TRENDS

Association of Schools Advancing Health Professions

MARCH 2020

HIGHLIGHTS

ASAHP
ASSOCIATION OF SCHOOLS ADVANCING HEALTH PROFESSIONS

Trends is the official newsletter of the Association of Schools Advancing Health Professions (122 C St. NW, Suite 200, Washington, D.C., 20001. Tel: 202-237-6481) Trends is published 10 times each year and is available on the Association's website at www.asahp.org. For more information, contact the editor, Thomas W. Elwood, Dr.PH.

SOME REFLECTIONS ON A PANDEMIC

The early part of the 1600s was characterized by the plague in Europe. Vaccinations were unknown, so health authorities had to rely on other forms of conventional wisdom. Health officer **Cristofano di Giulio** of Prato in Italy wrote a manuscript back then with the title *Libro della Sanità*, in which he provided a summary of what he believed a public health officer ought to know in time of plague.

He asserted that it has been proven by experience that to respond to an epidemic, first of all it is necessary to resort to the majesty of God and in the intercession of the Holy Virgin and of the Saints. Then it is necessary to observe with every possible diligence the following rules: (1) disinfect with sulphur and perfumes all homes or rooms wherein there has been death or sickness; (2) separate at once the sick from the healthy as soon as the case of illness is discovered; (3) burn and take away at once those objects such as have been used by the deceased or by the sick; and (4) shut up straight away all houses wherein there have been infected patients and keep them closed for at least 22 days so that those who are segregated inside the houses will not carry the infection to other individuals.

Physicians suggested that patients should be treated at a distance with the barber-surgeon of the lazaretto (i.e., a pest house for isolating persons believed to have the disease or to be incubating it), shouting from the window the quality, sex, condition of the patient, and the stage of illness. A cautious physician then would shout back the cure from a safe distance. Another belief was that even though a patient had recovered, convalescents remained infectious for some time.

Unfortunately, related public health measures failed to produce salutary outcomes. Orders for the mass slaughter of dogs and cats, in the belief that the coats of these animals harbored the plague bearing miasma, made life easier for rats, the creatures eventually discovered to be more closely associated with disease outbreaks. Oddly enough, resorting to the majesty of God often led to crowded religious processions and packed houses of worship, which aided in the rapid transmission of infection.

1960 Nobel Prize winner **Sir Macfarlane Burnet** stated in 1962 that "One can think of the middle of the 20th century as the end of one of the most important social revolutions in history, the virtual elimination of the era of infectious diseases as a significant factor in social life." Since then, the appearance of Zika, Ebola, SARS, MERS, and other devastating communicable diseases has shown that his prediction was issued prematurely Enormous progress over the past four centuries has been made in medical laboratory procedures, hospital care, health devices, communication capabilities, and the highly sophisticated education and training of health professionals. These developments will have a decisive bearing on how successful efforts will be in eliminating the COVID-19 threat.

For the present, however, it is reasonably safe to assume that household pets are in no immediate danger of being slaughtered and physicians will not find it necessary to stand across the street from homes and holler instructions through bullhorns to their beleaguered patients.

PRESIDENT'S CORNER

By ASAHP President Phyllis King

We are living in an unprecedented reality that is likely to have a transformational effect on aspects of our lives, especially higher education. No doubt everyone has had to demonstrate adaptability and creativity to address changes under challenging conditions. The pandemic has altered our routine lifestyles to one of disruption, social distancing and isolation. Use of technology has provided us with a means of continuity in operations and communications. This is a time to model resilience, persistence, strategic thinking, leadership and teamwork, as we all work together to recover.

The Higher Logic platform is a member benefit of ASAHP where you can share online your questions, concerns, announcements, best practices, and many other items (embed the link here). I encourage you to join this community and reach out to others sharing similar experiences. Show your support and learn from one another collectively how to handle challenging times and build a road to recovery. ASAHP is here for you.

The Association has been instrumental in providing resources for institutions of high education. The following examples indicate efforts aimed at continuing to monitor COVID-19:

Interim Guidance for Administrators of US Institutions of Higher Education (IHE) to Plan, Prepare, and Respond to Coronavirus Disease 2019 (COVID-19)

Interim Guidance: Get Your Mass Gatherings or Large Community Events Ready for Coronavirus Disease 2019 (COVID-19)

CDC Coronavirus Information

Harvard Medical School Coronavirus Resource Center

Department of Education Coronavirus Information and Resources for Schools and School Personnel

Federal Student Aid Guidance

Federal Student Aid FAQ

Inside Higher Ed Article - March 6, 2020

Inside Higher Ed Coronavirus Coverage

World Health Organization Coronavirus Information

White House Coronavirus Guidelines for America

Kaiser Family Foundation Tracking

HRSA Coronavirus Resources

RISING TO THE OCCASION

Ordinarily during a presidential election year, significant legislative proposals grind to a halt. The party controlling the White House would like to be able to enact laws that bolster its reputation in ways that strengthen the rationale for voters to retain it in office. Opponents in the other party are less inclined to aid in achievement of that goal. Instead, it is much more to their advantage to portray the incumbents as being ineffective and give the electorate good reasons for removing current officials from office.

A good crisis can act as a circuitbreaker that disrupts this pattern of doing business and it arrived in the form of a declaration by the World Health Organization that a pandemic is underway accompanied by the establishment of a national emergency by the Trump Admiistration regarding the outbreak of COVID-19. These developments have set in motion some extraordinary responses in the form of legislation aimed at providing nostrums for the perceived health and economic threats posed by this disease. The following description of the steps being taken may be considered partial as of the date this section of the newsletter is being written because each new day stimulates the arrival of new responses to the challenges arising from the spread of communicable disease.

In phase one of providing financial assistance, the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020 (P.L. 116-123), which passed with near unanimous support in both the House and Senate, was signed into law by the President on March 6, 2020. The bill provides $8.3 billion in emergency funding for federal agencies to respond to the coronavirus outbreak. Of that amount, $6.7 billion is designated for the domestic response and $1.6 billion for the international response. The next major step taken was completion of the second supplemental legislative package aimed at seeking to contain and combat the COVID-19 pandemic. The president signed the Families First Coronavirus Response Act H.R. 6201 (P.L. 116-127) on March 18. The House had passed the bill on both a 363-40 vote on March 14 and a subsequent March 16 unanimous vote to add technical corrections. The Senate then passed the measure on a vote of 90-8 on March 18.

The scope of these initiatives is vast insofar as recognition is being accorded to major disruptions caused by health care facilities in the U.S. possibly being overwhelmed by the demand for services and economic dislocations that result from workers becoming unemployed, along with the production of essential goods and services being curtailed. The kinds of situations either addressed by existing initiatives or being contemplated for future action include: unemployment insurance; enhanced paid leave and sick leave; direct financial payments to individuals; federally guaranteed loans to employers; loans to distressed industries, such as airlines; and increased funding for medical supplies and equipment.

P.L. 116-127 makes it possible for group and individual health insurance plans to cover approved diagnostic tests as well as office visits, treatment at urgent care clinics, telehealth, and emergency room visits that result in orders for coronavirus diagnostic testing, insofar as the services received during the visit relate to testing or determining the need for testing. Plans will not be able to impose cost-sharing or subject enrollees to prior authorization or other medical management requirements.

2020-2021 ASSOCIATION CALENDAR OF EVENTS

May 14-15, 2020—ASAHP Leadership Development Program Part I in Columbus, OH Postponed

October 26-27, 2020—ASAHP Leadership Development Program Part II in Long Beach, CA

October 28-30, 2020—ASAHP Annual Conference in Long Beach, CA

October 20-22, 2021—ASAHP Annual Conference in Long Beach, CA

HEALTH REFORM DEVELOPMENTS

Across the decades, policymakers have strived assiduously to produce improvements pertaining to the metaphorical three-legged stool of health care quality, access, and cost. The Patient Protection and Affordable Care Act of 2010 came into effect in March of that year. It represented a highly comprehensive approach of dealing with a wide range of defects and deficiencies in health care that continued to persist in the first decade of the 21st century.

Until several weeks ago, efforts to reform health care have proceeded in incremental and uncoordinated ways. The sudden appearance of a new communicable disease in the form of a pandemic has resulted in an explosion of new initiatives launched through a combination of coordinated federal and state interventions. Such new efforts continue at a rapid pace, but they do so in a time of considerable uncertainty. Some essential issues that continue to call for a clear resolution involve the following considerations: the best way of slowing the spread of infection, accurately determining how many individuals continue to circulate freely as their infection goes undetected, understanding how long the current appearance of the disease will last, and even if it apparently disappears, what the likelihood is that it could resurface later in the year. Also, if an appropriate vaccine becomes available, it remains to be seen whether it will result in any untoward hazardous side effects.

Role Of The Health Workforce And Challenges It Faces

A steady accumulation of new cases of COVID-19 in both the U.S. and in other countries that occurs as diagnostic testing for the presence of this disease increases, means that much greater stress is being placed on the capacity of the network of health care services to deal with this situation. Apart from the basic question of whether there are sufficient numbers of many kinds of health professionals in appropriate venues, such as hospitals to meet patient demands for care, there is the matter of the increased risk of disease exposure these personnel must confront when providing treatment. Not all of these individuals have the protective equipment needed to prevent infection. Logistically, more effort is needed to increase the supply chain and ensure that effective masks and hazard protection clothing are distributed rapidly. Otherwise, a serious problem becomes even more threatening if frontline health care practitioners are sidelined because they also become seriously ill.

The Left Hand Giveth While The Right Hand Taketh Away

Many actions taken with the best of intentions, unfortunately often are accompanied by unintended negative consequences. For example, according to the Congressional Research Service, the current COVID-19 outbreak may pose significant challenges for the United States' blood supply. Mitigation strategies to prevent the spread of this disease, such as closures of schools and workplaces, have led to blood drive cancellations, resulting in a critical blood supply shortage in the Pacific Northwest (specifically, western Washington and Oregon). School closures, event cancellations, and other mitigation strategies in other areas of the country may provide challenges for maintaining a sufficient blood supply. The management and distribution of the supply in this nation is coordinated largely by private organizations (e.g., Red Cross), with some oversight by the Department of Health and Human Services (HHS). Congress may need to consider how best to address critical storages, such as through HHS or the U.S. Food and Drug Administration's (FDA) authority over blood safety and donation guidance.

The VA Health System Within A Nonexistent System

Calling U.S. health care a system is a misnomer. Rather than a single unified entity, it is a collection of various systems that include government providers (e.g., Veterans Health Administration and Medicare) and non-governmental providers (e.g., private sector employers and private insurance). At a time of COVID-19 crisis, the Veterans Administration is of special interest. Because of their age, patients who served in Vietnam, Korea, and World War II are an important part of a demographic group designated as being at high risk for this disease. The VA currently administers the provision of health care services for more than nine million beneficiaries. Having served their nation in time of need, every effort should be made to ensure that these individuals receive the kind of care they need in this period of crisis.

DEVELOPMENTS IN HIGHER EDUCATION

As the month of March 2020 draws to a close, the nation is experiencing an unprecedented array of governmental and non-governmental proactive and reactive initiatives to mitigate the impact of COVID-19. Closing K-12 to postgraduate education activities will exert a wide variety of strains on students and their families. For example, a health professional who also happens to be a single parent with children is placed in the uneviable position of trying to juggle the responsibility of going to work every day to provide care for patients while also contending with the challenge of assuming family life duties for their offspring who are at home because of school closings.

Portions of the education sector are being affected in different ways. Classroom teachers throughout the nation have to figure out how best to furnish a comparable level of education for their students who now are at home rather than on school grounds. Children who depend on school nutrition programs for food need to have effective alternative ways of being fed sarisfactorily. Colleges and universities fortunate enough to possess hefty endowments may not have any immediate concerns of having to make refund payments to students for dormitories that have been and classes that have been suspended indefinitely. The same is not true, however, for institutions with little in the way of financial reserves and that rely heavily on tuition income. A related concern is that the high cost of operating intercollegiate athletic programs for students cannot be offset by post-season tournament revenues derived from television and ticket sales.

Governmental Assistance For Education In Response To The Spread Of The Coronavirus

Phase 2 of a federal stimulus package in the form of the Families First Coronavirus Response Act (P.L. 116-127) expands paid family and medical leave for child care due to school and day care closings for both private and public employers with less than 500 employees. Recognising that more assistance is needed, legislators continue to seek agreement on how to address related situations that include: (1) Continuation of school lunch programming; (2) Allow the secretary of education to defer student loan payments, principal, and interest for three months without penalty to the student, with an additional three months' deferment available if necessary; (3) Ensure that students at eligible institutions whose semesters were ended due to the emergency do not have to return their Title IV aid or have the distributed aid count towards their loan limits; and (4) Allow institutions to issue work-study payments to a student who is unable to work due to work-place closures and grant institutions the ability to transfer unused work-study funds for supplemental grants.

Under a change announced on March 20, borrowers can suspend payments for two months by contacting their servicers and enrolling in "forbearance." No interest would accrue during that time. The plan would apply to all loans made directly by the federal government and to a portion of those made by private lenders and guaranteed by the government under a program that ended in 2010. However, loans made under the federal guarantee program that are held by commercial institutions won't qualify. Approximately 43 million Americans owe roughly $1.5 trillion in federal student loans. The typical family spends $179 a month on payments, according to a July 2019 report by the JPMorgan Chase Institute.

Accreditation In The Context of Disease Transmission Increases

The congressional legislative hopper contains bills aimed at improving accreditation. The necessity of focusing on initiatives that bear directly on controlling the spread of disease means that for the immediate future such legislation will not move forward. Examples are: H.R. 5768, the Accreditation Reform Act to amend the Higher Education Act of 1965 to protect students and taxpayers by modernizing evaluation and increasing transparency in the accreditation system, and for other purposes; and H.R. 5171to authorize the National Advisory Committee on Institutional Quality and Integrity permanently. Currently, it must be reauthorized each time the Higher Education Act is extended or reauthorized. Meanwhile, Education Secretary **Betsy DeVos** announced finalization of a package of regulations on college accreditation that are designed to erase any distinction between regional and national accrediting agencies. If the original schedule is adhered to, they will be effective this coming July 1. Aimed at promoting innovation in higher education, consumer advocates have expressed concerns that new regulations will enable low-quality institutions to shop for friendly accreditors more easily, thereby allowing them to access federal funding.

QUICK STAT (SHORT, TIMELY, AND TOPICAL)

Trends In Alcohol-Induced Deaths In The United States, 2000-2016

According to a paper appearing on February 21, 2020 in *JAMA Network Open*, a total of 425,045 alcohol-induced deaths were identified from 2000 to 2016. The rate of such deaths increased substantially among men and women and accelerated recently. The largest increases by race/ethnicity were observed among American Indian and Alaska Native men, American Indian and Alaska Native women, and white women. Despite initial declines among black women, black men, and Latino men, increases occurred later in the study period. Among American Indian and Alaska Native individuals, increases throughout the age range were observed, with the largest absolute increase occurring for ages 45 to 49 years among men and for ages 50 to 54 among women. This study found large increases in alcohol-induced death rates across age and racial/ethnic subgroups of the US population, which have accelerated over recent years. Large increases in these deaths among younger age groups may be associated with future increases in alcohol-related disease.

Attention-Deficit/Hyperactivity Disorder And Learning Disabilities Among U.S. Children Aged 3–17 Years

According to data released in March 2020 from the *National Health Interview Survey*, in 2016–2018, nearly 14% of children aged 3–17 years were reported as ever having been diagnosed with either attention-deficit/hyperactivity disorder (ADHD) or a learning disability. Non-Hispanic black children were the most likely to be diagnosed (16.9%). Among children aged 3–10 years, non-Hispanic black children were more likely to have ever been diagnosed with ADHD or a learning disability compared with non-Hispanic white or Hispanic children. Diagnosis of ADHD or a learning disability differed by federal poverty level for children in all racial and ethnic groups. Diagnosis of ADHD or a learning disability differed by parental education among non-Hispanic white children only. Attention-deficit/hyperactivity disorder (ADHD) and learning disabilities are the most commonly diagnosed neurodevelopmental disorders in children and often coexist.

HEALTH TECHNOLOGY CORNER

Lab-On-Chip Ultrasonic Platform For Real-Time And Nondestructive Assessment Of Extracellular Matrix Stiffness

According to an article published in Issue 4 2020 of the journal *Lab on a Chip*, similarly to how a picked lock gives away that someone has broken into a building, the stiffening of a structure surrounding cells in the human body can indicate that cancer is invading other tissue. Monitoring changes to this structure, called the extracellular matrix, would give researchers another way to study the progression of disease. Detecting changes to the extracellular matrix is hard to do, however, without damaging it. Purdue University engineers have built a device that would allow disease specialists to load an extracellular matrix sample onto a platform and detect its stiffness through sound waves. Researchers first demonstrated the device as a proof-of-concept with cancer cells contained in hydrogel, which is a material with a consistency similar to an extracellular matrix. The team now is studying the device's effectiveness on collagen extracellular matrices.

Brain Reading Technology And Development Of Brainwave-Controlled Devices

Researchers at the Francis Crick Institute, Stanford University, and University College London have developed a new method to record brain activity at scale accurately. A manuscript appearing on March 20, 2020 in the journal *Science Advances* indicates that the technique could lead to new medical devices to help amputees, patients with paralysis, or individuals with neurological conditions, such as motor neurone disease. The system consists of a bundle of microwires mated to large-scale microelectrode arrays, such as camera chips. This system has excellent recording performance, demonstrated via single unit and local-field potential recordings in isolated retina and in the motor cortex or striatum of awake moving mice. The modular design enables a variety of microwire types and sizes to be integrated with different types of pixel arrays, connecting the rapid progress of commercial multiplexing, digitization, and data acquisition hardware together with a three-dimensional neural interface.

AVAILABLE RESOURCES ACCESSIBLE ELECTRONICALLY

Characteristics And Health Status Of Informal Unpaid Caregivers: 2015-2017

The Centers for Disease Control and Prevention (CDC) has released a report, *Characteristics and Health Status of Informal Unpaid Caregivers*. In 2015, an estimated 17.7 million U.S. persons were informal caregivers who provided substantial services through in-home, unpaid assistance to their family members and friends. Caregiving can have many benefits, such as enhancing the bond between caregiver and recipient, but it also can place an emotional and physical strain on caregivers, leading to higher rates of depression, lower quality of life, and poorer overall health. Based on three years of Behavioral Risk Factors Surveillance System (BRFSS) data across 44 states, the findings indicate that approximately 20% of respondents were caregivers, and nearly 20% of these caregivers reported fair or poor health. Demographic characteristics and health status of unpaid caregivers, along with implications of the findings are discussed. Unpaid family and friend caregivers are paramount to the care of older adults, as well as the health system more generally. Unfortunately, caregivers are often under-supported and consequently may suffer adverse health effects. The report can be obtained at https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6907a2-H.pdf.

2020 Alzheimer's Disease Facts And Figures

2020 Alzheimer's Disease Facts and Figures is a statistical resource for U.S. data related to Alzheimer's disease, the most common cause of dementia. This disease is the most common cause of dementia, accounting for an estimated 60% to 80% of cases. Recent large autopsy studies show that more than half of individuals with Alzheimer's dementia have Alzheimer's disease brain changes (pathology) as well as the brain changes of one or more other causes of dementia, such as cerebrovascular disease or Lewy body disease. This condition is called mixed pathologies, and if recognized during life is called mixed dementia. Difficulty remembering recent conversations, names or events is often an early clinical symptom. Apathy and depression also often are early symptoms. Later symptoms include impaired communication, disorientation, confusion, poor judgment, behavioral changes and, ultimately, difficulty speaking, swallowing, and walking. Background and context for interpretation of the data are contained in the Overview. Additional sections address prevalence; mortality and morbidity; caregiving; and use and costs of health care and services. A Special Report examines primary care physicians' experiences, exposure, training, and attitudes in providing dementia care and steps that can be taken to ensure their future readiness for a growing number of Americans living with Alzheimer's and other dementias. The report can be obtained at https://www.alz.org/media/Documents/alzheimers-facts-and-figures_1.pdf.

Critical Analysis Of Existing And Emerging Patient Safety Practices

Despite sustained national attention and notable successful interventions in recent years, patient safety remains a significant problem in the United States. Harms such as adverse drug events, healthcare-associated infections (HAIs), falls, and obstetric adverse events are responsible for thousands of deaths and hundreds of thousands of injuries each year. An estimate is that in 2017, there were 86 hospital-acquired conditions per 1,000 hospital discharges, a figure that has fallen steadily in recent years, but remains alarmingly high. The *Making Healthcare Safer III* report by the Agency for Healthcare Research and Quality (AHRQ) addresses this continuing problem by supporting the implementation of patient safety practices where appropriate, advancing a framework for patient safety transformation, and considering the contextual factors that can lead to successful use of patient safety interventions. Forty-seven practices are reviewed that target patient safety improvement in hospitals, primary care practices, long-term care facilities, and other healthcare settings. The practices are categorized among 17 chapters that represent harm areas including medication management and diagnostic errors. The practices include clinical decision support and those designed to prevent medication errors and reduce opioid misuse and overdose. The report can be obtained at https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/making-healthcare-safer/mhs3/making-healthcare-safer-III.pdf.

TEETH, EARLY-LIFE ADVERSITY, AND MENTAL HEALTH RISK

Exposure to early-life adversity is one of the biggest risk factors for both mental and physical health problems across the lifespan. A need for objective measures that are noninvasive, inexpensive, and able to provide more accurate information about the presence and timing of childhood adversity has been recognized. If such a measure existed, its public health implications would be profound. For the first time, clinicians would be able with confidence to identify children on a population-wide scale who experienced childhood adversity during sensitive periods in development and therefore are at future risk for developing a psychiatric or other disorder. A manuscript appearing in the March 2020 issue of the journal *Biological Psychiatry* advances the proposition that teeth potentially could serve as a promising and actionable new tool capable of achieving key primary prevention goals. To support this claim, researchers first summarized empirical work from dentistry, anthropology, and archaeology on human tooth development and show how these fields collectively have studied human and animal teeth for decades, using teeth as time capsules that preserve a permanent, time-resolved record of life experiences in the physical environment.

Specifically, the investigators articulate how teeth have been examined in these fields as biological fossils in which the history of an individual's early-life experiences is permanently imprinted, acknowledging that this line of research is related to, but distinct from, studies of oral health. They then integrate these insights with knowledge about the role of psychosocial adversity in shaping psychopathology risk to present a working conceptual model, which proposes that teeth may be an understudied yet suggestive new tool to identify individuals at risk for mental health problems following early-life psychosocial stress exposure. They end by presenting a research agenda and discussion of future directions for rigorously testing this possibility and with a call to action for interdisciplinary research to meet the urgent need for new biomarkers of adversity and psychiatric outcomes.

REPORTING OF RACE AND ETHNICITY IN THE MEDICAL LITERATURE

Far beyond mere academic interest, the collection of race and ethnicity data is an important way to identify and ultimately address disparities in access to treatment and inequalities in health care provision**.** The extent to which race and ethnicity, a multifaceted concept, is reported in the medical literature is extremely variable, according to an article published in the March 2020 issue of the *Journal of Clinical Epidemiology*. Investigators sought to determine objectively the quality of reporting of race and ethnicity in original medical research papers. A retrospective bibliometric analysis was used. Two independent investigators analyzed original articles investigating race and ethnicity, published between 2007 and 2018, in the 10 top-ranking academic journals in each of the following categories: general medicine, surgery, and oncology.

Among 995 original articles reporting race and ethnicity in the top 10 ranking medical academic journals, only 4.52% provided a formal definition of race and ethnicity and only 10.25% described the method used to classify individuals as to race and ethnicity. Eighty-one different race and ethnicity classifications were identified, but they often were imprecise and open to interpretation. A reasonable question is what, if anything, does this information add to what already is known? The adherence of leading medical academic journals to International Committee of Medical Journal Editors (ICMJE) and also the American Medical Association (AMA) Manual of Style guidelines was poor (still poor when considering previous studies). Pertinent questions are what is the implication and what should change now? The investigators conclude that there is significant room for improvement in the collection, reporting, and publishing of data describing ethnicity and race. Given that many national and international agencies, including the National Institutes of Health, require extensive data sets to identify and ultimately prevent health disparities, the lack of adequate reporting of race and ethnicity in the medical literature presents a significant and clinically relevant problem.