal. In addition to therapy, Azimuth provides a set of free online tools that have helped tens of thousands of people, including the Burnout Calculator, Career Enmeshment Test, and Values Navigator.

Short-Bowel Syndrome

Teamwork Makes the Dream Work

By Lisa Hewitt, MA

Oh, the small intestine. It just doesn't get any press.

Unlike the more glamorous colon ("Don't forget your colonoscopy!") or the stomach ("Doc, the pain just won't go away"), the small intestine just quietly goes about its job, somewhat like the second assistant director on a film: unsung, but you can't get the job done without her.

Until something goes wrong.

In short bowel syndrome (SBS), something has gone radically wrong: The small intestine can no longer do its job. According to the Short Bowel Syndrome Foundation, the condition occurs when "parts of the intestine are removed surgically," making it more difficult for the remaining intestine to process food. In the journal Nutrition in Clinical Practice, Loris Pironi stated that the syndrome defines "the clinical feature associated with a remaining small bowel in continuity of less than 200 centimeters from the ligament of Treitz."

This disorder can manifest a host of uncomfortable and debilitating symptoms, including bloating and flatulence, vomiting, food allergies/sensitivities, cramps and heartburn, sleep deprivation and fatigue, irregular bowel habits, and difficulty maintaining weight, among others.

A severe potential effect of SBS is chronic intestinal failure (CIF), leading to symptoms such as diarrhea, electrolyte disturbances, malnutrition and dehydration. Pironi wrote that CIF is "defined as the 'reduction of gut function below the minimum necessary for the absorption of macronutrients and/or water and electrolytes, such that intravenous supplementation (IVS) is required to maintain health and/or growth' in a metabolically stable patient." This is known as parenteral nutrition, in which the patient receives part or all their nutrition through an IV, bypassing the digestive system.

When the lack of absorption isn't as severe, the patient may be classified with intestinal insufficiency (II), or intestinal deficiency (ID).

While SBS is relatively rare, affecting an estimated 10,000 to 20,000 people in the United States, the past 40 years have seen the number of cases double. Endo, et al., wrote in the journal Regenerative Therapy, "Treatment for SBS is mainly supportive, consisting of supplementation, prevention and treatment of complications, and promotion of intestinal adaptation. While development of parenteral nutrition and drugs promoting intestinal adaptation has improved clinical outcomes, the prognosis of patients with SBS remains poor. Intestinal transplantation is the only curative therapy, but its outcome is unsatisfactory."

The Short Bowel Syndrome Foundation has resources to help patients cope with the nutritional demands of their condition.

Deep in the Weeds

In a CME Outfitters webinar, Miguel Regueiro, M.D., AGAF, FACG, FACP, chair of the Digestive Disease and Surgery Institute at the Cleveland Clinic, discussed with Doctors Kishore R. Iyer and Donald F. Kirby the challenges of SBS and how to create a "medical neighborhood" to help patients cope with—and thrive in spite of—the disorder.

There are three types of SBS according to anatomical criteria. Type 1 is end-jejunostomy, which is the most severe, according to Donald F. Kirby, M.D., FACP, FACN, FACG, AGAF, FASPEN, CNSC, CPNS, the medical director of the intestinal transplant program and professor of medicine at the Cleveland Clinic. "It has the worst prognosis because it has the shortest amount of surface area," he said. Indicators include rapid transit, acid hypersecretion, poor adaptation, large fluid losses, and malabsorption.

The most common is Type 2 SBS, jejuno-colonic, which has rapid transit, poor adaptation, B12 and bile salt malabsorption, and variable calorie and fluid absorption. "To really stay off parenteral nutrition in this type, you need more than 65 centimeters of jejunum to at least half or more of colon," Kirby said.

Jejunoileo-colonic, Type 3, has adequate absorption until about 75% resected. It also has good adaptation and slower transit. But although it offers the best prognosis, it's uncommon—only about 9% of patients are Type 3. They do well, Kirby said, because "they've got that ileocecal valve ... These patients are the easier ones to rehabilitate and get off parenteral nutrition." However, adaptation can take two to three years, so patience is critical.

The disease is tough enough to deal with on the day to day, but according to Kishore R. Iyer, MBBS, FRCS (Eng), FACS, professor of surgery and pediatrics at Mount Sinai Medical Center in New York City, it gets really difficult when patients encounter social situations. "Think about one thing any one of us does socially that does not involve food and drink. So for patients living with this disease, it is really quite devastating at many levels," he said. Worries about the stoma bag leaking, embarrassing digestive noises or urgency to go to the toilet can substantially impair quality of life for patients.

And while total parenteral nutrition (TPN) is lifesaving, it can also impose burdens, especially if patients are infusing their nutrition at night: If the machine's alarm is constantly going off, and patients have to wake up constantly, this will interfere with their sleep cycle. If you've ever had a colicky child or a medical condition that constantly rouses you, you know what it can do to your daily productivity.

Kirby concurred. "Being on home parenteral nutrition is harder than being on dialysis," he said. "You go to a dialysis center, you give them an arm, they hook you up, you sit there, watch TV for three, four hours, and then you go home, eat, drink, be merry.

"For TPN, you've got to take the bag out of the refrigerator, you need to let it get to room temperature. You then may have to add a couple of additives, and then you put it up on the pole, and then you prime the pump, and then you set it up and let it go, and then the pump beeps in the middle of the night,

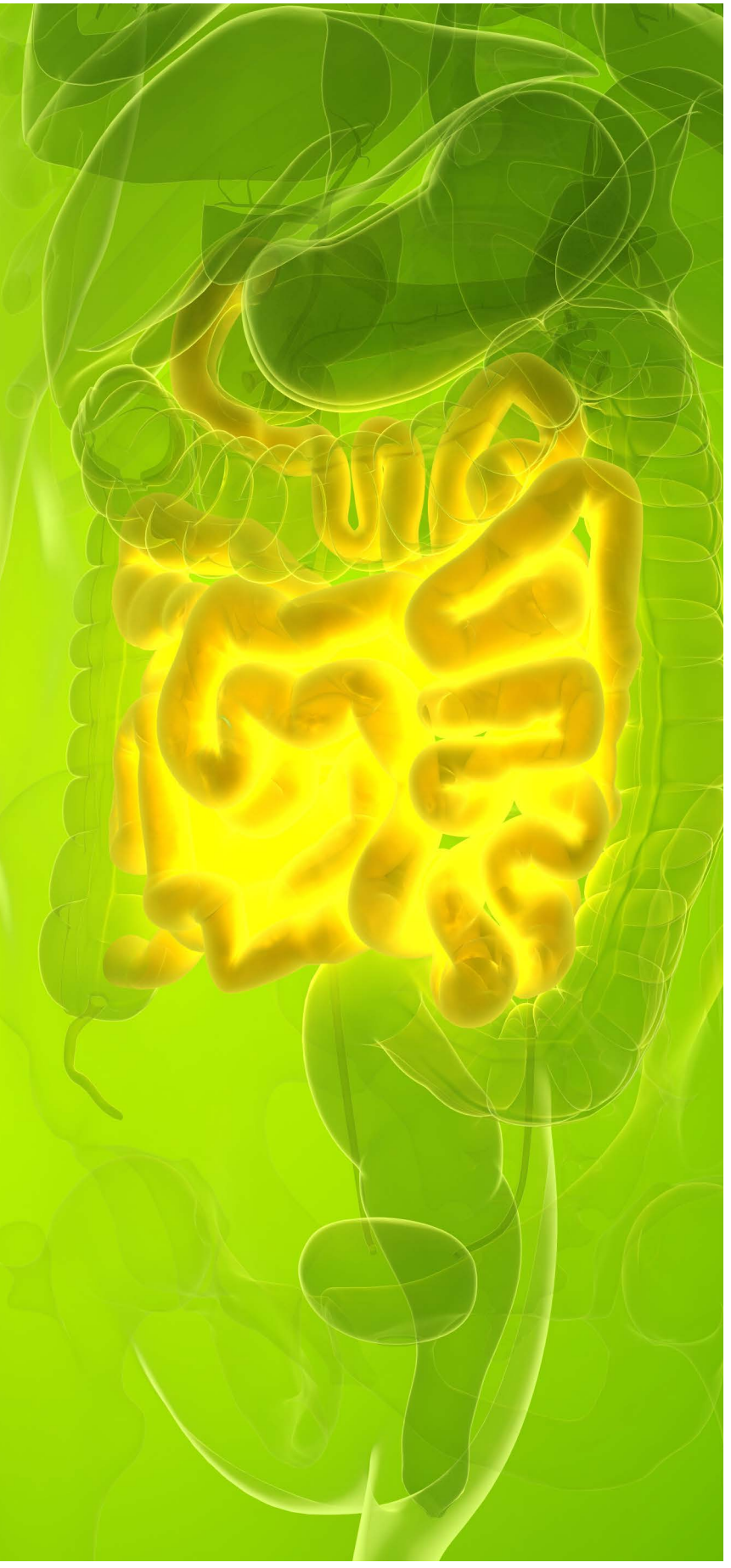
and then you're infusing things at 200 to 300 milliliters per hour, so what does that mean? Well, everybody's going to get up and start peeing in the middle of the night, so nobody gets a good night's rest. If you can give them a night off, you have suddenly made a best friend. It's really important to realize the burden on these patients."

Partial parenteral nutrition can be paired with regular eating, but patients on TPN should avoid eating. Some report hunger cravings, while others do not. So much depends on the patient, the amount of digestive tract, and the team.

Creating an Interdisciplinary Team

Patients benefit when all their healthcare professionals are on the same page.

The key to facilitating communication,



whether in clinical practice or research, according to Pironi, is careful and "homogenous" categorization of the disease. This categorization may include anatomy (e.g., length of bowel), evolutionary factors (maintenance phases), pathophysiological factors (whether there is a "colon in continuity"), clinical factors (level of malabsorption), and severity of chronic intestinal failure (CIF).

Kirby said the first place to start in achieving an early and accurate diagnosis is by taking a comprehensive and accurate medical history. This may require some digging. When surgeons measure the amount of remaining small bowel and make a note of it, that's very helpful for members of the medical team as they follow up and create a treatment plan. Blood work and fecal fat testing reveal a lot of information, but endoscopy and colonoscopy are important, too, Kirby said, especially if you're dealing with patients who might have mucosal disease, as this can affect nutrient absorption.

Iyer said that a good intestinal rehabilitation team should have "medical expertise in the form of a gastroenterologist, [and] ideally, a hepatologist as well. There should be a surgeon with an interest in intestinal failure. We also have an intestinal transplant program. Our intestinal transplant program rests squarely within the intestinal rehab program. We view intestine transplant as just one extreme piece of the intestinal rehabilitation team. But that's only the physicians."

Kirby added that one of the team leaders could be the gastroenterologist or pediatric gastroenterologist, but this depends on the program you're working with. "Many home parenteral nutrition programs in the U.S. ... have an endocrinologist, or maybe it's embedded in surgery." He works closely with transplant, reconstructive and general surgeons, depending on whether the patient needs a feeding tube, assessment or reconstructive surgery. "We may have to work with intensivists when our patients are admitted with sepsis from another catheter infection ... and we have excellent interventional radiologists that helped us get the line in, keep the line in, and maintenance of that line, which is absolutely imperative." And of course, nurses who help with line care and ostomy care.

One factor teams often overlook is involving the health insurance company early in the process. Other team members critical to rehabilitation include those with expertise in nutrition, dietitians and nutritionists, Iyer said. Incorporate someone with expertise in medical management. You'll likely also need social workers, pharmacists, infectious disease specialists and radiologists. The team may

be large, but that's necessary to provide the patient—and the patient's family—with the best possible care.

So is education. Kirby includes medical educators on his team. He provides an educational series for parenteral patients, and he goes so far as to have them sign a patient agreement, acknowledging they've seen it.

Pharmacists do their part on the team, prepping the TPN and flagging potential drug interactions and drug/nutrient interactions, which can manifest quickly and may have lethal consequences. Tomczak, Stawny and Jelinska wrote, "In addition to drug incompatibility, other intravenous medication administration errors may affect a patient's condition, including the risk of death and the increased cost of medical care resulting from a prolonged stay at the hospital." The standardization of PN admixtures has helped reduce medical errors, but it's still important to have a pharmacist on board.

And parenteral feeding can induce complications, including overfeeding, sepsis, GI atrophy and fluctuating blood sugar levels. On the long term, parenteral feeding can cause a form of liver disease, gallbladder problems, and demineralization of bones.

about the patient's situation. "This affects every member of the family," Kirby said. "Sometimes [even] the pets."

In pediatrics, Iyer said, team members should include occupational and behavioral therapists, as well as people with expertise in speech and swallowing mechanisms. The composition of the team will depend on the type of diagnosis and needs of the patient. Pediatric cases may include experts in behavioral health, dietitian, nutrition, medicine, surgery and radiology. Kirby said that probably more important for pediatrics is having a speech pathologist. The tiniest patients may never have been taught to eat; some don't even have a suck reflex.

The importance of child and family support for pediatric patients cannot be overstated, so Kirby includes a child life specialist.

Pediatrics can be tricky. "For the patient … we want to achieve freedom from parenteral nutrition to the extent that's possible," Iyer said. "That should be goal one." For some patients, this is impossible. So goal two is "freedom from complications."

The third goal is improving quality of life. Iyer's team works

Iyer said that a good intestinal rehabilitation team should have "medical expertise in the form of a gastroenterologist, [and] ideally, a hepatologist as well.

Nutrition assistance and counseling is critical to patients. Kirby called the registered dietitians at his facility "probably the most important member[s] of my team." While it's easy to set down a bunch of rules about what a patient can and cannot eat, the dietitian personalizes it for each patient, depending on multiple needs. "We try to get into their lives and figure out the best diet we can for them," he said.

According to Kirby, the best place to start when it comes to diet is by determining how much colon a patient has left. "If they have a colon, you're going to have to put them on a lower fat diet than if they go straight to an ileostomy or a jejunostomy." Key to success is keeping patients on small meals: five or six smaller meals or light snacks in a day. "We don't want to overload their surface area," Kirby said. He advises that patients eat slowly, avoiding simple carbohydrates and simple sugars, as well as limiting lactose.

Avoiding sorbitol is important to limiting diarrhea, and even too much water can be problematic. Kirby recommended oral rehydration solutions—often used for patients where intravenous fluids are unavailable or impractical—and again, slow consumption.

To help deal with practical considerations like home environment, needs and finances, Kirby ensures social workers are a part of the team. He also includes a psychologist; patients and their families can become depressed or anxious to understand, empathize and see how they can help. "The therapy itself is burdensome; the disease is burdensome," Iyer said. "It's not for me to comment on a patient's quality of life. I need to listen and hear from the patient and his or her family—what is their quality of life, and is there something I can help with?" It might be as simple as recommending the patient carry their parenteral nutrition bag in a backpack during the day so they can get a better night's sleep.

"This really takes a village," Kirby said. "To be successful, you need to have a team of people [who] are interested, dedicated and want to work together."

"We're in academic medicine in a distressing disease field that is now going through almost tumultuous development for the better," Iyer said. "So yes, research is a responsibility.

"You can improve time to freedom from PN, you can reduce complications, you can improve survival, you can improve quality of life. So an intestinal rehabilitation program should be involved in the care of these patients."

Lisa Hewitt, MA, senior editor at EndoPro Magazine, has had a long career as an editor, writer and designer, with an emphasis on medical content.

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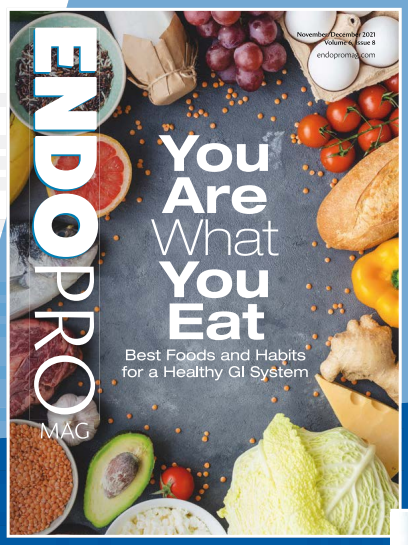

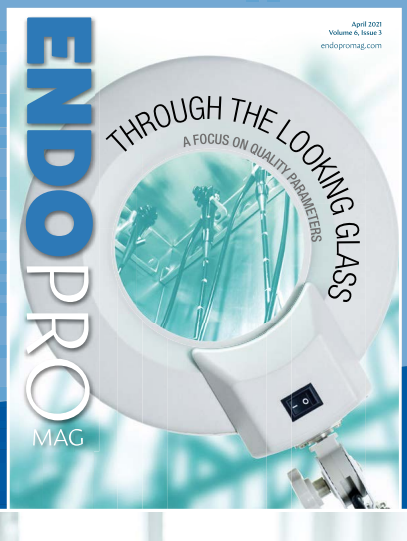

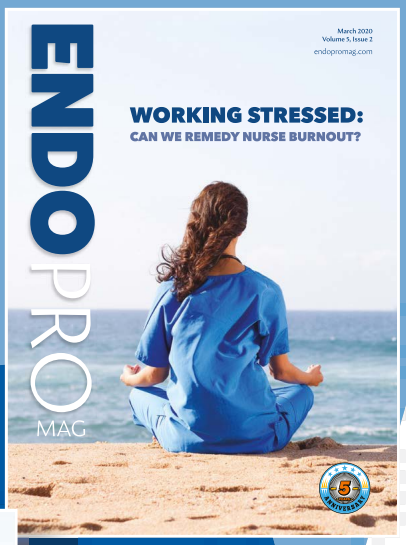

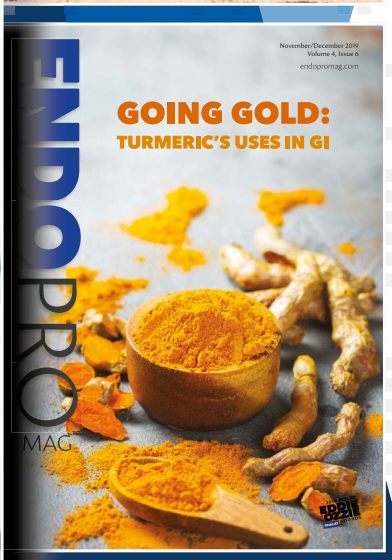

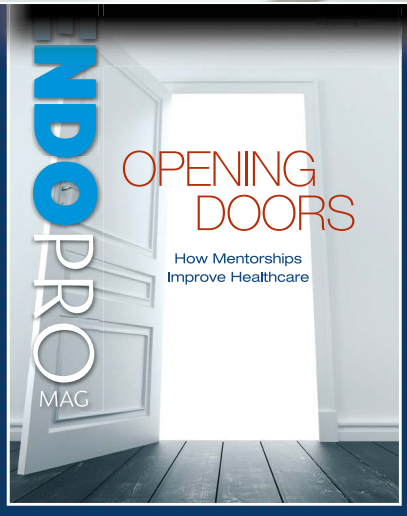

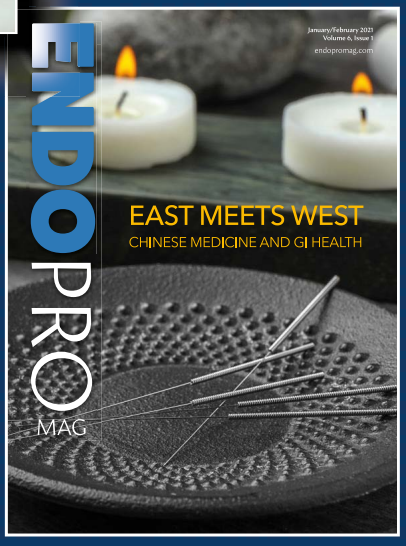

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