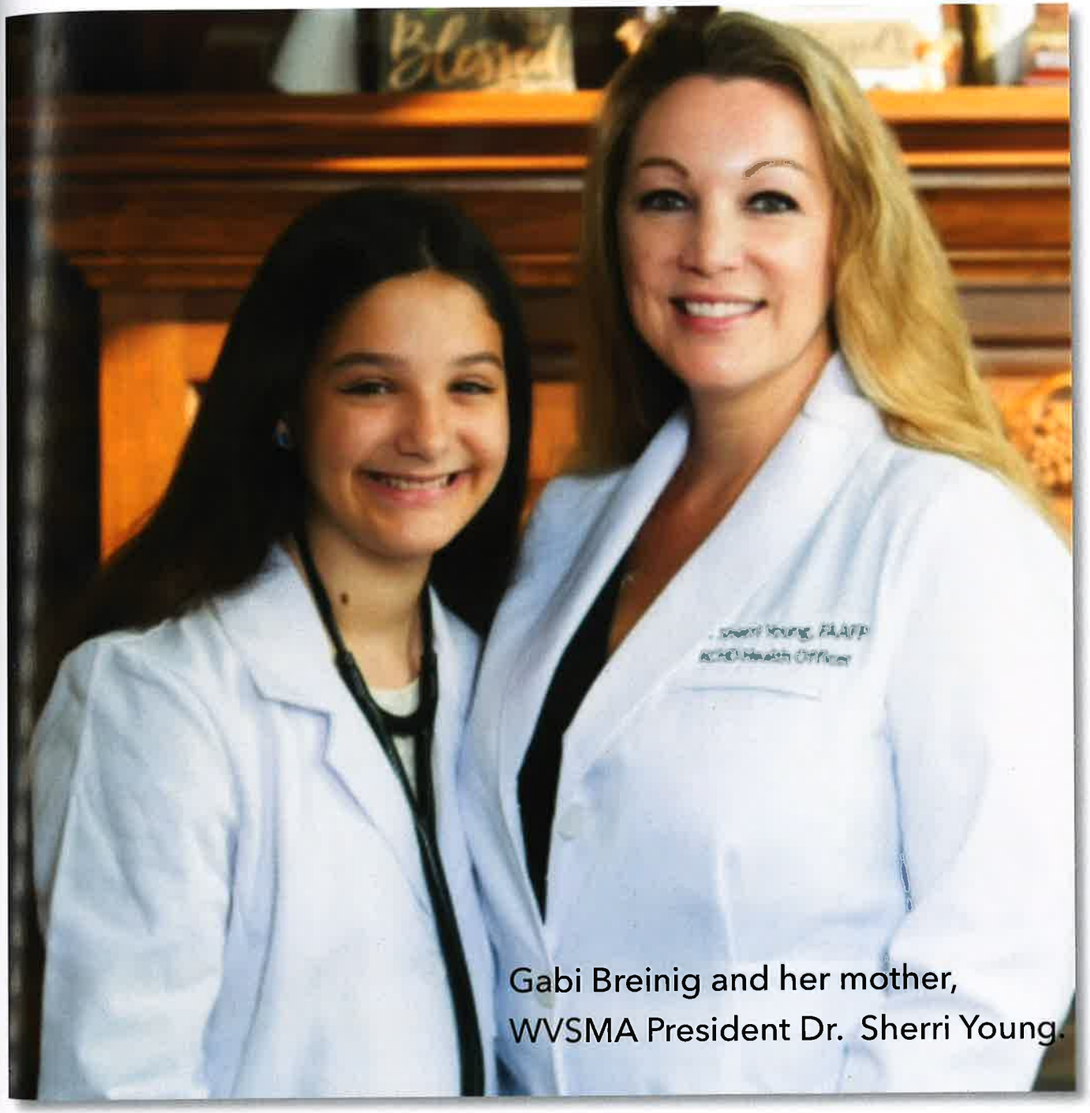
West Virginia
State Medical
Association
2018 Kanawha Blvd., E.
Charleston, WV 25311

wvsma.org

West Virginia
Medical JOURNAL

4th Quarter, 2019

Volume 115, No. 4



Gabi Breinig and her mother,
WVSMA President Dr. Sherri Young.

Contents

4th Quarter, 2019 Volume 15, No. 4

Peer Reviewed Articles

Features

The West Virginia Medical Journal is published bimonthly by the West Virginia State Medical Association, 2018 Kanawha Boulevard, East, Charleston, WV 25311, under the direction of the Publication Committee. The views expressed in the Journal are those of the individual authors and do not necessarily reflect the policies or opinions of the Journal's editor, associate editors, the WVSMA and affiliate organizations and their staffs. Periodical postage paid at Charleston, WV, and other cities. Phone 304-925-0342.

President's Message

Sherri Young, DO, FACOG
WVSMA President, 2019-2020

It is an honor and privilege to be the new president of the West Virginia State Medical Association, the state's largest physician-based advocacy organization. Physicians spend a minimum of 12 years preparing for their medical careers. We make countless sacrifices to serve and protect our patients. With the hard work, financial debt, and selfless acts we endure to become physicians, we most often put others first. This level of giving back is almost second nature to most of us. Because we spend most of our time trying to make the world a better place, we often forget to care for ourselves. Possibly in an effort to cope with our level of stress and giving, we feel that everything will simply work out well for us.

On Jan. 12, 2018, my family and I were placed on the other side of need. We lost our home in an explosion that decimated everything we owned. Watching this unfold before my eyes, I could do nothing but fall to the ground, helpless. I was screaming so hard my throat was burning. The taste of bile and blood rose in my mouth. Our daughter, Gabi, fell to the ground next to me, screaming so hard there were no words. My husband, Adam, stood above us, awestruck. Our neighbors thought we were dead. No one could have survived this blast.

It was several minutes before I could stand or comprehend the situation around us. As Adam put out his hand to help me stand, reality washed over me. We are homeless. We had only the soaking wet clothes on our backs. Everything was gone. We did not have so much as a toothbrush to our name.

The life that Adam and I had built together was in pieces. Looking at the blast, we knew we were blessed and beyond lucky to be alive. All of a sudden, our lives were changed, forever. We went from being the helpful physicians who give back to their patients to the unfortunate family with nothing.

People came to help us immediately. First, there were firefighters and first responders. Next, the American Red Cross. In only a few hours, friends and family came pouring in to help us. Being the person who needed help was new to me. After all, I went to medical school to help others. I never wanted to or planned to be the person in need. It was humbling. Also, it was inspiring.

> Because we spend most of our time trying to make the world a better place, we often forget to care for ourselves.

In the days and months following the explosion, I truly learned how many people care for our family. People went to extraordinary measures to make sure Gabi could go back to school with everything she needed, and in the uniforms she was expected to wear. After several days in a hotel, friends and family helped us find an apartment that would be our new home for many months. They also helped us with the essentials that we far too often gave no significant thought. We appreciated every stitch of clothing, every warm blanket, the warm, homemade meals and other things that our friends and family provided us.

This level of giving inspired me. It was not enough for me to be a physician, serving a community. I was given a second chance at life. With a grateful heart, I realized that I must do all that I can, not only for patients, friends and family, but for everybody where I could have an impact. For a few

precious moments a day, we all can find a way to help someone. Even if it is seemingly small, these acts of kindness make a huge impact on others.

I never want what happened to my family to happen to anyone else. It was terrible. Unfortunately, terrible things happen, and they are often out of our control. We can do our best to prevent bad things from happening to people. That is why I returned to public health. I want to be a part of restoring and healing Kanawha County. I want to help heal the physician community and improve the lives of our patients. I am going to take every opportunity, with the second chance I was given, to help others in every way possible. I hope that my fellow physicians will help in this mission to improve health care and improve the health and safety of the people we know and love.

WVSMA is an exceptional organization that supports our mission to improve the health of West Virginians by supporting physicians and improving the delivery of health care in our wonderful state. I am elated to be the president of this great organization for the next year, and I truly appreciate your support in our mission.

I never wanted to or planned to be the person in need.

It was humbling.

Also, it was inspiring.

WEST VIRGINIA MUTUAL Insurance Company

R.Austin Wallace, MD
Chairman & CEO
West Virginia Mutual Insurance Company

WVMIC more financially sound today than it was in 2011.

My comments for this edition represent an update of a previous article that I wrote for the July/August 2018 ***West Virginia Medical Journal*** because there continue to be some unscrupulous insurance agents and a few very misinformed physician colleagues in our state who are telling people that the Mutual is somehow experiencing financial difficulties.

Apparently, this is occurring because of our decision to no longer seek a rating from the A. M. Best company. The statistics below convincingly demonstrate that this allegation is absolutely and completely false. In reality, the West Virginia Mutual Insurance Company had one of the strongest financial performance years of any medical liability insurance company in the US in 2019 by all measures.

In April 2018, WVMIC decided to withdraw from the A. M. Best rating process because of their lack of understanding of our company's goals that did not fit their cookie-cutter metrics. Their misguided approach to their rating process is convincingly demonstrated by the following: At the time we were assigned an "A-"rating in 2011, we were significantly more highly leveraged with significantly less policyholder surplus than today as is shown in the following:

	2011	2017	2018
Policyholder Surplus	$80 million	$90 million	$95 million
Reserve to Surplus Ratio	0.90	0.59	0.48
Premium to Surplus Ratio	0.44	0.18	0.18

It should be pointed out that the lower the leverage measures (i.e. the reserve to surplus and premium to surplus ratios), the better, and that when we started our company, a ratio of 1:1 with premium matching surplus was considered truly excellent. Now, we have more than 5 times the surplus compared to our current premium level. As you can see, WVMIC is clearly even more financially sound today than it was in 2011.

Best changed their rating methodology last fall stating that the new methodology would allow more objective consideration, but it appears that the process has become even more subjective, thereby allowing their analysts to make their determination based on considerations other than financial strength.

By Best's proprietary Capital Adequacy Ratio (BCAR), WVMIC qualifies as an "A+" rated company, but Best's rating scheme penalizes companies like WVMIC for being a single-line, single-state mutual insurance company. This is very unfair, in our opinion, as these characteristics are precisely what we all agree make our company the best option for our region's healthcare providers.

Incredibly, one of the senior Best analysts with whom we met last year had the temerity to tell me, a physician, that it was his opinion that we take too many lawsuits to court because all physicians want to settle lawsuits and avoid having to go through a trial. I respectfully but firmly informed him that nothing could be further from the truth and that if a physician has provided excellent care and gets sued despite this, our company's philosophy is to defend him or her vigorously all the way to trial, if necessary.

The WVMIC Board plotted a course for the Mutual in which we have been able to give back unneeded surplus to our physician owners through the use of dividends and stable premiums while maintaining the level of surplus that resulted in the achievement of our original "A-"rating. Unfortunately, A.M. Best does not appreciate this honorable mission of placing

We intend to continue serving you, our physician owners, by placing your interests first. We remain ***Physicians Insuring Physicians.***

policyholder interests above the interests of outsider profits, which is the case with most of our competitors. We simply will not allow an outside agency such as Best to interfere with our company's business plan for no good reason.

Therefore, it is obvious that the new rating scheme devised by the A. M. Best people, some of which is significantly ill-informed, in my opinion, obviously does not value ourπ company's profile and mission and that their narrow opinion and new rating methodology do not in any way discredit our excellent financial position. We intend to continue serving you, our physician owners, by placing your interests first. We remain ***Physicians Insuring Physicians.***

Jan. 23

Save the date

West Virginia State Medical Association

Advocacy Day

WVSMA Headquarters
2018 Kanawha Boulevard, East
Charleston, WV. 25311

For more information contact:
Devon Lopez
devon@wvsma.org
304-925-0342

Concussions in High School Sports in the Eastern Panhandle of West Virginia 2008-2017

Michael Niemann
Medical Student, West Virginia University School of Medicine, Eastern Campus, Martinsburg, West Virginia

Ryan Sprouse, MD, CAQSM
Department of Family Medicine, West Virginia University School of Medicine, Eastern Campus

George D. Harris, MD, MS, CAQSM
Professor and Chair, Department of Family Medicine, West Virginia University School of Medicine, Eastern Campus

Nathan Fiore
Clinical Research Project Coordinator, West Virginia University School of Medicine, Eastern Campus

Disclosure

The views expressed in the submitted article are our own and not an official position of the institution or funder.

There were no grants, equipment, drugs, and/or other support that facilitated conduct of the work described in the article or the writing of the article itself.

Michael Niemann, Dr. Ryan Sprouse, Dr. George D. Harris Nathan Fiore have no conflicts of interest in the writing of this submission.

Abstract

The incidence and prevalence of sport-related concussion has increased over the past decade as a result of an increase in athletic participation, improved diagnostic methods, and an overall increased awareness of the symptoms and signs of concussion[3].

This is a retrospective study identifying high school athletes in the Eastern Panhandle of West Virginia who participated in baseline and post-concussion neurocognitive ImPACT testing from 2008-2017. A total of 740 unique first post injury tests were performed, and a total of 9,850 unique baseline tests were performed. The athletes were baseline tested at the beginning of their freshman and junior years. New students and any student who had had a concussion in the previous year were tested prior to starting their respective sport season.

The number of post-concussion tests was compared to the number of baseline tests and stratified each year by age, sex, and sport. Comparing our findings with the incidence by sport reported in the medical literature demonstrated that the same sports identified as being the highest and lowest risk were generally congruent with the sports reported to be the highest and lowest risk in two large literature reviews [7, 8]. The notable exception was cheerleading; our study found it to be among the sports with a higher incidence of concussion. A review of the literature demonstrated that cheerleaders, like participants in other contact sports, are at significant risk for concussion. Previously concussion rates in cheerleading had been reported to be relatively low (4–6% of cheerleading injuries) compared to other injuries and compared to concussion rates in other sports. However, concussions were noted to be the most common cheerleading injury, accounting for 31.1% of injuries. [12] and also reported that the number and rate of cheerleading related concussions had increased by 290% from 2001 to 2012. [13]

Introduction

Sport-related concussion (SRC) is defined as the immediate and transient symptoms of traumatic brain injury (TBI). It is still unresolved if concussion is part of a TBI spectrum associated with lesser degrees of diffuse structural change than are seen in severe TBI or whether the concussive injury is the result of reversible physiological changes.[1] Concussion is induced by direct or indirect biomechanical forces on the brain.

Concussion is characterized by a rapid onset of usually short-lived neurological impairment, which typically resolves spontaneously; acute clinical symptoms that usually reflect a functional disturbance rather than structural injury with a range of clinical symptoms that may or may not involve loss of consciousness , and normal routine neuroimaging studies [2] Common symptoms include headache, dizziness, light and/or noise sensitivity, neuropsychiatric symptoms and cognitive impairment- that follow a closed head injury. The head injury results in temporary impairment of neurological function with no accompanying abnormality seen on imaging[3]. Due to the neurological impairments caused by concussion, any individual suspected of sustaining a suspected concussion should be seen by a physician within 24 to 48 hours[3]. When properly diagnosed and treated, symptoms typically peak and often resolve within 7-10 days, and most patients return spontaneously to baseline within 3 months[3].

The incidence and prevalence of sport-related concussion has increased over the past decade as a result of an increase in athletic participation, improved diagnostic methods, and an overall increased awareess of the signs and symptoms of concussion[3].

There are more than 8 million athletes participating in high school athletics[5] and SRCs in these athletes represents a critical public health problem[4] for which prevention remains an elusive goal. In the United States, all 50 states now have some form of law that addresses sport-related concussions. To date, there is no evidence to show that following enactment of such laws the incidence of concussions has been reduced.[5]

In a society plagued by chronic diseases largely driven by a sedentary lifestyle, participation in high school sports can help establish habits to provide long-term physical, mental, emotional, and social benefits for the athletes. However, to optimize these benefits, the risks of participating, including concussion, must be quantified and managed appropriately when they occur. Especially in adolescent athletes, appropriate return to play and follow up is essential to minimizing potentially long-term consequences of concussion.

It is the responsibility of the physician to understand the varying levels of concussion risk for adolesent patients who choose to participate in sports. The risk for concussion in adolescents varies among type of sport, age, and gender. Individuals who have participated in contact sports are at higher risk with approximately one third of those who participate in contact sports report having been diagnosed with a concussion.[6]

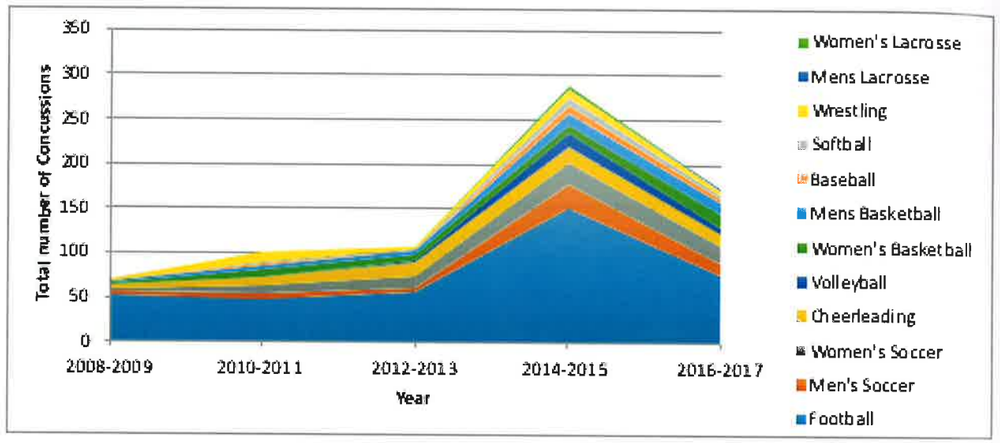
In the Eastern Panhandle of West Virginia, many high schools require athletes to complete a valid baseline concussion neurocognitive test using the Immediate Post-Acute Concussion Test (ImPACT) assessment. In the event of a suspected concussion injury, the athlete was asked to re-take the ImPACT assessment. Those data was provided to local physicians who compared baseline and post-injury results to assist with both diagnosis of a concussion and return to play decisions.

The purpose of this study was to analyze recent concussion trends for adolescent athletes in the Eastern Panhandle to identify the high- and low-risk sports for males and female athletes of different ages using assessment data over the past decade from ImPACT. Our findings were compared with similar studies in the medical literature.

Results

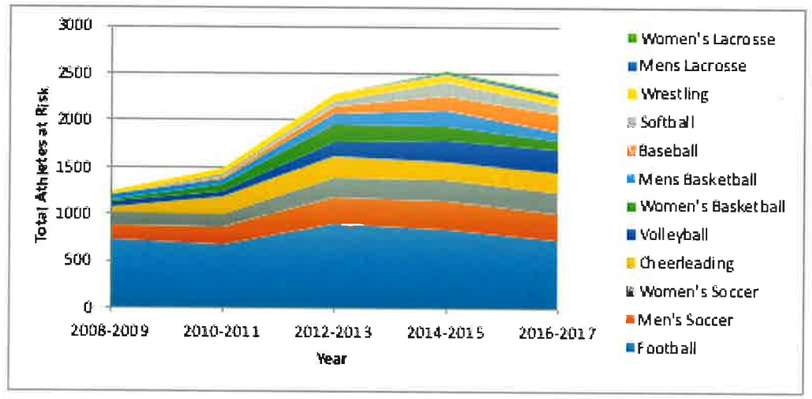
A total of 740 unique first post injury tests were performed and a total of 9850 unique baseline tests were performed over the same time period. (2008-2017). Distribution of these post injury tests by sport and year is shown in Figure 1.1. This was used to approximate the number of first concussions. If a single athlete had multiple concussions in a season, only the first was included. The elevated number of post injury tests for 2014-2015 may be contributed to the opening of a new high school in Berkeley County with over 1400 students enrolled and the hiring of several new athletic trainers to assess athletes.

FIGURE 1.1: TOTAL NUMBER OF UNIQUE POST INJURY TESTS ("CONCUSSIONS")



A total of A 9850 unique baseline tests were performed over the same time period. The distribution of these baseline tests by sport and year is shown in Figure 1.2 and was used to approximate the total number of athletes at risk of concussion. Football contributed the most to the overall data, contributing a total 3915 athletes from 2008-2017.

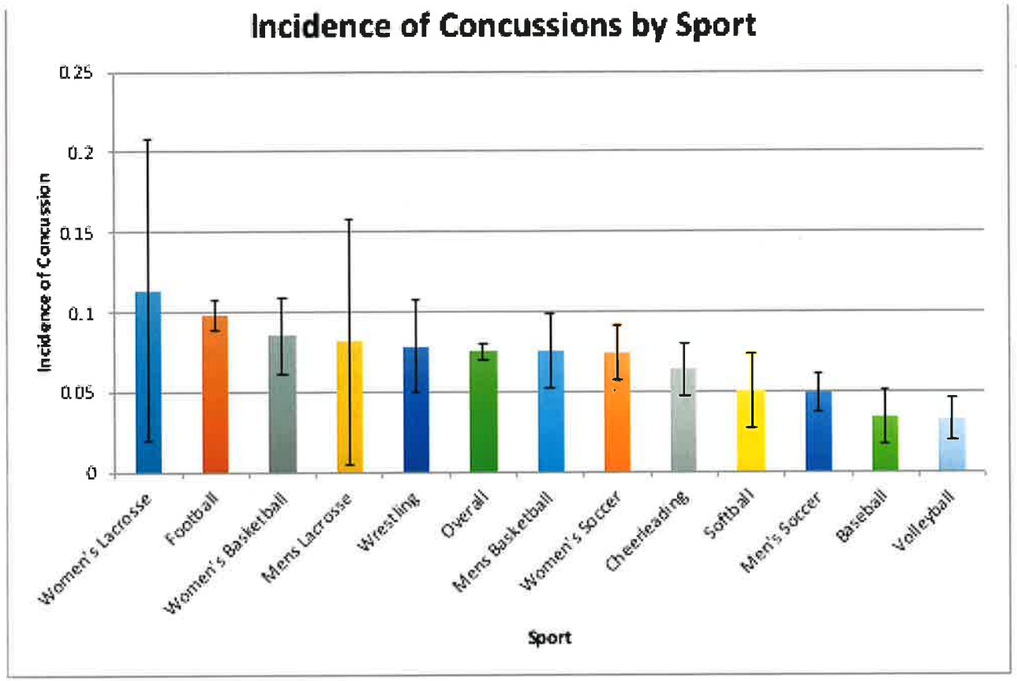
FIGURE 1.2: TOTAL NUMBER OF UNIQUE BASELINE TESTS ("ATHLETES AT RISK")



The "Incidence of concussion" in this study refers to the approximated risk of an athlete having at least one concussion per season. This was calculated by (# of first post injury tests over 2-year period) divided by (# unique baseline tests over 2-year period).

Figure 2.1 compares the incidence of concussion (2008-2017) by sport with 95% confidence intervals shown.

FIGURE 2.1: INCIDENCE OF CONCUSSION BY REPORT



A comparison the incidence of concussion by year and sport. Green to red color-coding indicates low-to-high calculated risk.

FIGURE 2.2: HEAT MAP COMPARING INCIDENCE OF CONCUSSION BY SPORT AND YEAR

Incidence by Sport	Women's Lacrosse	Football	Women's Basketball	Mens Lacrosse	Wrestling	Total	Mens Basketball	Women's Soccer	Cheerleading	Softball	Men's Soccer	Baseball	Volleyball
2008-2009	No data	7.2	11.1	No data	4	9.5	2.1	2.5	4.1	No data	2.7	No data	No data
2010-2011	No data	7	11.4	No data	9.2	6.7	8	7.1	4.3	6.6	3.8	4.3	1.8
2012-2013	No data	6.1	3.8	No data	4	4.7	3.9	6.5	6.3	2.2	1.9	1.4	1.3
2014-2015	22.2	17.8	6.5	12.5	9.4	11.4	8	8.2	8.7	6	9.4	5.1	6.3
2015-2017	3.8	10.3	10.1	6.5	4.7	7.6	6.3	9.2	6.8	4.5	5.1	2.3	2.2

Figures 2.2 expresses incidence as a percent of concussions/athletes at risk/season representing the risk of an experiencing at least one concussion per season. The study demonstrated that the incidence with the highest risk per season of concussion by sport (Figures 2.1-2.2) for male athletes was football (9.81%), wrestling (7.83%), and basketball (7.45%), 95% CI [8.88%,10.74%, 4.94%,10.72%] and [5.17 %,9.81%] respectively. The men's sports studied with the lowest risk per season of concussion were baseball (3.40%) and soccer (4.89%) with the 95% CI [1.71%, 5.09%] and [3.65%, 6.13%] respectively.

For the female athletes, the women's sports with the highest risk per season of concussions were in basketball (8.51%), soccer (7.45%), and cheerleading (6.34%), 95% CI [6.13%, 10.89%], [5.74%, 9.10%], and [4.77%, 7.97%] respectively. The female sports studied with the lowest risk per season of concussion were volleyball (3.28%) and softball (5.01%), 95% CI [1.96%, 4.60%] and [2.69%, 7.34%] respectively.

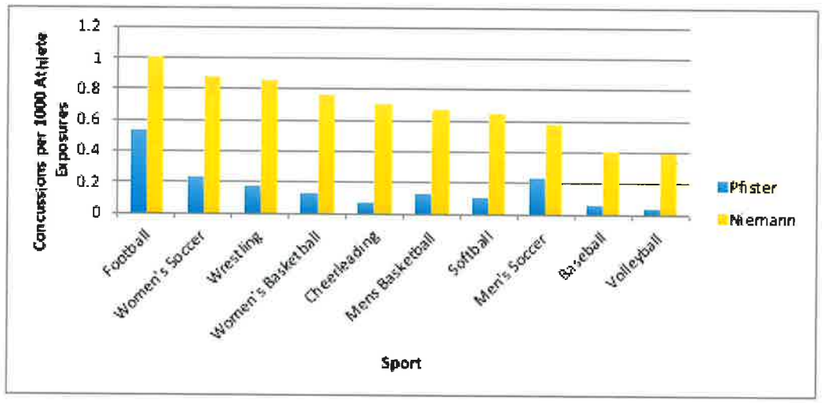
Lacrosse was identified as a sport with a high risk per season of concussion for both men (8.16%) and women (11.4%), but more data is needed to meaningfully compare it with other sports, 95% CI [4.97%,15.8%] and [1.99%,20.7%] respectively.

A comparison in the incidence of concussion (2008-2017) by sport found in this study (Niemann) versus incidence reported in the literature by Pfister[7] (2016 meta-analysis) is noted in Figure 2.3.

Comparing our findings with the incidence by sport reported in the medical literature (Figure 2.3), demonstrated that the same sports identified as being the highest and lowest risk were generally congruent with the sports reported to be the highest and lowest risk in two large literature reviews.[7, 8] The notable exception is cheerleading, which in our study was found to be among the sports with a higher risk of concussion.

After conversion to concussions per 1,000 athlete exposure for more direct comparison, the absolute incidence was found to be higher in nearly every sport than the incidence reported in the literature. This most likely is due to over utilization of the ImPACT test (not every suspected concussion resulting in a post injury test actually represented a clinical concussion).

FIGURE 2.3 COMPARISON OF INCIDENCE BY SPORT FOUND IN OUR STUDY (NIEMANN) VERSUS INCIDENCE REPORTED IN LITERATURE (PFISTER[7])



Comparing incidence of concussions by gender, our study demonstrated that overall males have a higher risk of concussion than females with no significant difference between males and females playing the same sport.

FIGURE 3.1: INCIDENCE BY GENDER WHEN PLAYING THE SAME SPORT

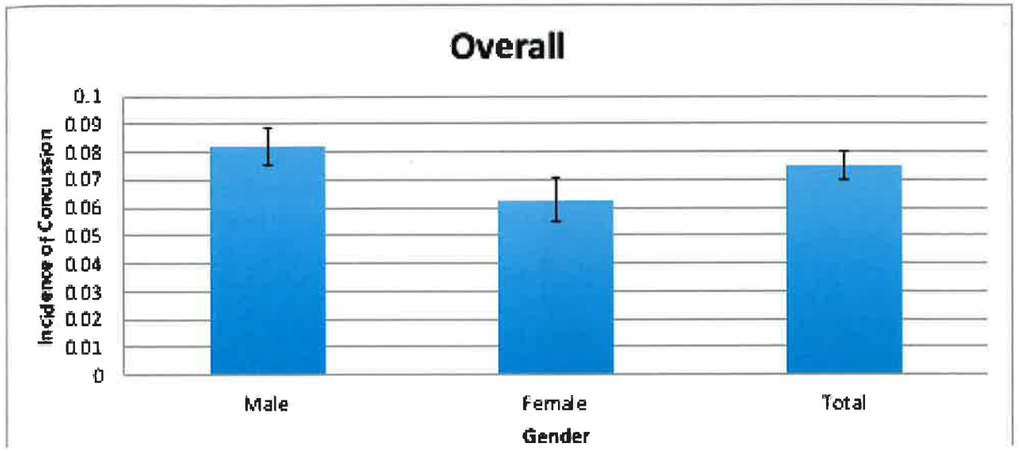


FIGURE 3.2: CONCUSSION INCIDENCE BY GENDER

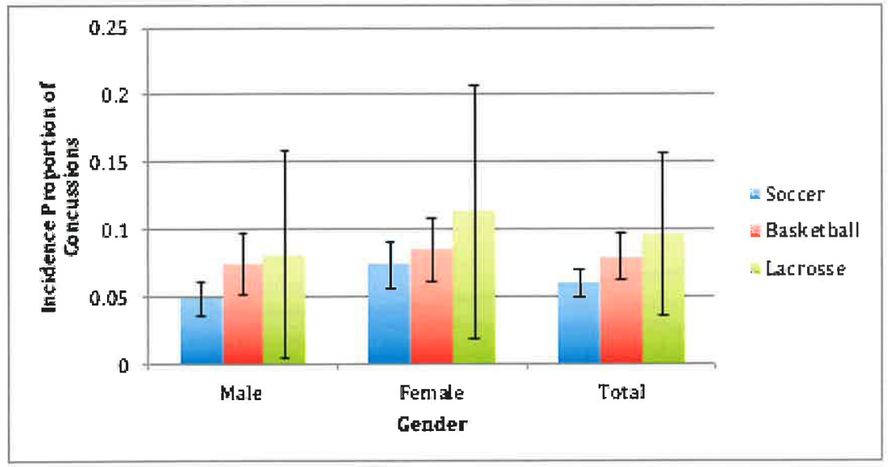


Figure 3.1 and 3.2 illustrates the incidence of concussion by gender in sports where data was available for both males and females with 95% confidence intervals. Note that males have a higher risk of concussion than females overall (p=0.0007), however, comparing males and female soccer players only, females have a significantly higher risk of concussion (p=.0151). A statistically significant difference between males and females was not demonstrated basketball or lacrosse.

Discussion

The medical literature[7] suggests that while men are more likely than women to have a concussion playing high school sports, women are more likely than men to have a concussion when playing the same sport. The same results were found in our study.

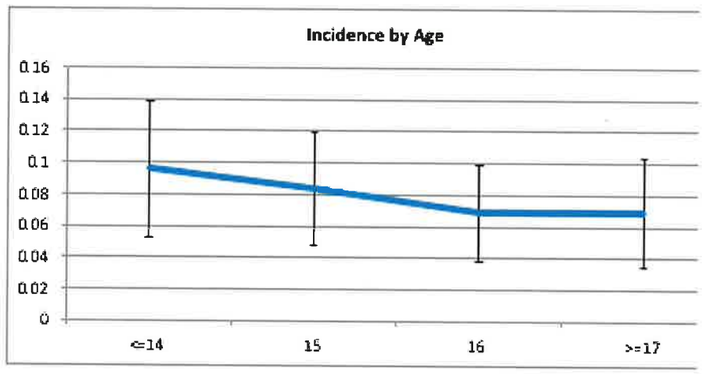
Comparing young individuals playing team sports, concussions are more likely to occur between 2 and 7 times during competitive games than in practice sessions.[9] Boys on football and ice hockey teams have the highest rates of concussion in young athletes. When evaluating overall number of concussions, girls on soccer teams are second only to football players.[9] In addition, female soccer players are more likely than male soccer players to sustain concussions during equal number of hours of play.[9]

While the study was able to demonstrate males are more likely to be concussed than females overall, which has been previously demonstrated in national studies, there is not enough data to show that females are more likely than males to be concussed in any individual sport. A limitation of this study was the sample size of male sand females in certain sports for some years. Further studies with additional data may demonstrate significant difference.

Studies suggest younger athletes (aged 5-12 years) report concussion symptoms different from adolescents and adults and have a higher incidence of concussion. However, in this study, no statistically significant difference between the different age groups was found (Figure 4). Incidence proportion of concussion of males by age with 95% confidence intervals are shown. The study used did account for athletes moving to the next age group within a 2 year window.

Another limitation of our study was the likely over utilization of the ImPACT testing to determine the present of a suspected concussion instead of various clinical parameters that were identified and then followed during the post injury period.

FIGURE 4: INCIDENCE OF CONCUSSION BY AGE GROUP



Painful Hemorrhagic Lesion of Right Palm

Authors:
Lauryn Falcone, PhD, West Virginia University School of Medicine

Omid Jalali, MD, West Virginia University School of Medicine

Roxann Powers, MD, West Virginia University School of Medicine

Corresponding Author:
Roxann Powers, West Virginia University School of Medicine
PO Box 9166
One Medical Center Drive
Morgantown, WV 26506
304-293-6618
rpowers@hsc.wvu.edu

Abstract

Herpes simplex virus (HSV) infections are ubiquitous in the population, with more than half of all people seropositive to HSV-1 or HSV-2. While these infections typically cause oral or genital lesions, eruptions can occur anywhere on the body or mucus membranes. Herpetic whitlow classically refers to a painful, swollen, vesicular lesion of the digits due to HSV infection. In some instances, however, the skin lesion of HSV may appear atypical. In the following report, we describe a unique case of a hemorrhagic, pustular appearing herpetic whitlow infection of the hand. This report serves to remind physicians to consider the diagnosis of HSV for a painful skin lesion of the hand, as herpetic whitlow can mimic more serious conditions and early detection can limit the spread of the disease.

Case Presentation

A healthy 27-year -old male health care professional presented to dermatology with a 5-day history of a new painful skin lesion on the right palm between the thumb

Figure 1. Painful hemorrhagic and pustular-appearing skin lesion on the right palm.

On physical exam, the lesion appeared as a hemorrhagic, tense bulla studded with what appeared to be pustules. He was otherwise well-appearing without fever, lymphadenopathy, or evidence of lymphangitis. He denied fever, chills, rash, pruritus, trauma, bleeding, drainage, exposure to animals, and recent travel. Review of systems, social history, past medical history, and physical exam were otherwise unremarkable. A punch biopsy was taken and revealed intraepidermal vesicles, perivascular inflammation, and multinucleated giant cells (Figure 2), confirming the diagnosis of herpes simplex virus (HSV) infection of the hand. The lesion had self-resolved upon follow-up.

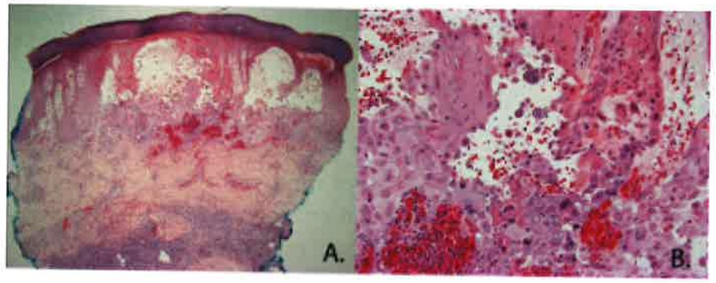


Figure 2. Punch biopsy findings demonstrating intraepidermal vesicles, perivascular inflammation, and multinucleated giant cells at 4x (a) and 40x (b) magnification. H & E stain.

Discussion

Herpes simplex virus (HSV) is a linear double-stranded DNA virus of the Alphaherpesvirinae subfamily.[1] Also included in this family is the varicella-zoster virus (VSV). Members of the Alphaherpesvirinae family, like other human herpesviruses (HHV), have an icosahedral capsid and a glycoprotein-studded envelope. While all HHV infections progress through the stages of primary infection, latency, and reactivation, only members of the Alphaherpesvirinae family predominantly cause a lytic infection in epithelial cells and a latent infection in neurons. Importantly, HSV infection is an extremely common infection worldwide, with an estimated 50 - 90 percent of the population demonstrating seropositivity to HSV-1 antibodies by age 40.[1]

HSV most commonly infects orolabial or genital regions but can occur anywhere on the body including the fingers and the palm.[1,2] Herpes infection of the fingers (classically known as herpetic whitlow) or hand presents as a painful, sometimes swollen, vesicular lesion. Constitutional symptoms as well as lymphadenitis and lymphadenopathy may be present although these were absent in this patient.[3] Blisters typically develop 24 to 48 hours after the onset of symptoms.[2] Many patients report a prodromal phase where they experience pain, tingling or numbness of the digits or hands prior to the appearance of the skin lesion.[1,4] The occurrence of vesicles in herpetic whitlow may sometimes be delayed, with the skin lesion first appearing only edematous and erythematous. In most cases, coalescing vesicles and sometimes erosions will later appear. In some instances, lesions may become crusted, desquamate, and heal without scarring. A number of atypical presentations of herpetic whitlow have been reported. One case noted a recurrent cutaneous eruption on the finger of a middle aged woman which was associated with lymphangitis of the homolateral arm.[5] Another case described a hyperbilirubinemic woman who developed herpetic whitlow appearing as dark brown vesicular lesions.[6] In this report, we observed a unique case of herpetic whitlow appearing as both a hemorrhagic and pustular lesion.

Some patients with herpetic whitlow have a history of herpes infection elsewhere.[2] Historically, healthcare professionals were considered to be at risk due to frequent contact with oral secretions of patients.[1,2] This risk has declined as precautions such as gloves are now commonplace. Children may become self-infected from thumb sucking or nail biting.[1,2] Frequency of herpetic whitlow is also increasing in adolescents and adults due to digital-genital contact.[1]

Diagnosis of HSV can be confirmed with Tzanck smear, viral cultures, direct fluorescent antibody assays (DFA), and polymerase chain reaction (PCR) for HSV.[1] In this case, a punch biopsy revealed intraepidermal vesicles, perivascular inflammation, and multinucleated giant cells classic for HSV (Figure 2).

Herpes infection of the hand typically resolves in two to four weeks.[1] While most cases are due to primary infection, 30 to 50 percent may represent recurrence at a site of prior infection,[3] although repeat eruptions are less common than with orolabial and genital herpes.[7] Treatment with antiviral drugs such as acyclovir, famciclovir, or valacyclovir is recommended for herpetic whitlow if the infection has been present for less than 48 hours.[3,7] Treatment should be considered in healthcare professionals as the infection can be transmitted to patients. In particular, oral acyclovir was found to shorten the duration of signs of infection and viral shedding.[8] Suppressive therapy with antiviral drugs is warranted for recurrent lesions.

It is important to accurately diagnose HSV not only to prevent transmission of the disease but also because it may mimic more serious conditions including paronychia, cellulitis, pyogenic granuloma, orf or blistering dactylitis.[1] The appearance of grouped small vesicles coalescing to form bullae is a clue to the HSV infection. However, the sometimes late appearance of these vesicles can make diagnosis of the disease less typical and more challenging. Early HSV infection can sometimes mimic cellulitis with the appearance of a swollen, erythematous digit in a patient with a fever.[9] If treatment of the cellulitis does not result in patient improvement or vesicles begin to appear, the diagnosis of HSV should be considered. Initially, herpetic vesicles contain a clear fluid rather than purulent fluid seen in bacterial infections. However, the fluid may become cloudy later in the course of the disease as occurred in the patient described in this case, leading to a misdiagnosis of a bacterial infection.[1,2] Blistering distal dactylitis (BDD) presents as a vesicular lesion of the digits sometimes confused for HSV and is often due to a Group A Streptococcus infection.[10] Most commonly, BDD affects the volar fat pad of the distal phalanx of the fingers and presents as a painless, purulent blister. BDD only rarely presents in an immunocompetent adult, as it is most common in children or adults who are immunocompromised or have a history of trauma, neither of which were reported in this patient.[11] Also, unlike a bacterial infection, the pulp space is often soft with HSV infections rather than tense, and frank pus will not be present without an accompanying bacterial infection.[1,4] With a viral infection such as orf or coxsackie virus, lesions are more likely to involve multiple fingers rather than a single vesicular lesion as seen in this patient.[12] Although less common, the HSV infection of the hand may sometimes become purpuric or hemorrhagic (as occurred in this patient).[4] This presentation is important to recognize as HSV is self-resolving, unlike other conditions which often require systemic antibiotics or incision and drainage.

Conclusion

Physicians should consider the diagnosis of HSV infection in any patients with a painful, localized skin rash. While locations such as the lateral palm are less common sites of infection compared to oral or genital regions, it is important to remember that HSV infection can occur anywhere on the body. Physicians should also realize that while HSV infections often appear erythematous, edematous, and vesicular, many infections look less typical including the presence of hemorrhagic and pustular bullae as described in this case report. Proper diagnosis reduces mistreatment as a more serious condition and diminishes spread of the infection.

References

1. Christopher Downing NM, Karan Sra, and Stephen K. Tyring. Human Herpesviruses. In: Jean L. Bolognia JVS, and Lorenzo Cerroni, ed. *Dermatology*. 4th ed. Philadelphia Elsevier Limited; 2018:1400-1424.
2. William D. James TGB, and Dirk M. Elston. Viral Diseases. *Andrews' Diseases of the Skin: Clinical Dermatology*. 12th ed. Philadelphia, PA: Elsevier; 2016:359-417.
3. Clark DC. Common acute hand infections. *American family physician.* 2003;68(11):2167-2176.
4. Betz D, Fane K. Herpetic Whitlow. *StatPearls*. Treasure Island (FL): StatPearls Publishing LLC.; 2018.
5. Foti C, Romita P, Mascia P, Miragliotta G, Calvario A. Atypical Herpetic Whitlow: A Diagnosis to Consider. *Endocrine, metabolic & immune disorders drug targets.* 2017;17(1):3-4.
6. Shiyovich A, Nesher L. Atypical presentation of herpetic whitlow as dark brown vesicles in aayperbilirubinemic patient. *Infection.* 2015;43(1):127-128.
7. Nikkels AF, Pierard GE. Treatment of mucocutaneous presentations of herpes simplex virus infections. *Am J Clin Dermatol.* 2002;3(7):475-487.
8. Gill MJ, Bryant HE. Oral acyclovir therapy of recurrent herpes simplex virus type 2 infection of the hand. *Antimicrobial agents and chemotherapy.* 1991;35(2):382-383.
9. Shoji K, Saitoh A. Herpetic Whitlow. *New England Journal of Medicine.* 2018;378(6):563-563.
10. Anjaneyan G, Kaliyadan F. Blistering Distal Dactylitis. *StatPearls*. Treasure Island (FL): StatPearls Publishing LLC.; 2018.
11. Kollipara R, Downing C, Lee M, Guidry J, Robare-Stout S, Tyring S. Blistering Distal Dactylitis in an Adult. *Journal of cutaneous medicine and surgery.* 2015;19(4):397-399.
12. Alsop J, Flewett TH, Foster JR. "Hand-foot-and-mouth disease" in Birmingham in 1959. *British medical journal.* 1960;2(5214):1708-1711.

A five-year follow up of doctors treating relatives and themselves.

Atalla, Jasmyn E, BS
JCESOM, Marshall University
Department of Internal Medicine
1249 15th Street
Huntington, WV 25701
atalla@live.marshall.edu

DeChant, Ross D, MD*
JCESOM, Marshall University
1249 15th Street
Huntington, WV 25701
*Present address:
University of Arizona Health Sciences
College of Medicine Tucson
Department of Emergency Medicine
Tucson, AZ 85724
rdechant22@gmail.com

Goebel, Lynne J, MD, FACP
JCESOM, Marshall University
Department of Internal Medicine
1249 15th Street, Suite 2000
Huntington, WV 25701
goebel@marshall.edu

Corresponding author:

Mufson, Maurice A, MD, MACP
JCESOM, Marshall University
Department of Internal Medicine
1249 15th Street, Suite 2000
Huntington, WV 25701
mufson@marshall.edu
304-691-1050

Funding

This work was supported by funds from the Department of Medicine and Department of Pathology, Marshall University Joan C. Edwards School of Medicine, Huntington, West Virginia.

IRB Approval

The Institutional Review Board (IRB) of Marshall University, which is the single IRB for Cabell Huntington Hospital, Saint Mary's Hospital, Veterans Administration Medicine Center and Marshall Health, the practice group of the Joan C. Edwards School of Medicine (JCESOM), approved this research.

Abstract

Studies show high rates of physicians believing that they should treat relatives and themselves. In this study, we compared such attitudes in surveys conducted in 2017 and 2012 among similar populations of physicians who attended Internal Medicine, Pediatrics, Family Medicine, and OB/GYN Grand Rounds.

Fewer respondents in 2017 prescribed medications to relatives without an examination. Similar numbers of residents and faculty in both years believed they should treat their relatives. Fifty-nine percent treated relatives for minor illnesses, a significant decrease from 75.3% in 2012. About half of physicians treated themselves for minor illnesses in both years. Although 73% of current respondents had a primary care physician (PCP), a significantly higher proportion of men had PCPs (p=0.04) in 2017 in contrast to a significantly higher proportion of women in 2012 (p=0.01).

The overall frequency of residents and faculty physicians who treat relatives and themselves decreased in the past five years and less treat without examination. However, too many physicians continue this practice, despite the ethical admonitions of the AMA and ACP. More education is required to convince physicians not to treat relatives and themselves. Further research is needed to determine why men now have PCPs more often than women.

Introduction

During the past five decades, physicians worldwide discussed in numerous medical publications the ethical dilemma of whether physicians should treat their relatives or themselves.[1-6] These authors argued that, as a rule, physicians should not treat themselves or their relatives, except in extenuating circumstances, as when they find themselves in an isolated geographic area without a nearby or otherwise available physician or they judge that they are the best trained physician available to manage the person with the presenting illness. In this respect, they adhere to the recommendations of the American Medical Association (AMA), the American College of Physicians (ACP) and the Canadian Medical Association (CMA) that admonish physicians not to treat relatives and themselves.[7-9] This path represents the safest and most prudent approach.

Our review of the literature revealed that many physicians believed they should treat themselves and their relatives not only for minor illnesses, but also for serious illnesses. Several reasons accounted for this practice including convenience, cost savings and the physician's judgement that they deliver the best treatment for themselves and their relatives than their colleagues.[2,4,10-12] However, this practice represents a major ethical concern.

A substantial number of publications derived data from surveys of physicians at various levels of career progress, including physicians in their residency and fellowship training years and physicians in clinical practice for several years or more than a decade, to gauge opinions as to whether physicians should treat themselves or their relatives.[11-18] Many respondents reported that they often self-medicate, especially for minor illnesses, and often treat relatives for minor illnesses and, in some instances, for major illnesses. The AMA warns that a physician's objectivity is compromised by

Abstract

In most health care fields, outcomes are becoming increasingly scrutinized and may play a role in "pay for performance;" therefore, selecting the most appropriate outcomes measures for the populations being studied or treated has evolved into a key aspect of outcomes monitoring. One way to assess patient goals is to administer a patient generated index (PGI). The philosophical underpinning of the PGI is that the person living the life is the best judge of the quality of that life. The PGI has been utilized in low back pain, as well as in adult spinal deformity surgery, however, it has not been previously utilized in an Appalachian population. The PGI was administered by means of self-report to 80 new patients with back pain who presented for assessment in the neurosurgery clinic. Participants completed an acceptability survey and provided written comments. Compliance was analyzed. Findings indicate that the PGI in its earliest form did not meet acceptable levels for use in this Appalachian sub-specialist clinic setting. This study contributes to the growing body of knowledge on patient-reported outcomes, and more specifically, the importance of utilizing patient-generated responses to map improvements in quality of life for patients over time.

Introduction

The World Health Organization defines quality of life (QOL) as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. [1]" Knowledge of a patient's goals and expectations for care is important in any medical interaction but especially if the patient's medical condition negatively impacts their QOL. One way to assess patient goals is to administer a patient generated index (PGI)[2]. The philosophical underpinning of the PGI is that the person living the life is the best judge of the quality of that life. This measure has been previously validated in a number of clinical settings[3]. A patient-generated measurement tool of quality of life may be particularly important in spine surgery, where patient treatment goals may not always align with surgeon goals of care.

The PGI is completed in three stages:

Stage 1: Patients are asked to list the five most important areas of their lives affected by their medical conditions.

Stage 2: The patient rates how much each of the five areas has been affected by his or her health condition using a scale of 1-100 where 0 is the worst imaginable and 100 is "exactly as you would like it to be."

Stage 3: Patients are asked to "spend" 60 tokens on the area they would like to see the most improvement. The 60 tokens are allocated according to the patient's priorities. A global index can be calculated by calculating the rating on stage 2 by the proportion of tokens allocated in stage 3, which are then summed to produce an index between 0 and 100.

A higher score indicates a higher quality of life. The index indicates how the patient's reality falls short of the goals and expectations for areas of their life they deem most important.[2]

Patient-reported outcome measures are increasingly popular and utilized for a variety of health conditions. One limitation of such surveys, which tend to be multiple choice for ease of assessment, is that patient-generated ideas or values are not assessed. Unlike these surveys, the PGI presents a free-text design, coupled with a ranking of disability levels and importance, and has been utilized and validated in a variety of medical conditions.[4,5] For example, it has been utilized in low back pain [6] as well as in adult spinal deformity surgery.[7] However, it has not been previously utilized in an Appalachian population. Appalachia is a distinct cultural region and has been associated with an aging population, high poverty rates, and low educational levels.[8] The objective of this feasibility study is to assess the utility and acceptability of the PGI for Appalachian patients with back pain.

Methods

After institutional review board approval, the PGI, along with Ruta's previously validated instruction sheet [4] (Appendix A) was administered by means of self-report to 80 new patients with back pain who presented for assessment in the neurosurgery clinic. This procedure mimicked the previous administration of the PGI in an earlier published pilot of PGI in a spinal deformity referral center [7]. Inclusion criteria included patient's > 18 years of age, first visit to the clinic, and currently experiencing back pain. The patients were identified by the research nurse and asked if they would consider participating. Those who agreed gave written informed consent. Participants were given a copy of the PGI, written instructions to complete the PGI, acceptability questionnaire (Figure1) as well as a copy of the informed consent. In addition, the patients were given brief verbal instructions, an overview of the PGI, and given the opportunity to ask questions prior to completing the PGI and acceptability survey. The completed surveys were collected at the end of the patient's visit. The PGIs were assessed for compliance with instructions, including general content of stage 1 areas of impact, and compliance with numbering instructions for stages 2 and 3. Compliance data, any written comments, as well as the results of the acceptability survey were entered into a REDCap (Research Electronic Data Capture)

personal feelings and that the patient and provider may suffer from a misadventure. The AMA also acknowledges that in case of an emergency, it is appropriate for a physician to step in and treat their relative. Several articles published on this topic during the last few years aimed to influence physician behavior to adhere to AMA recommendations.[11-20]

Five years ago, in 2012, we conducted an anonymous survey of resident, fellowship and faculty physicians at our academic institution for their views on whether they would treat themselves or their relatives for minor or serious illnesses. About one year ago, 2017, we repeated the anonymous survey with a different group of resident, fellowship and faculty physicians at our academic institution. Our study compared the results of these two surveys to determine whether attitudes and practices changed concerning treatment of relatives or themselves during the five-year interval.

Materials & Methods

We (all authors) developed an 11-item survey and tested it for face validity with physicians who were not participants in either survey (https://somwebapps.marshall.edu/research/wvmj/SurveyForms_Atalla_DeChant_Goebel_Mufson.pdf).

One of us administered the most recent survey anonymously from August to September of 2017 to residents, fellows and faculty physicians at Internal Medicine, Pediatrics, Family Medicine, and OB/GYN Grand Rounds.

Similarly, in 2012, one of us administered that survey anonymously to residents, fellows and faculty physicians at Internal Medicine, Pediatrics, Family Medicine, and OB/GYN Grand Rounds. Both surveys aimed to capture physician beliefs and practices regarding treatment of their relatives and themselves. For both surveys, we collected demographic data including age, gender, specialty, and level of training.

Statistical Analyses

Statistical calculations were run using the Vassar stats website (vassarstats.net). We calculated Fisher exact probability test 2-tailed and Chi-square to compare results from the 2017 and the 2012 survey.

Results:

The demographics for the 2017 and 2012 groups did not differ significantly for gender or level of training (Chi-square=1.25, df=3, p=0.74) (Table 1). Also, 39% were from Internal Medicine, 16% from Pediatrics, 24% from Family Medicine and 21% from OB/GYN. A wide variety of ages were represented, with 35% in the 20-29 age category and 43% in the 30-39 age category.

More than one-third (38.6%) of physicians in the 2017 survey believed they should treat their relatives and 54.3% in the 2012 survey did so, although the two proportions were not significantly different (Table 2). The number of physicians who prescribed medications for relatives without an examination significantly decreased (p=0.02) between the 2012 and 2017 surveys, as did the number of physicians who treated relatives for a minor illness (p=0.04) (Table 2). By comparison, very few physicians in both surveys treated relatives for serious illnesses, namely 7.2% and 6.2%, respectively (p=1.0). The reasons for treating relatives often cited by respondents included expediency, no charge courtesy care and very good or better medical care than another physician might provide, for example at an ER.

Table 3 shows the results of questions regarding physicians who treated themselves. The number of physicians who believed they should treat themselves for minor illnesses was similar between the surveys of 2012 and 2017, 57.8% and 49.4%, respectively. Furthermore, there were no significant differences when comparing the number of physicians who treated themselves and prescribed medications for themselves or had a relative prescribe medications for them.

We observed an interesting finding when we analyzed the number of men and women who currently had a PCP (Table 4). In 2012, a significantly higher number of women than men had a PCP (88.0% vs 56.4%; p=0.01). Conversely in 2017, a significantly higher number of men than women had a PCP (81.6% vs 59.4%; p=0.04).

When we analyzed the number of physicians who had a PCP and treated themselves for a minor illness in the past, there were no significant differences between men and women, with or without a PCP, and no significant differences between the 2012 and 2017 surveys (Table 5). There were no significant differences between the 2012 and 2017 survey results or between men and women, with and without a PCP, who also prescribed medication for themselves. The proportion of all physicians who had a primary care physician who self-medicated in 2017 (5/59, 8.5%) was less than those without a primary care physician (5/22, 22.7%); however, this did not reach statistical significance.

Discussion

In the 2017 survey, compared with the 2012 survey, significantly fewer physicians prescribed medications for relatives without an examination and treated relatives for minor illnesses. Additionally, there was a non-significant downward trend in the number of physicians who believed they should treat relatives and the number of physicians who prescribed medications for themselves. We suggest that these decreases could be accounted for by a heightened awareness of this issue, in part due to the recent publications covering the topic, and peer pressure. Administration of the survey can represent a teaching moment for physicians in training that encourages them to consider their thoughts on self-treatment and self-medication and discuss the issue with their peers.

A substantial number of physicians in our 2017 survey reported that they treated relatives and themselves, even though the number was somewhat less compared to the 2012 survey. The AMA suggests physicians should not treat themselves or family members except in emergencies when no other qualified physician is present.[7] Physicians believed that treatment of their relatives was a reasonable action because it was the expedient approach, their relative avoided a visit to an ER with very long wait times and because the physician often treated a minor illness of their relative that only required medications and appeared not to require any diagnostic tests. Consequently, they surmised that they were quite capable of fulfilling the role of their relative's PCP. Infrequently, they used the same reasoning to treat serious disease in their relatives, which carries more risk; either they did not think about this or they were willing to accept the risk because it was their relative. Under any circumstance, these actions incur ethical and medical practice risks for the physician, who might only have been doing a favor, but nonetheless thought it expedient to treat their relative.[1,2,4,6]

Osler opined that "the physician who treats himself [also herself] has a fool for a patient."[21] Yet, this practice occurs frequently. Physicians queried in surveys conducted in the US, Canada, Great Britain, Norway and Finland overwhelmingly treated themselves and their relatives, as if no best practices recommendation against treatment of self and relatives existed.[4,11-13,16,18] Self-medication occurred among 58% of Norwegian physicians who had been in practice at least 9 years[11]; 88% of 242 general practitioners in Great Britain self-medicated in the previous 5 years[12]; 56% of 90 neurologists surveyed in Illinois self-medicated with prescription medicines and 38% had self-treated or self-diagnosed without consulting another physician[13]; 48-84% men and 58-88% women physicians suffering from the most common serious diseases treated themselves (the percentages within those ranges depended on the disease) from among a cadre of 3313 physicians surveyed in Finland[16]; and, in another survey, 59.2% of 500 practicing physicians and 77.2% of 301 medical students in one state in New England self-prescribed psychoactive drugs at any time in the past.[18]

Several authors previously suggested questions which physicians should ask themselves to guide their choice as to whether or not to treat their relatives.[1-6,20] La Puma first suggested seven questions to be pondered thoughtfully by physicians before they undertake treatment of their relatives (or

themselves), encompassing sufficient knowledge of the disease to be treated, closeness to the relative which might compromise their conducting a thorough examination and history and limit their objectivity, and management of conflicts that might arise between physician and relative being treated as well as among other family members.[6] Still, physicians who treat themselves or relatives involve a conflict of interest and fail to understand that they cannot necessarily find a better treatment plan than an independent practitioner, who is not emotionally involved.[4,17]

Clearly, to avoid self-medication and self-diagnosis, and risks inherent in this approach, every physician needs a primary care physician, not only to treat them in the most objective and timely manner, but also to act as an ombudsman and manage their total care.[4] Krall argued also that physicians need their own healthcare provider so that they do not exceed their own limits, for an objective opinion, to manage documentation in a comprehensive manner and to follow-up their progress and interpret test results.[4] Campbell and Delva queried 122 medical residents in an academic institution in Canada and only about one-third reported that they had a primary care physician.[15] However, unlike the results of the Canadian researchers, in both of our surveys, slightly more than one-half to four-fifths of men and women reported that they had a PCP. As our two surveys were carried out 10 and 15 years, respectively, after the Canadian survey, this may reflect a more enlightened viewpoint of medical residents on the importance of identifying a PCP. Medical residents with a personal PCP more often rely on their physician than self-treatment.[15] In our study, less physicians who had a primary care provider prescribed medication for themselves, however the difference was not statistically significant.

As the number of physicians that follow up with a current PCP remains stagnant in the past five years, more awareness is needed to educate physicians in the harm of treating themselves and self-medicating and the benefits of having their own physician. The low number of physicians that follow up with a current PCP feeds the cycle of belief that physicians are capable of prescribing medications for themselves and treating themselves for minor illnesses. Even with physicians that are following up with a PCP, a fraction of them are still treating themselves rather than consulting their physician. Furthermore, the small number of attendings and upper rank residents having a PCP can influence incoming residents into believing self-treatment is acceptable in the medical field. New physicians entering the medical field need to be educated in not only the harm of self-treatment, but also the benefits of following up with a PCP and senior physicians should present a more positive role model in this area. Physicians should know the importance of having a PCP to care for them and manage their preventive health maintenance.

The irony of self-treatment remains the inability to self-conduct a thorough and comprehensive physical examination of some organ systems, for example, an examination of the abdomen, a digital examination of the rectum or a neurological examination. Moreover, the irony of treatment of a relative seems to be the inability to establish the same professional relationship as with a stranger, and broaches the discomfort, for example, of a male physician examining his grandmother or his twenty-year old niece. This conundrum may be unsolvable and should not be pursued to maintain good relations in the family. Moreover, if the examination was unsatisfactory and the physician missed or overlooked a key physical finding that accounted for an egregious outcome, the physician may never rid himself of guilt. Clearly, we recommend that the physician refer his/her relatives to an appropriate physician for their care and, en passant, follow the recommendations of the AMA, the ACP and the CMA.[7,8]

It is unclear why a significantly higher number of male respondents to the 2017 survey had a current PCP. In the 2012 survey, a significantly higher number of women had a current PCP. This difference seems understandable as women likely consider their OB/GYN as their primary care provider. The significant increase in men having a PCP could be due to increased awareness of men's health and peer pressure among men to enlist primary care as part of the men's wellness movement. Our medical school recently formed a men's health interest group.

One limitation of our study is the ambiguity of questions regarding treatment as we did not specify whether treatment included over the counter or only prescription medication. There is also ambiguity in the definition of a minor illness. Another limitation to the study is the sample size. There are no significant findings when separating the faculty, residents and fellows for analysis, perhaps due to the small numbers in each group. Additionally, the survey may not reflect the practice of treating relatives in the general medical population since our study was limited to only resident, fellowship and faculty physicians at one medical school.

Conclusion

Many physicians believe they should treat their relatives and themselves and this practice occurs often. Even though in our study the frequency of respondents who treated relatives and themselves decreased during the past five years, the numbers are still high and warrant greater awareness. Healthcare providers need more education to stress the importance of avoiding treatment of relatives, especially without an examination as this is substandard care. Also, they should be encouraged to select a PCP and seek the advice of their physician in lieu of treating themselves.

References

1. Gold, K J, Goldman, EB, Kamil, LH, Walton, S, Burdette, TG, Moseley, KL. No appointment necessary? Ethical challenges in treating friends and family. N Engl J Med, 2014 Sep 25;371(13):1254-1258.
2. Scarff JR, Lippmann S. When physicians intervene in their relatives' health care. HEC Forum. 2012 Jun;24(2):127-37.
3. Montgomery AJ, Bradley C, Rochfort A, Panagopoulou E. A review of self-medication in physicians and medical students. Occup Med (Lond). 2011 Oct;61(7):490-7.
4. Krall EJ. Doctors who doctor self, family, and colleagues. WMJ. 2008 Sep;107(6):279-84.
5. Ladouceur R. Should doctors treat themselves or not? Can Fam Physician. 2009 Aug;55(8):776-7.
6. La Puma J, Priest ER. Is there a doctor in the house? An analysis of the practice of physicians' treating their own families. JAMA. 1992 Apr 1;267(13):1810-2.
7. The AMA Code of Medical Ethics' opinion on physicians treating family members. Virtual Mentor, 2012 May 1;14(5), 396-397.
8. Snyder L; American College of Physicians Ethics, Professionalism, and Human Rights Committee. American College of Physicians Ethics Manual: sixth edition. Ann Intern Med. 2012 Jan 3;156(1 Pt 2):73-104.
9. CMA Policy Summary. Physician health and well-being. Can Med Assoc J 1998;158(9):1191-5.
10. Richer S. Should family physicians treat themselves or not?: No. Can Fam Physician. 2009 Aug;55(8):781-2.
11. Hem E, Stokke G, Tyssen R, Grønvold NT, Vaglum P, Ekeberg Ø. Self-prescribing among young Norwegian doctors: a nine-year follow-up study of a nationwide sample. BMC Med. 2005 Oct 21;3:16.
12. Chambers R, Belcher J. Self-reported health care over the past 10 years: a survey of general practitioners. Br J Gen Pract. 1992 Apr;42(357):153-6.
13. Evans RW, Lipton RB, Ritz KA. A survey of neurologists on self-treatment and treatment of their families. Headache. 2007 Jan;47(1):58-64
14. Töyry S, Räsänen K, Seuri M, Aärimaa M, Juntunen J, Kujala S, Husman K. Increased personal medication use among Finnish physicians from 1986 to 1997. Br J Gen Pract. 2004 Jan;54(498):44-6.
15. Campbell S, Delva D. Physician do not heal thyself. Survey of personal health practices among medical residents. Can Fam Physician. 2003 Sep;49:1121-7.

16. Töyry S, Räsänen K, Kujala S, Aärimaa M, Juntunen J, Kalimo R, Luhtala R, Mäkelä P, Myllymäki K, Seuri M, Husman K. Self-reported health, illness, and self-care among Finnish physicians: a national survey. Arch Fam Med. 2000 Nov-Dec;9(10):1079-85.

17. La Puma J, Stocking CB, La Voie D, Darling CA. When physicians treat members of their own families. Practices in a community hospital. N Engl J Med. 1991 Oct 31;325(18):1290-4.

18. McAuliffe WE, Rohman M, Santangelo S, Feldman B, Magnuson E, Sobol A, Weissman J. Psychoactive drug use among practicing physicians and medical students. N Engl J Med. 1986 Sep 25;315(13):805-10.

19. Fromme EK, Farber NJ, Babbott SF, Pickett ME, Beasley BW. What do you do when your loved one is ill? The line between physician and family member. Ann Intern Med. 2008 Dec 2;149(11):825-31.

20. Anyanwu, EB, Abedi, HO, Onohwakpor, EA. Ethical Issues in Treating Self and Family Members. Am J Public Health Res 2014;2(3), 99-102.

21. "A physician who treats himself has a fool for a patient." *Sir William Osler Aphorisms*, by William Osler et al., Iwanami Publishing Service Center, 2001.

Table 1. Comparison of Demographics from the 2012 and 2017 Surveys.*

2012 (N=81)*		(N=201783)+
	Number (%)	Number (%)
Gender		
Women	25 (31.3)	32 (39.5)
Men	55. (67.9)	49 (50)
Level of training		
PGY1	20 (24.7)	25 (30.9)#
PGY2	16 (19.8)	17 (20.5)
PGY3, 4 Fellow	15 (18.5)	15 (18.1)
Faculty	30 (37.0)	24 (28.9)

*No significant differences between each demographic of the 2012 and 2017 surveys.

+DeChant R, Goebel L, Mufson M. Should physicians treat their relatives or themselves? J Investig Med 2014;62:524.

#Atalla J, DeChant RD, Goebel L, Mufson MA. A 5-Year Follow Up of Doctors Treating Relatives. J Investig Med 2018;66:620.

§ Data missing from one respondent.

‖Data missing from two respondents.

Table 2. Questions asked to physicians in regard to treating relatives

Should physicians treat relatives?	Have you prescribed medication for a relative without an exam?*+	Have you treated a relative for a minor illness?*

Survey Year	Number (%)	Number (%)	Number (%)
2012 (N=81)	44 (54.3)	29 (35.8)	61 (75.3)
2017 (N=83)	32 (38.6)	16 (19.3)	49 (59.0)

*Significantly more residents and faculty in the 2012 survey compared to the 2017 survey prescribed medications for relatives without examining them, p=0.02 (Fisher Exact Test, 2-tailed) and treated relatives for minor illnesses, p=0.04 (Fisher Exact Test, 2-tailed).

† Prescribed medications for a relative were mainly supportive therapy, including over-the-counter (OTC) medicines such as NSAID's and antihistamines for the common cold or a viral infection; in a few instances they included migraine prophylaxis, antibiotic treatment for an uncomplicated UTI, treatment for diabetes mellitus, hypertension, osteoarthritis and sinusitis and writing a prescription for an Epipen.

Table 3. Questions asked to physicians in regard to treating themselves.*

Do you treat yourself for a minor illness?	Do you prescribe medication for yourself?	Has a relative prescribed medication for you?
Survey Year	Number (%)	Number (%)	Number (%)
2012 (N=81)	46 (57.8)	17 (21.0)	12 (14.8)
2017 (N=83)	41 (49.4)	10 (12.0)	21 (25.3)

* No significant differences between the 2012 and 2017 surveys for these three questions.

† Minor illnesses included mainly the common cold, other viral upper respiratory tract illnesses and infrequently other illnesses, such as uncomplicated urinary tract infection.

‡ Physicians prescribed medication for themselves that mainly included supportive therapy for common colds and viral upper respiratory infections.

Table 4. More Women had PCP's, but 5 Years Later More Men had PCP's.

Men			Women	
Survey Year	Number in Group	Number (%) with PCP	Number in Group	Number (%) with PCP
2012*	55	31 (56.4)	25	22 (88.0)
2017	49	40 (81.5)	32++	19 (59.4)

*Significantly more female residents and faculty had PCP's compared to males, p=0.02 (Fisher Exact Test, 2-tailed)

+Significantly more male residents and faculty had PCP's compared to females, p=0.014 (Fisher Exact Test, 2-tailed)

++Data from two respondents missing

Table 5. Number of physicians with or without a PCP who choose to treat themselves for a minor illness or self-medicate.

Women		Men		Women		Men			
Survey Year	PCP	Number in group	Number (%) treated for a minor illness	Number in group	Number (%) treated for a minor illness	Number in group	Number (%) who self-medicated	Number in group	Number (%) who self-medicated
2012*	Yes+	31	15 (48.4)	22	12 (54.5)	31	6 (19.4)	22	1 (4.5)
	No	24	(15 (62.5)	3	3 (100.0)	24	9 (3.75)	3	1 (33.3)
2017*	Yes+	40	20 (50.0)	19	5 (26.3)	40	4 (10.0)	19	1 (5.3)
	No	9	7 (77.8)	12++	7 (58.3)	9	3 (33.3)	13	2 (15.4)

in who self-

*No significant differences among men and women with or without a PCP for the 2012 and 2017 surveys for self-treatment of minor illness and for self-medication.

+One respondent did not state gender.

++One respondent did not state treatment.

HEALTHCARE SUMMIT

Aug. 21-23, 2020

The Greenbrier
White Sulphur Springs

Plan your schedules to attend West Virginia's premier meeting to discuss current health care trends, meet policy makers and accumulate continuing education hours.

Constitution and Bylaws Of The West Virginia State Medical Association

CONSTITUTION

ARTICLE I. - TITLE AND DEFINITION

The name and title of this organization shall be the West Virginia State Medical Association.

ARTICLE II. - PURPOSES

The purposes of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of West Virginia and to unite with similar associations or societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to promote thevpublic health; to maintain the highest standards of medical education; to secure the enactment and enforcement of just medical laws; to promote the general welfare of the profession; and to enlighten and direct public opinion in regard to Medicine in West Virginia, and to promote the time honored commitment of the profession to the prevention and cure of disease and in improving the quality of life in the State.

ARTICLE III. - COMPONENT SOCIETIES

Component societies shall be chartered by this Association.

ARTICLE IV. - COMPOSITION

This Association shall consist of active, retired, resident, and student members and others, as shall be provided in the Bylaws.

ARTICLE V. - HOUSE OF DELEGATES

The House of Delegates is the legislative and the policy-making body of the Association composed of elected representatives and others as provided in the Bylaws.

ARTICLE VI. - COUNCIL

The Council shall consist of the elected Councilors from each component society and from the Medical Association Resident, Medical Association Student and Young Physicians' section as provided in the Bylaws; the immediate Past President, who shall serve as Chairman; and his or her immediate predecessor who shall serve as a Senior Councilor-at-Large for one (1) year and thereafter as a Junior Councilor-at-Large for one (1) year, and the President, the President Elect, the Vice President, the Treasurer, the Speaker of the House of Delegates, Vice Speaker of the House of Delegates, West Virginia State Medical Association delegates to the American Medical Association, the Chair of the Legislative Committee, and the President of the West Virginia State Medical Association Alliance. Members of Council present shall constitute a quorum. Their duties and responsibilities shall be as defined in the Bylaws.

ARTICLE VII. - SECTIONS

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections, and for the organization of such sections as will promote the best interests of the profession, these to be composed exclusively of members of component societies, or as may be prescribed in the Bylaws.

ARTICLE VIII. - MEETINGS AND SESSIONS

The Association shall hold an annual meeting, consisting of daily sessions which shall be open only to registered members and guests as prescribed in the Bylaws.

The Association shall hold such other meetings as deemed necessary or as provided in the Bylaws.

ARTICLE IX. - OFFICERS

The officers of this Association shall be a President, a President Elect, who shall automatically succeed to the office of President, a Vice President, a Treasurer, a Speaker of the House of Delegates and a Vice Speaker of the House of Delegates, Councilors to be elected, as provided in the Bylaws, the Chair of the Council, who shall be the retiring president, and his or her two immediate predecessors, who shall be the Councilors-at-Large.

The officers' qualifications, terms and duties of office shall be provided in the Bylaws.

ARTICLE X. - FUNDS AND EXPENSES

Funds shall be raised by an annual per capita assessment of dues from members of the Association.

Funds may also be raised in any other manner approved by the Council or House of Delegates as provided in the Bylaws.

ARTICLE XI. - REFERENDUM

A general meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association who may vote by mail or in person. The action of the majority of the members of the Association shall determine the question and be binding upon the House of Delegates.

The House of Delegates may, by a two-thirds vote of its members, submit any question before it to a general referendum, and the result shall be binding on the House of Delegates. It may also, by a like vote, refer any question, including the election of officers or any number of them, to the general meeting of the Association, a majority vote of the membership determining the result.

ARTICLE XII. - THE SEAL

The Association shall have a common seal which shall be entrusted to the care of the Executive Director.

ARTICLE XIII. - AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any annual session, provided that such amendment shall have been presented in open meeting at the previous annual session, and that it shall have been published in the WEST VIRGINIA MEDICAL JOURNAL, at least two (2) months prior to the next annual meeting or sent officially to each component society.

BYLAWS

CHAPTER I. - MEMBERSHIP

Sec. 1. Applications for membership are subject to review and approval by the Executive Committee of the West Virginia State Medical Association.

Sec. 2. Eligibility for full membership in the Association shall be limited to doctors of medicine or osteopathic medicine licensed to practice in West Virginia; residents who are licensed to practice medicine in West Virginia, or who are serving an internship/residency training programs approved by the Accreditation Council for Graduate Medical Education, or the Committee on Post Doctoral training of the American Osteopathic Association or their successors prior to meeting requirements for licensure; and students enrolled in accredited schools of medicine in West Virginia granting Doctor of Medicine or Doctor of Osteopathic Medicine degrees.

Sec. 3. Active members shall be those physicians who are engaged in the practice of medicine, and the practice of osteopathic medicine as stipulated in Section 2 of this Chapter, in the State of West Virginia, including those who are temporarily absent by reason of serving a residency or absent for a tour of duty with the Armed Services.

Sec. 4. Retired members shall be those physicians who have retired from active practice of medicine and, upon written request, received Executive Committee approval.

Retired members shall, following Executive Committee approval, be exempt from the payment of dues or assessments and physicians excused by Executive Committee may be exempt from the payment of dues to alleviate financial hardship or because of forced retirement from medical practice due to physical disability. Executive Committee shall establish appropriate standards and procedures for granting all dues exemptions. These physicians shall have the privilege of the floor in any open session of the Association, but shall not have the right to make or second motions, to vote, or to hold any elective office in this Association, except that they may hold elective or appointive committee membership.

Sec. 5. Student members shall be those persons enrolled in accredited schools of medicine in West Virginia granting Doctor of Medicine or Doctor of Osteopathic Medicine degrees and who fulfill the membership requirements set forth in these Bylaws.

Sec. 6. Resident members shall be those persons who are licensed to practice medicine in West Virginia, or who are serving in internship/residency training programs approved by the Accreditation Council for Graduate Medical Education, or the Committee on Post-Doctoral Training of the American Osteopathic Association or their successors prior to meeting requirements for licensure and who fulfill the membership requirements set forth in these Bylaws.

Sec. 7. Associate members shall be those individuals, firms, corporations, or partnerships who, while not doctors of medicine or osteopathic medicine licensed to practice in West Virginia, have interests allied to the medical professions. Applications for associate membership shall be in writing to the Executive Director of the Association and shall constitute acceptance of the Constitution and Bylaws of the Association.

The applicant for such associate membership shall be sponsored by another member with full privileges and in good standing or by the Executive Director. The application shall contain the name of such sponsor.

Such applications for associate membership shall be referred by the President to the Executive Committee of the West Virginia State Medical Association, who shall investigate the applicant and shall vote on each applicant as to whether the applicant may become an associate member of the Association.

Associate members shall have neither a vote nor be eligible to hold office.

Sec. 8. Licensed Physician Assistants seeking association membership shall be granted membership with the rights and privileges of an Associate Member.

Sec. 9. The principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Sec. 10. Dues shall be payable annually. Dues in each membership category shall be fixed by action of the Executive Committee. Dues may be waived for active members temporarily incapacitated. Any member whose dues have not been paid within thirty days of anniversary date shall be held to be delinquent and shall be automatically dropped from membership. Such members cannot be reinstated except by action of the Executive Committee.

Sec. 11. Each member in attendance at an annual session shall register and indicate the component society or section of which he or she is a member. When his or her membership status has been verified, he or she shall receive a badge which shall be evidence of his or her right to all privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he or she has complied with the provisions of this Section.

Sec. 12. Non-members of this Association, resident in West Virginia, shall not take part in the deliberations of this Association, except when invited to do so or specifically authorized in the Constitution or Bylaws.

CHAPTER II. - ANNUAL MEETING

Sec. 1. The Association shall hold a meeting each year at such place and such date as may be selected by the Executive Committee.

Sec. 2. Special meetings of either the Association or the House of Delegates shall be called by the President, or on petition of twenty (20) delegates or fifty (50) members. The association shall give proper notice via electronic means.

Sec. 3. All registered members may attend and participate in the proceedings and discussions of the general scientific meetings and of the several sections. The general meetings shall be presided over by the Speaker of the House of Delegates or Vice Speaker of the House of Delegates.

CHAPTER III. - HOUSE OF DELEGATES

Sec. 1. The House of Delegates shall meet annually at such time and place as may be fixed by the Executive Committee of the Association.

Sec. 2. The House of Delegates shall consist of (1) delegates elected by the component societies; (2) delegates elected by Resident Physician and Medical Student Sections; and (3) the President, President Elect, Vice President, Treasurer, Chair of the Council, Senior and Junior Councilors-at-Large, Speaker of the House of Delegates and Vice Speaker of the House of Delegates, and Delegates and Alternate Delegates to the American Medical Association.

Sec. 3. Each component society shall be entitled to elect and send to the House of Delegates each year one (1) delegate who shall be an officer of the society, and one (1) additional delegate for every twenty (20) members or fraction thereof. A corresponding number of alternates shall be elected each year by each component society. Resident Physician and Medical Student Sections shall be entitled to send to the House of Delegates one (1) delegate and alternate each year, chosen according to constitutions, bylaws or other organizational principles adopted by those sections. Roster of Delegates and Alternates must be submitted to the Association offices in a timely manner for approval of credentials. In case any of the regularly elected delegates or alternates are not present at an annual meeting, the members of the component societies, or Resident Physician or Medical Student Sections, to which they belong shall elect a delegate or delegates pro temp. Credentialing must be accomplished prior to the opening of each session of the House of Delegates.

Sec. 4. The Delegates present shall constitute a quorum and only members of the House who are present shall have the right to vote.

Sec. 5. The deliberations of the House of Delegates shall be governed by the Robert's Rules of Order.

Sec. 6. The House shall consider resolutions during the annual session. Resolutions must be submitted 30 days prior to the first session and may not be voted on until the next session, except by 2/3 consent vote of the House. Late resolutions require unanimous consent to be considered and must be submitted prior to 1st Session of the House.

Sec. 7. The House of Delegates may, upon application, provide and issue charters to county societies organized in accordance with the Constitution and Bylaws.

Sec. 8. Upon request, the House of Delegates may organize the physicians of two (2) or more counties into component societies.

Sec. 9. The House shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates.

Sec. 10. The House of Delegates shall meet in open session, to which any member may be admitted. In closed session, attendance shall be restricted to members of the Association with full privileges, its legal counsel and members of the Association's office staff. In any session only delegates and authorized official personnel shall have the privilege of the floor, except by unanimous consent.

Sec. 11. Actions of the House of Delegates shall be published in THE WEST VIRGINIA MEDICAL JOURNAL.

CHAPTER IV. - ELECTIONS

Sec. 1. All elections may be by electronic ballot, and a majority of the votes cast shall be necessary to elect.

Sec. 2. The officers of this Association and delegates and alternate delegates to the American Medical Association shall be nominated in the method prescribed in that section of the Bylaws relative to the duties of the Committee on Nominations, and the election shall be open for the thirty (30) days prior to the start of the annual meeting.

CHAPTER V. - TERMS OF OFFICERS

Sec. 1. The officers, except hold-over Councilors and Councilors-at-Large shall be elected annually. The term of the elected officers, except members of the Council and the Speaker and Vice-Speaker, shall be for the period of one year beginning with the installation of the President. The term of the Speaker and Vice-Speaker shall be for a period of two years. All these officers shall serve until their successors take the oath of office.

The term of office of Councilors shall be for a period of two (2) years.

Sec. 2. The retiring President shall be Chairman of the Council for the year following his or her term of office, and shall then serve another two (2) years as Councilor-at-Large.

Thereafter he or she shall be eligible for election to any office of the Association except President or President-Elect.

Sec. 3. The Executive Director shall be appointed by the Executive Committee.

CHAPTER VI. - DUTIES OF OFFICERS

Sec. 1. The President shall address the annual meeting of the House of Delegates, and participate, with the right to vote in sessions of the House of Delegates. He or she shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require.

In the event of a vacancy in the office of Treasurer or in the Council, the President shall be empowered to fill the vacancy by appointment until the next annual meeting.

Sec. 2. The President Elect and Vice President shall assist the President in the discharge of the President's duties. In the event of the death, resignation, incapacitation, or removal from office of the President, the President Elect shall succeed the President in office and shall serve for the remainder of the term of his or her immediate predecessor, and the term to which he/she was elected.

The President Elect shall be installed as President at the annual meeting.

Sec. 3. The Treasurer shall be financial overseer of this Association. The Treasurer shall report financial conditions to the President and the Chair of the Council. The accounts of the Association shall be audited by a certified public accountant for the previous fiscal year. The Executive Director shall be the trustee of the funds and securities of the Association.

Sec. 4. The Speaker of the House of Delegates shall preside at the meetings of the House of Delegates and shall perform such duties as custom and parliamentary usage require, and may address the House of Delegates at the opening meeting of al conventions, but such address shall be limited to matters of conduct and procedure in the House. The Speaker has the right to vote only in the case of a tie.

Sec. 5. The Vice Speaker shall officiate for the speaker in the latter's absence or at the request of the Speaker. In the event of a vacancy in an office of the Speaker, the Vice Speaker shall officiate during the unexpired term. When officiating for the speaker or when filling a vacancy in the office of the Speaker, the Vice Speaker shall have the right to vote only in the case of a tie.

CHAPTER VII. - THE COUNCIL

Sec. 1. The Council shall meet at the call of the Chair at each annual meeting, and as often as necessary to transact the general business and other affairs of the Association, or on written petition of five (5) members of that body. For purposes of determining the existence of a quorum at a special meeting, and for purposes of voting on any business of the Council conducted at such special meeting, a Councilor shall be included in such determination or vote if present at the special meeting either in person or by means of a telephone conference call or similar electronic communication by means of which all persons participating in the special meeting can hear and speak to each other. The location of any such special meeting shall be deemed to be the place specified in the notice of such special meeting, or, if no location was specified, the place from which the telephone conference call or other means of electronic communication originates.

The Council shall be the executive body of the House of Delegates, and between meetings shall exercise all the powers conferred on the House of Delegates by this Constitution and Bylaws.

In the event of the absence of the Chairman of the Council at any meeting, the President shall serve as acting chairman. Should the President also be absent, then an acting chairman shall be elected by the members of the Council present.

Sec. 2. Each Councilor shall serve as organizer, advisor and representative in his or her component society.

Sec. 3. In the event of a conflict, the Council shall be empowered to retain general legal

counsel for the Association.

Sec. 4. Each component society shall have a minimum of one (1) Councilor and shall be listed in alphabetical order and so numbered.

1 - Boone County Medical Society;

2 - Cabell County Medical Society;

3 - Central West Virginia Medical Society;

4 - Eastern Panhandle Medical Society;

5 - Greenbrier Valley Medical Society;

6 - Hancock County Medical Society;

7 - Kanawha Medical Society;

8 - Mason County Medical Society;

9 - Monongalia County Medical Society;

10 - Ohio County Medical Society;

11 - Parkersburg Academy of Medicine;

12 - Raleigh County Medical Society.

Sec. 6. During the annual meeting of the House of Delegates held in an even-numbered year, there shall be elected Councilor**s** from each even-numbered component society to serve for two (2) years; and during the annual meeting of the House of Delegates held in an odd-numbered year, there shall be elected Councilors from each odd-numbered component society to serve for two (2) years. Each component society which has from one (1) to one hundred (100) members shall be entitled to one (1) Councilor. For each additional one hundred (100) members or fraction thereof a component society shall be entitled to one (1) additional Councilor. Each Society shall also submit the name of an alternate councilor to act as its representative in the absence of one or more of its councilors. An AMA alternate delegate shall also serve as an alternate councilor in the absence of an AMA delegate. The alternate councilor's right to vote shall only be in the absence of one or more of his or her component society's councilors.

In computing the membership base for determination of the number of Councilors to which a component society may be entitled, medical student members and resident members shall be counted in the component society where they declare their residency.

Sec. 7. The Medical Association resident section, the Medical Association medical student section and the Medical Association young physicians' section shall each have one (1) councilor and one (1) alternate councilor. Each councilor shall be elected at the annual meeting of the House of Delegates to serve for two (2) years. Each section shall also submit the name of an alternate to act as its representative in the absence of its councilors.

Sec. 8. The Chair of the Legislative Committee shall be a member of council with the right to vote.

Sec. 9. The Council shall have jurisdiction over all proceedings to take disciplinary action against a member or associate member of the Association, subject to any limitations in the Constitution and Bylaws. Such jurisdiction shall include the power to censure, impose probation, suspend, expel or otherwise discipline a member or associate member of the Association. All proceedings of the Council shall be held in accordance with due process but the proceedings need not follow the W.Va. Rules of Civil Procedure or Rules of Evidence.

CHAPTER VIII. - COMMITTEES

Sec. 1. There shall be an Executive Committee of the Association, composed of the Speaker and Vice-speaker of House, and Chair of Legislative Committee, the three (3) immediate Past Presidents, the President, President- Elect, Vice President, Treasurer and the Executive Director ex officio, with the President serving as Chair, whose duties shall be as follows:

(a) Prior to January 1 of each year, the Executive Committee shall establish an annual budget.

(b) The Executive Committee shall set the agenda for the Council meetings, and shall make recommendations to the Council in regard to any pertinent matters, shall fulfill such other duties as may be delegated to it by the House of Delegates or the Council and shall take such other actions as may become necessary, in the opinion of the Executive Committee, to protect the interests of the Association and its members.
(c) The Executive Committee shall select an Executive Director who shall carry out all duties assigned to him or her by these Bylaws or by competent authority. The Executive Director shall have the responsibility to employ, or discharge, personnel needed to achieve the objectives of this Association.

Sec. 2. The Executive Committee shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities.

The President may appoint temporary ad hoc committees to perform specified functions.

All such committees shall expire at the end of the term of the President by whom appointed.

Standing committees shall send special reports to the Council for action on matters concerning the West Virginia State Medical Association policy or requiring the expenditure of Association funds, and shall submit committee minutes to the Council for information.

No committee or commission shall have power or authority to fix or determine Association policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Council, except when immediate action by the Executive Committee as authorized in Section 1 (b) of this Chapter, becomes necessary to protect the interests of the Association and its members, in which case decisions of the Executive Committee shall be authorized.

Sec. 3. The Committee on Nominations shall consist of five (5) members chosen by the President, and the Junior Councilor- at-Large, who shall serve as Chair. The Committee shall consider and recommend to the House of Delegates, prior to the election of officers in its final session, its nominees for the office of President Elect, Vice President, Treasurer, Speaker of the House of Delegates, Vice Speaker of the House of Delegates and the AMA Delegate and Alternate. Nothing in this Section shall serve to prevent any nominations from the floor for these respective offices.

Sec. 4. The Committee on Resolutions shall receive and consider all resolutions prepared for presentation in the House of Delegates at an annual or special meeting. Such resolutions must be in the hands of the Executive Director at least 30 days before the meeting at which they are to be presented; otherwise, 2/3 consent vote of the House of Delegates shall be required for presentation. The Committee shall, in open session, afford any member with full privileges the opportunity of testifying for or against any resolution duly presented, and, in closed session, may recommend adoption, referral, amendment or disapproval, or may report a substitute resolution to the House of Delegates.

Sec. 5. The Finance Committee shall consist of four (4) members of the Association with full privileges, appointed by the President and who possess some expertise in financial matters, and the Treasurer, who shall serve as Chair. One (1) of the four members shall be the Association Vice President. The term of office for the other three (3) members of the Committee shall be for two (2) years and shall be eligible for reelection.

The members shall be appointed initially two (2) for two (2) year terms, and one (1) for a one (1) year term, and each year thereafter, be appointed for two (2) year terms.
The finance committee shall oversee the finances of the Association; assist in budget preparation and review the annual audit.

Sec. 6. The Scientific and Educational Sessions Committee shall consist of five (5) members of the association; the chair of which will be the President-Elect. The remaining four (4) members will be appointed by the President. Duties and responsibilities of the Committee shall be to plan scientific and educational sessions in regard to the program content, format and site and in accordance with the requirements of the WVSMA Essentials, Guidelines and Standards for Commercial Support and enduring Materials.

CHAPTER X - SECTIONS

Sec. 1. The objectives of sections are to (a) form closer professional relations among physicians practicing in particular specialty areas; and among residents and students;

(b) foster among physicians members of particular specialties, and among residents and students, educational and other activities directed toward better patient care; and

(c) assist hospital medical staffs in confronting concerns in the health care environment.

Sec. 2. Each section shall elect its own officers according to procedures and/or Constitution and Bylaws mechanisms it adopts. It shall advise the Executive Director of the West Virginia State Medical Association of the results of each election within ten (10) days of such an election; and shall take other steps necessary to ensure that a current roster of officers is on file with the Executive Director.

Sec. 3. There is hereby authorized, within the membership framework of the West Virginia State Medical Association, establishment of Young Physician, Resident Physician, Medical Student, and Hospital Medical Staff Sections to (a) provide for direct participation of resident and medical students in educational, business and other activities of the Association; (b) establish effective lines of communication among young physicians, physicians-to-be, and their more senior colleagues; and (c) provide a forum to discuss the needs and concerns of physician members of hospital medical staffs.

Each such section shall develop its own constitution and by-laws or other organizational procedures and elect its officers, under provisions of Section 3 of this Chapter; provided, however, that such a constitution, by-laws or revisions and amendments shall not be inconsistent with the principles or organization of the West Virginia State Medical Association, and shall be subject to approval by the Association's Council.

The Resident Physician and Medical Student Sections each shall be entitled to elect one (1) delegate and one (1) alternate to the Association's House of Delegates each year.

Each section shall report to the Association's Executive Director by October 1 of each year the names of its delegate and alternate.

CHAPTER XI. - COMPONENT SOCIETIES

Sec. 1. All component medical societies now affiliated with this Association or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and Bylaws, may, on application, receive a charter from and become component parts of this Association. Subsequent revisions or amendments of these principles shall be submitted to the Executive Committee for review.

Sec. 2. Charters shall be issued only on the approval of the House of Delegates and shall be signed by the President. The House of Delegates shall have authority, after a hearing, to revoke the charter of any component society, the actions of which are in conflict with the letter or spirit of this Constitution and Bylaws.

Two (2) or more component societies shall have the right to merge into one (1) society provided such action is agreed to by a vote of the majority of the members of the societies affected. In the event of a merger under this section, the charter or charters of the societies losing identity as such shall be surrendered to the Houseof Delegates.

Sec. 3. Only one (1) component medical society shall be chartered in any one county.

Sec. 4. Each component society shall be the judge of the qualifications of its own members, but, as such societies are the only portals to membership in this Association and to the American Medical Association, every licensed physician shall be eligible to apply for membership.

Sec. 5. When a member in good standing in a component society moves to another county in this State, his or her membership may be transferred to the component society in the area to which the member has moved, provided the transfer is approved by such society.

Sec. 6. A physician living in one county may hold his or her membership in a contiguous county medical society whose meetings are most convenient for him or her to attend.

Any physician who resides in a county having no county medical organization may apply for membership in a contiguous county medical society, and upon election, continue such membership until his or her own county is organized.

Sec. 7. Each component society shall have general direction of the affairs of the profession in its area, and its influence shall be constantly exerted for bettering the science and art of Medicine through its organizational efforts.

Sec. 8. The secretary or treasurer of each component society shall remit promptly to the Executive Director of the Association dues of

Live Healthy, Live Well, WV promotes health, policy discussions

Each month, WVSMA Executive Director Danny Scalise interviews a health care leader or policy maker or in the health care field about issues of interest. *Live Healthy, Live Well, WV*, is produced at the West Virginia Library Commission and is seen on cable stations around West Virginia. Shows may be viewed at the WVLC website or on YouTube. Shows are available on Suddenlink Channel 17 on the following days and times:

Suddenlink
Channel 17
Wednesday
10:30 a.m.
4:30 p.m.
10:30 p.m.
Thursday
4:30 a.m.
Saturday
4:30 p.m.

Dr. Peter Salk seeks to preserve Jonas Salk legacy

Dr. Peter Salk likes showing a photograph of his young self being injected with the polio vaccine while his vaccination-developing father Dr. Jonas Salk, and a nurse in a stiff white uniform and cap, observe. Salk spoke at the West Virginia State Medical Association's Healthcare Summit in August.

The year was 1955. Polio was crippling people throughout the world. "Polio," according to the Centers for Disease Control and Prevention, "or poliomyelitis, is a crippling and potentially deadly infectious disease. It is caused by the poliovirus. The virus spreads from person to person and can invade an infected person's brain and spinal cord, causing paralysis..."

Dr. Peter Salk spoke at the West Virginia State Medical Association Healthcare Summit.

When the Food and Drug Administration approved Salk's vaccination, it was licensed the same day, unheard of in today's world of protracted research and development and complicated licensing processes.

Things were not perfect. A small number of people contracted the virus after receiving the vaccination. A lab that didn't follow Salk's strict distribution protocols released vaccinations with a mutated virus causing many being vaccinated to suffer paralysis and, in some cases, death.

Within seven years of licensing the vaccination, the incidence of polo in the United States fell by 97 percent.

Importantly, within seven years of licensing the vaccination, the incidence of polo in the United States fell by 97 percent. Groups such as Rotary International still raise money to promote vaccinations in a few third-world countries experiencing polio outbreaks.

Salk, a noted researcher in his own right who worked closely with his father on many projects, divides his time between a professorship at the University of Pittsburgh's Graduate School of Public Health (Much of his father's research was Pittsburgh-based.) and the Jonas Salk Legacy Foundation in La Jolla, California.

Jonas Salk, who was working to perfect an HIV vaccination prior to his 1995 death at 81, wrote several books his son said address the human condition and how earth's people can protect themselves and their planet. Summing up his father's legacy, he noted a quotation his brother found in his father's writings: *Hope lies in dreams, in imagination and in the courage of those who dare to make dreams into reality.*

Salk sees a close tie between emotional well being and public health. He has visited West Virginia twice this year and is impressed by the state's response to the opioid epidemic. While one West Virginia physician excoriated him for the proposal after his speech, Salk advocates for cultivating voluntary meditation programs in schools.

He said non-trauma focused meditation utilizing mindfulness based on stress reduction improves the psychological health of school students. He said meditating students increase their grade point averages and engage in fewer harmful activities.

Hope lies in dreams, in imagination and in the courage of those who dare to make dreams into reality.

...Dr. Jonas Salk

AMA House of Delegates Report

Joseph Selby, MD
Delegate and Chair

The West Virginia Delegation to the Annual Meeting of the American Medical Association (AMA) in June 2019 was busy. Members in attendance: Joseph Selby, Delegate and Chair; Hoyt Burdick, Delegate; Jim Felsen, Alternate Delegate; Ron Stollings, Alternate Delegate; Coy Flowers, President of West Virginia State Medical Association (WVSMA). Danny Scalise, Executive Director of WVSMA, handled support and coordination of functions.

The Delegation was involved in interviews for candidate election to office and council through the coordination of the Southeast Delegation. Dr. Jim Felsen served on Reference Committee D, Public Health, and put in long hours. Dr. Joseph Selby, Lisa Costello and Jess Thayer, with Danny Scalise, presented at the Organization of State Medical Association Presidents (OSMAP) on the West Virginia University School of Medicine, *Health Policy and Advocacy Rotation*. Articles have appeared in the *West Virginia Medical Journal* highlighting the students' accomplishments.

During our lunch caucus, Senator Joe Manchin called to encourage the Delegation to speak to Resolution 231 in Reference Committee B, to determine if it was in support of his efforts in Senate Bill 1012, *Protecting Jessica Grub Legacy Act*. The Resolution sought to align Federal Privacy Laws and Regulations with substance use disorder treatment and was in alignment with efforts of Senator Manchin.

I took the opportunity to speak on the floor of the House of Delegates in the support of Resolution 321, which called for more accountability, consistency, and excellent provision of service by the country's state organized Physician Health Programs (PHP). West Virginia has been recognized as having one of the best programs in the country.

Sema Verma, Centers for Medicare and Medicaid Services (CMS) Administrator, gave a 24-minute speech focused on *Patients over Paperwork*, a CMS initiative to simplify the Medicare payment system. Reforming payment for evaluation and management services and interoperability of electronic health record systems are key components to this initiative. Members of the House of Delegates applauded when Verma mentioned how reforms such as site-neutral payments are intended to create a level playing field for independent practices. She said many well-intended government policies seeking to solve the challenges of health care have exacerbated problems and have led to health care consolidation that has driven up costs.

Without a doubt, the highlight of the annual meeting was the inauguration of Dr. Patrice A. Harris as the 174th President of the American Medical Association and the first African-American woman to hold this position. Dr. Harris grew up in Bluefield, West Virginia, and attended West Virginia University, earning a BA in Psychology, an MA in Counseling Psychology and a Medical Degree in 1992.

Without a doubt, the highlight of the annual meeting was the inauguration of Dr. Patrice A. Harris as the 174th President of the American Medical Association and the first African-American woman to hold this position. Dr. Harris grew up in Bluefield, West Virginia, and attended West Virginia University, earning a BA in Psychology, an MA in Counseling Psychology and a Medical Degree in 1992. Dr. Harris spearheads the AMA's effort to end the opioid epidemic and has been the Chair of The AMA Opioid Task Force since its creation in 2014.

In attendance at her inauguration was Dr. Jim Stevenson former Chair of the Department of Psychiatry at WVU, Dr. Clay Marsh, Dean of the WVU School of Medicine; and Gordon Gee, President of West Virginia University. It was a great "homecoming" for Dr. Harris.

EXECUTIVE DIRECTOR DANNY SCALISE AND AMA PRESIDENT PATRICE HARRIS AT WVSMA'S HEALTHCARE SUMMIT

Much of the work at the AMA meeting is attending Reference Committee proceedings and being available to give testimony before the committee and on the floor of the House of Delegates if necessary. The following is a list of the Committees at which AMA meeting they convene, and who in our Delegation was assigned to cover each:

Reference Committee on Amendments to Constitution and Bylaws, Annual and Interim Meetings, assigned to Dr. Joseph Selby.

Reference Committee A Medical Service, Annual Meeting only, covered by Hoyt Burdick.

Reference Committee B Legislation, Annual and Interim Meetings, covered by Ron Stollings.

Reference Committee C Medical Education, Annual Meeting only, covered by Dr. Joseph Selby.

Reference Committee D Public Health, Annual Meeting only, covered by Dr. Jim Felsen.

Reference Committee E Science and Technology, Annual Meeting only, covered by Dr. Jim Felsen.

Reference Committee F AMA Finance and Governments, Annual and Interim Meetings, covered by Dr. Coy Flowers.

Reference Committee G Medical Practice, Annual Meeting only, covered by Dr. Hoyt Burdick.

Reference Committee J Advocacy related to Medical Service, Practice and Insurance, Interim Meeting only, no assignment at this meeting in June 2019.

Reference Committee K Advocacy related to Medical Education, Science and Public Health; Interim Meeting only, no assignment at the Annual meeting in June 2019.

Tobacco, Nicotine Vaping and Cannabis were items discussed in Reference Committee that should be of interest to West Virginia Physicians. A major take away is that cannabis is still a major health concern to physicians and there is strong support for continued review and research especially in implementing its use in the various states. Tobacco and nicotine vaping actions were aligned with FDA actions but there is still disagreement in the House of Delegates over the best approaches and possible unintended consequences of proposed actions.

Resolution 244 asks that our AMA Advocate at State and National levels to promote Prescription Drug Monitoring Program (PDMP) integration and access within the electronic health record at no cost to physicians or other authorized health care providers.

Resolution 204 resolved that our AMA Advocate that monies paid to states as a result of litigation against Pharmaceuticals Manufactures be used for research, education, prevention, and treatment of opioid use disorder, overdose and pain treatment.

Board of trustee report 23 resolution 208-A-18 and report 23: The AMA recommended that the AMA advocate for policy makers, insurance companies and PBMs to remove barriers, including prior authorization to non-opioid pain care and that it supports amendments to opioid restriction policies to allow for exceptions so physicians when medically necessary to exceed arbitrary thresholds for post op care and other medical procedures and conditions.

Resolution 229 deals with Inappropriate use of CDC's control and prevention guidelines for prescribing opioids. The AMA supports balanced opioid sparing policies that are based not on hard thresholds but on patient individuality and help ensure safe prescribing practices, minimize workflow disruption, and ensure patients have access to their medication in a timely manner without cumbersome documentation requirements.

Resolution 433 promoted strengthening public health opportunities for physicians in rural America. This resolution was by Nebraska and West Virginia.

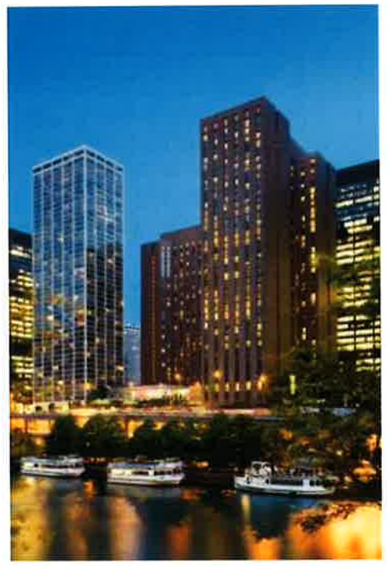
Resolution 612, which calls upon our AMA to offer its members training in health policy and health law and to develop a fellowship in health policy and health law. The AMA Board of Trustees is currently putting together a report on this issue to be presented at the 2019 Interim Meeting in San Diego.

Resolution 704 calls for prior authorization reform. There is a call from members for a reduction in the overall volume of prior authorization requirements and a demand for timely access to medically necessary care for patients as well as a reduction of practice administrative burdens.

A Final comment, from Reference Committee A, concerns Council on Medical Service Report 2, *Covering the Uninsured* and Resolution 116, *Medicare for All* . There are members of the AMA who are disappointed that the Council on Medical Service did not recommend removing the AMA's opposition to single payor proposals. The Reference Committee felt and it was adopted that even with policy opposition to single payor proposals, the AMA will continue to engage in discussions of health reform whether they are tied to improvement in the Affordable Care Act; employer sponsored insurance or single payor proposals.

Save the Date!

2020 AMA
House of Delegates
June 6-10, 2020
Chicago, IL



West Virginia School of Osteopathic Medicine

Mace discusses opioids at global initiative

The West Virginia School of Osteopathic Medicine (WVSOM) participated in the Milken Institute Future of Health Summit, where health care leaders from around the world gathered to confront health challenges by matching human, financial and educational resources with innovative and impactful ideas.

Drema Mace, PhD, MSP, WVSOM's vice president for community engagement and development, attended the summit to participate in two invitation-only sessions: *The Role of Corporations in Addressing the Opioid Crisis* and *Combating the Opioid Crisis: Investment and Health IT Innovation.*

Mace, in collaboration with local partners including Seneca Health Services, FMRS Health Systems, Raleigh General Hospital, Greenbrier Valley Medical Center, the Drug-Free Mother Baby Program, the WIN West Virginia Foundation and other organizations, has developed a hub-and-spoke model to address the substance use epidemic in West Virginia's Raleigh and Greenbrier counties. Mace said she was pleased to share the model with summit participants.

"The Milken Institute is a global think tank consisting of the finest minds of our time coming together to address health issues, including the opioid crisis. I was honored to be invited to participate in this global discussion to create innovative solutions," she said.

The Role of Corporations in Addressing the Opioid Crisis was designed to help attendees understand the role of the workplace regarding prevention and awareness of opioid addiction. Speakers shared best practices and explored collaborations for effective follow-up.

With *Combating the Opioid Crisis: Investment and Health IT Innovation,* the Milken Institute, with the National Institute on Drug Abuse, discussed evidence-based health technology by highlighting cutting-edge digital-health innovations and investment opportunities in response to the opioid crisis.

Mace, in collaboration with local partners, ... has developed a hub-and-spoke model to address the substance use epidemic in West Virginia's Raleigh and Greenbrier counties. Mace said she was pleased to share the model with summit participants.

Ed Greissing, executive director of the Milken Institute's Center for Public Health, praised WVSOM's commitment to its role in responding to the crisis.

"Dr. Mace and WVSOM have been generous with their time and shared knowledge to help inform our opioid work and provide critical insights into the needs of people in West Virginia and across the United States," Greissing said.

WVSOM President James W. Nemitz, PhD, said the school benefited from its participation in the summit.

Marshall University School of Medicine

Marshall launches Women in Medicine mentoring circle

Marshall University Joan C. Edwards School of Medicine launched a longitudinal mentoring program connecting women mentors and mentees at various stages of their careers. Available to women faculty, residents, alumni, medical and pharmacy students and staff, the Women in Medicine and Science (WIMS) program helps participants connect with new and established women leaders and professionals.

The group promotes policies, practices and programs that advance women's participation and success by building a supportive community that nurtures the professional development of current and future women in medicine and science; advocating for women's advancement and leadership in education, research, clinical practice and administration; collecting, analyzing and applying data to inform institutional and individual decisions and actions; developing and disseminating initiatives, resources, mentoring, and professional career development programs; recognizing women's accomplishments; and working with the American Association of Medical Colleges and other medical schools to advance women in medicine and science nationally.

"Career success depends largely on skills not covered in training," said Darshana T. Shah, Ph.D., associate dean for faculty advancement at Marshall's School of Medicine. "At Marshall, we value the experiences of others and want to use the connections made at forums such as this to embolden women who can then bring those experiences and lessons to their everyday personal and professional lives."Marshall's Women in Medicine and Science program is led by an executive council of female faculty, staff and students from across the school of medicine.

WVU School of Medicine

WVU plans North Central West Virginia psychiatry residency training program

West Virginia University will expand its capacity for treating psychiatric patients in North Central West Virginia by establishing a rural residency program in counties identified as Health Professional Shortage Areas, or HPSAs.

With funding from a Health Resources and Services Administration (HRSA) grant, residents in Barbour, Braxton, Gilmer, Harrison, Lewis, Marion, Taylor and Upshur counties could see an increase in resident provided services as early as 2021.

WVU School of Medicine faculty will use the nearly $748,000 to develop the infrastructure for a rural residency training track where residents will use a combination of in-person and telehealth/telepsychiatry treatment modalities with their patients.

challenges our patients face when seeking care in rural settings."

Key partners include the Department of Behavioral Medicine and Psychiatry, WVU Institute for Community and Rural Health, the United Summit Center, WVU Medicine, Louis K. Johnson Veterans Medical Center, and Community Care of West Virginia.

"Ultimately, we hope and expect that many of these residents will enter the workforce in these communities following their training," Elswick said. "West Virginia has so much to offer to these trainees. This rural residency track helps to highlight those opportunities to give back to underserved communities."

Faculty leads from WVU include Elswick, who serves as the grant's principle investigator; Institute for Community and Rural Health Director Dr. Larry Rhodes; and Director of Telepsychiatry Dr. Kari-Beth Law.

'Suicide and addiction are not exclusive to our clinical campuses at WVU,' Dr. Daniel Elswick, MD., Department of Behavioral Medicine and Psychiatry associate professor and psychiatry residency director said. 'As a land-grant institution, it's our responsibility to find ways to better the lives of West Virginians and their access to care.'

"Suicide and addiction are not exclusive to our clinical campuses at WVU," Dr. Daniel Elswick, M.D., Department of Behavioral Medicine and Psychiatry associate professor and psychiatry residency director said. "As a land-grant institution, it's our responsibility to find ways to better the lives of West Virginians and their access to care. This rural track will also provide our medical residents with unique training and a better understanding of the

"This prestigious HRSA grant will have a significant impact on the lives of many West Virginians," Dr. Rhodes said. "The partnership between the Department of Behavioral Medicine and Psychiatry and the WVU Institute of Community and Rural Health is an example of how two distinct WVU programs can work together for the good of our state."

Bureau for Public Health

Preventing Cancer: Recommendations on Expanded Use of Human Papillomavirus (HPV) Vaccination, 2019

Human papillomavirus (HPV) vaccine has the potential to prevent several hundred cases of cancers in West Virginia each year, yet HPV vaccine remains underutilized in West Virginia. Health care providers are vital in reaching the families of unvaccinated adolescents and young adults to educate about the safety and efficacy of the vaccine. New national recommendations underscore the importance of expanding vaccine use. Routine vaccination is recommended for ages 11 to 12, the age at which vaccination confers the greatest benefit, with catch-up vaccination now recommended for ages 13 to 26 regardless of gender. Vaccination started before age 15 years is a two-dose series. For ages 15 and older, it requires a three-dose series.

On June 26, 2019, the Advisory Committee on Immunization Practices (ACIP) voted to change two recommendations for the human papillomavirus (HPV) vaccine regarding adults.[1] The first change was to expand the catch-up age in young men to age 26, whereas it had previously been only to age 21. The second change was related to the expanded approval by the U.S. Food and Drug Administration (FDA) in October 2018 for Gardasil 9, the only HPV vaccine available on the U.S. market currently.[2] This FDA expansion now approves use of Gardasil 9 for men and women ages 27 to 45, as a three-dose series over 6 months. The ACIP voted to apply a Category B ("permissive") individual clinical decision-making recommendation for Gardasil 9 among individuals in this age range, which leverages the personalized patient-provider relationship to determine if immunization is appropriate.[3]

HPV has been shown to cause cancer of the cervix, vagina, vulva, penis, anus, rectum, and oropharynx. The CDC estimates that 33,700 cancers were attributable to HPV each year during 2011-2015; of those, over 92% could have been prevented by the 9-valent HPV vaccine.[4] In 2016, the CDC reports that West Virginia's age-adjusted new cervical cancer rate was 8.9 per 100,000 women (states across the nation ranged from 4.1 to 10.2 per 100,000), and West Virginia's age-adjusted new oral and pharynx cancer rate was 14.2 per 100,000 people (states range from 8.3 to 15.1 per 100,000).[5] Approximately 70% of these cancers are caused by either HPV16 or HPV18. [6,7]

Gardasil 9 is FDA-approved for prevention of cervical, vulvar, vaginal, and anal cancers in females and anal cancers in males; there is no mention of oropharyngeal cancers, which can be caused by the HPV16 strain. In fact, as of 2015 the most common HPV-associated cancer was oropharyngeal squamous cell carcinoma (SCC).[8] Although Gardasil 9 is not FDA-approved to prevent oropharyngeal cancers, a study published in 2018 shows a link between HPV vaccination and decreased oral HPV infection.[9]

HPV vaccine can halt HPV transmission and prevent life-threatening cancers later in life. Provider recommendation is one of the best predictors of vaccination. What you say and how you say it matters. The Bureau for Public Health along with the CDC, AAFP, AAP, ACOG, ACS and others encourages all providers to implement practical and proven strategies for increasing your HPV vaccination rates. See www.cdc.gov/hpv/hcp/boosting-vacc-rates.html for ideas.

References

1. Schnirring, L. Experts expand HPV vaccine recs as study finds high impact. *Center for Infectious Disease Research and Policy.* http://www.cidrap.umn.edu/news-perspective/2019/06/experts-expand-hpv-vaccine-recs-study-finds-high-impact. Published June 27, 2019. Accessed July 2, 2019.
2. Food and Drug Administration. FDA approves expanded use of Gardasil 9 to include individuals 27 through 45 years old. https://www.fda.gov/news-events/press-announcements/fda-approves-expanded-use-gardasil-9-include-individuals-27-through-45-years-old. Published October 5, 2018. Accessed July 2, 2019.
3. Pickering L, Orenstein W, Sun W, Baker C. FDA licensure of and ACIP recommendations for vaccines. *Vaccine.* 2017; 35 (37): 5027-5036.
4. Centers for Disease Control and Prevention. Cancers associated with human papillomavirus, United States-- 2011-2015. *USCS data brief, no. 4,* August 2018.
5. U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on November 2018 submission data (1999-2016). U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. https://gis.cdc.gov/Cancer/USCS/DataViz.html. Updated June 2019. Accessed July 3, 2019.
6. National Cancer Institute. HPV and Cancer. https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-and-cancer. Published May 28, 2019. Accessed July 2, 2019.
7. World Health Organization. Human papillomavirus (HPV) and cervical cancer. https://www.who.int/news-room/fact-sheets/detail/human-papillomavirus-(hpv)-and-cervical-cancer. Published January 24, 2019. Accessed July 3, 2019.
8. Van Dyne E, Henley S, Saraiya M, Thomas C, Markowitz L, Benard V. Trends in Human Papillomavirus-Associated Cancers--United States, 1999-2015. *MMWR Morb Mortal Wkly Rep.* 2018;67(33):918-924.
9. Chaturvedi A, Graubard B, Broutian T, Pickard R, Tong Z, Xiao W, Kahle L, Gillison M. Effect of Prophylactic Human Papillomavirus (HPV) Vaccination on Oral HPV Infections Among Young Adults in the United States. *J Clin Oncol.* 2018; 36 (3):262-267.

Authors

Megan Ross, MPH, CHES
Epidemiologist
Division of Health Promotion and Chronic Disease
Office of Community Health Systems and Health Promotion
Bureau for Public Health
West Virginia Department of Health and Human Resources

Catherine C. Slemp, MD, MPH
Commissioner and State Health Officer
Bureau for Public Health
West Virginia Department of Health and Human Resources

STATEMENT REQUIRED BY THE ACT OF OCT. 23, 1962; SECTION 4369, TITTLE 39, U.S. CODE SHOWING THE OWNERSHIP, MANAGEMENT AND CIRCULATION OF THE WEST VIRGINIA MEDICAL JOURNAL.

The names and addresses of the publisher, editor and managing editor are: Publisher, West Virginia State Medical Association, 2018 Kanawha Boulevard, East, Charleston, WV 25311; Editor, F. Thomas Sporck, MD, 2018 Kanawha Boulevard, East, Charleston, WV 25311; and Managing Editor, John D. Law, 2018 Kanawha Boulevard, East, Charleston, WV 25311.

The known bond holders, mortgages and other security holders owning or holding one percent or more of the total amount of bonds, mortgages or other securities are: None.

The average number of copies of each issue during the preceding 12 months are: (A) Total number of copies printed 1,550; (B1) Paid circulation through dealers and carriers, street vendors, and other counter sales: None. (B2) Paid circulation through mail subscriptions: 1,437; (C) Total paid circulation, 1,437; (D) Free distribution by mail, carrier or other means: 69 (E) Total distributions: 1,476; (F1) Office use: 44 (F2) Copies distributed to news agents, but not sold: None; and (G) Total 1,550.

I certify the statements made by me are correct and complete.

John D. Law
Managing Editor

West Virginia
State Medical
Association
2018 Kanawha Blvd., E.
Charleston, WV 25311

wvsma.org