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THE DOSE

Official Newsletter of UAEM North America



A Letter from the Editors

BY THE DOSE EDITORS

Welcome to The Dose! In today's world, the power of journalism plays a pivotal role in raising awareness, shedding light on important issues surrounding access to medicines, and inspiring action.

Through our articles, interviews, and opinion pieces, we strive to provide a platform that allows diverse voices to share their experiences, insights, and knowledge. Our focus is on barriers and solutions to the access to medicines crisis.

We look forward to sharing informative and thought-provoking content with you, and we encourage you to not only join us in these important conversations, but also to become a part of UAEM's movement to drive meaningful change in our global community. Together, we can foster a more just and equitable future.

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UAEM UCLA Leading Legislative Advocacy

BY SABRINA GHALAMBOR, UAEM UCLA

The legislative advocacy project led by the UAEM UCLA Chapter aims to engage the local community and support the passage of critical health legislation in California. Members from our UAEM chapter focused on the following three bills: Assembly Bill 85 (AB-85), Senate Bill 59 (SB-59), and Senate Bill 90 (SB-90). For each of these bills, UAEM UCLA members called local officials, wrote letters of support, spread the message across social media platforms, and called into committee hearings to make our voices heard.

The first bill, AB-85, encourages screenings for social determinants of health (SDOH) to become a standard practice during regular clinical appointments. SDOH are the factors outside of medical care that can affect one's health, such as access to healthy foods, work-life balance, financial stressors, or exposure to pollution. These factors significantly impact health outcomes, and they disproportionately affect low-income populations. Screenings for such factors would benefit the community, ensuring that medical providers consider SDOH in their treatment plans and connect patients with community resources to address their needs.



Students have the power to create positive transformation within their community. By working together in UAEM, young leaders can effect change by supporting bills or resolutions that could improve society (Image by Suwannar Kawila via Canva)

The second bill, SB-59, would provide people with free menstrual products in the bathrooms of all state-owned buildings, local government buildings, and state-funded hospitals. Menstruation is the monthly shedding of the uterine lining. Although this biological process is a normal, natural part of many people's lives, it is a phenomenon that is tied to inequality, stigma, shame, and embarrassment because many people do not have regular access to safe and hygienic menstrual management products. By making these products free and publicly available, all people who rely on them (especially those who live in poverty or otherwise cannot afford the high cost of menstrual products) will benefit from environments that are more supportive of their menstrual health needs, less discriminatory, and more respectful of their human dignity.

Finally, the last bill, SB-90, promotes greater affordability of insulin for Californians. The recent passing of the Inflation Reduction Act successfully capped the monthly cost of insulin at \$35 for patients with Medicare. With SB-90, Californians with private health insurance would be allowed to access this live-saving medication at the same low-cost, providing millions of Californians with significant economic relief and greater health outcomes.

Each of these three bills have critically important health implications and have the potential to improve the quality of life for people throughout California. The UAEM UCLA Chapter's efforts to advocate for and support these bills are a powerful example of how UAEM is working to improve equity in access to medicines and healthcare for people and local populations.

Taking a Closer Look into Menstrual Health Equity

BY ANGELA HAKOBYAN

What would allow girls, women, transgender men and non-binary persons opportunities to meet their natural, normal sexual and reproductive health needs? Improved access and affordability of Menstrual hygiene products. Instead of providing people who menstruate with the opportunity to manage their monthly cycle in a safe, healthy way, companies in corporate America and participating state governments developed unfair ways to capitalize on and profit from the human body.

Between the 1850s and 1915, multiple patents had been filed for menstrual hygiene products. By the 1920s, commercial success for sanitary napkins was reached, and new inventions were released into the market in subsequent decades. Pharmaceutical companies like Johnson & Johnson jumped into the consumer health market with menstrual hygiene products, which have a steady level of demand, after all, half the world population relies on them for a major portion of their lifespan. In 2022, Johnson & Johnson reported franchise sales of nearly one billion dollars from the department for menstrual health products. Globally, the market for these hygiene products is valued at 40 billion dollars, and it is continuing to grow.

Because gaining access to these products comes with a price tag, forcing people who menstruate to budget to afford these products. On average, it costs the average menstruating person about \$200-\$300 per year and over \$18,000 in a lifetime to obtain these essential health management products. Numerous people suffering from poverty, especially homeless individuals, might and do experience significant barriers to accessing menstrual products. In hopes to help address this problem, legislative measures were introduced in the state of California. Senate Bill 59 (SB-59), also known as the Menstrual Product Accessibility Act, was introduced by Senator Nancy Skinner (D) on December 19, 2022.

The primary aim of the Menstrual Product Accessibility Act is to provide an adequate supply of menstrual products in public spaces such as state and government-owned buildings. The Menstrual Product Accessibility Act not only recognizes that period poverty is a public issue, but it also recognizes that obtaining access to menstrual products is a basic human right. Since its introduction, it has been heard on several committee floors. As of May 18th of this year, it has been placed on suspense file, meaning committee members must take additional action at a later time to discuss the bill further.

This is not the first time California has focused on menstrual product access. In 2021, the California budget granted \$2 million towards making menstrual products free in San Diego and Los Angeles counties. California additionally implemented policies to increase the availability of period products in schools such as community colleges, elementary schools, and state universities. However, the impact of these efforts is unclear. Although these orders and support systems are in place, numerous public facilities in the Los Angeles County still have not been able to provide a reliable supply of free period products, and many schools have not successfully made these products available to its students. Although official reporting on compliance is still lacking, Californian high school students interviewed by the Sacramento School Beat report that "restroom dispensers often aren't stocked [as they should be], or they're broken or vandalized. In addition, the required notices [with text of the law's provision] are not posted in the restrooms." Thus, the passing and implementation of SB-59 would be critical for finally closing the gaps that continue to exist in Californian communities, where the hope is to create inclusive spaces and ensure menstrual products become widely available, free of cost, at all times, to menstruating employees, students, and the general public.

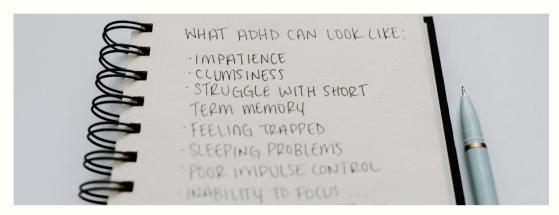
Furthermore, the benefits of this act can be observed by investigating the outcomes from other countries that worked to ensure menstrual products are completely free and accessible for their people. For instance, in 2022, Scotland became the first country to provide free period products to all menstruators to end period poverty. This ethical leadership initiative encouraged other countries, such as Ireland, to make similar efforts in taking the same steps to better protect the health and dignity of their citizens.

The gross commercialization and escalating costs of period products in the past century must be stopped. Currently, period products are facing higher manufacturing costs due to record-high inflation which forces pads and tampons to become nearly 10% more expensive than they already are. These inflated costs place additional financial burdens on people who become forced to pay even higher prices for the same products. Challenges in affording period products, an essential care item, prompts legislative actions such as SB-59 to be enacted as soon as possible. We must take action now to make menstrual products accessible for all.

Examining the National Adderall Shortage

BY GRACE JOHNSON AND MADELINE CHUNG

Attention-deficit/hyperactivity disorder (ADHD) is characterized by a combination of persistent and disruptive symptoms, such as impulsiveness, restlessness, poor time management skills, problems completing tasks, trouble coping with stress, and low frustration tolerance, often causing problems in an individuals' academic, professional, or social performance. To be diagnosed with ADHD, a person must have difficulties with symptoms that are severe enough to create ongoing issues in multiple areas of their life. Many times, adults with ADHD live with coexisting conditions like depression or anxiety.



An incomplete list of common symptoms that people living with ADHD can experience (Image by Tara Winstead via Pexels)

Adderall, a commonly prescribed treatment option for ADHD, has a tremendous impact on many patients' sense of well-being. As a stimulant drug, this medication boosts and balances the activity levels of the neurotransmitters dopamine and norepinephrine in the brain, increasing focus and reducing impulsive behavior. That is, Adderall brings people from overstimulation to a more manageable state. Although Adderall does not cure ADHD, it has been successful in allowing many patients to experience increased well-being and improvements to daily life functioning at home, work, and/or school.



Adderrall can help students with ADHD improve attention, focus, and reduce impulsivity (Image by Karolina Grabowska via Pexels)

Unfortunately, in October of 2022, the Federal Drug Administration (FDA) announced a nationwide shortage of Adderall. Manufacturers of the drug have been experiencing issues like short-staffing that have resulted in supply problems. By June of 2023, over eight months later, these critical supply chain issues are ongoing, and tens of millions of individuals living with ADHD in the U.S. are still struggling to gain access to this medication. At this time, suppliers are still unable to provide a reliable timeline on when they can expect to resolve the shortage and meet the needs of the many people living with ADHD.

Examining the National Adderall Shortage (cont.)

BY GRACE JOHNSON AND MADELINE CHUNG

Pharmaceutical companies claim that the shortage is due in part to the regulations and production limits placed on the active ingredients used to make Adderall, as established by the Drug Enforcement Administration (DEA). With a responsibility to prevent controlled substances from being abused, the DEA must be careful to set quotas that will meet medical need for Adderall while preventing the drug from being overproduced and misused. The DEA reports that their quotas are not the reason behind the medication shortage. If these quotas are not being met or surpassed, then manufacturers are not going to face production restrictions from the DEA. Most likely, the core issue behind the shortage is in supply not being sufficient enough to meet demand.

One reason demand might be so high is the onset of telemedicine. Virtual consultations allow a wider number of people to access professional help and care, especially during pandemic times when in-person, non-emergent clinical visits became more limited. However, the inability to assess patients in-person could potentially result in diagnostic errors. This particular concern is under scrutiny in this situation, as there has been a surge of patients being prescribed Adderall without having an ADHD diagnosis, worsening the challenges that people living with ADHD are enduring during this time.



Continuity of care, ability to follow treatment plans, and access to medicines are often essential for patients to achieve optimal well-being and properly manage or cope with their symptoms (Image by Kanchanachitkhamma via Canva)

Until this shortage is properly addressed, people relying on these medications will be left to face major disruptions in their continuity of care, a difficult decision to ration their available remaining supply, take a smaller dosage than what provides them with appropriate levels of symptomatic relief, or consider trying alternative treatment options that may not offer them a similar ability to cope or reach optimal levels of focus.

Without access to Adderall or effective alternative medications, individuals with ADHD may be forced to go through withdrawal effects. Unexpected and abrupt discontinuation of Adderall after long-time use can lead to mood changes, agitation, irritability, fatigue, weakness, nausea, vomiting, headaches, and other problems that prevent those living with ADHD from functioning with optimal well-being.

The ongoing Adderall shortage proves difficult for many throughout the United States, leaving those with ADHD without the essential medicines they need to function throughout the day. The FDA is closely monitoring the situation and their Drug Shortages Database logs the status of every medication from every manufacturer, allowing clinicians, pharmacies, and patients to see estimated availability dates, as well as the reasons for shortages. As many people continue to wait for medication shortages to be resolved, it will be more critical than ever before to practice healthy lifestyle habits as much as possible and report mental health changes to healthcare professionals. Moving forward, it is also important to note that improving access to medicines is a multifactorial process that often requires efficient collaboration between different institutions, companies, and entities. Being a part of the movement for ensuring widespread availability can be achieved across many roles and in various levels at the intersection of medicine, society, and law.

New Frontiers in Bio-Pharma Production and Genetic Therapies

BY JUSTIN MENDOZA, MPH

Since my first foray into the space of intellectual property and access to medicines in 2010, it's safe to say the environment has changed quite a bit. In the U.S. alone, we have had legislation pass at the federal and state levels that have increased transparency, created drug price negotiation plans, and tackle some of the patent abuses and monopolies that allow for prices to increase. During that time, I've testified before Congress about these fixes, fought for policy change in multiple states, and built entire organizing tools to advance the movement. We have also seen dramatic increases in federal funding for new medicines, and nearly unchecked investments during the COVID-19 pandemic, which perpetuated global inequality while also bringing the world an essential set of vaccines. But even as we work to address this issues as they arise, the speed of scientific discovery in life sciences has outpaced the mainstream discourse and advocacy around access to medicines. In this piece, I wanted to take a few moments to highlight two recent publications from UAEM leaders that bring a new sense of understanding, offer unique recommendations, and expands important conversations.

The founder of our UAEM UC Santa Cruz Chapter, Ted Malpass, co-authored an article published in *Area Development and Policy* (ADP), a journal that examines the economic, political, cultural, and geographical contexts that shape Brazil, Russia, India, China, and South Africa, countries called the Greater BRICS. In the article, *Bio-pharma hub development in global production networks: contrasting state policies and conjunctural value strategies*, the authors explore different bio-pharma hubs across the world and what these developments mean for the future of drug innovation and global health markets.



Map of Biotech Bay by BioSpace, highlighting major biotechnology firms in the San Francisco Bay Area, as depicted in Figure 1 of Ted's article

I asked Ted about the piece, and he stated:

I am truly excited to share our work, "Bio-pharma hub development in global production networks: contrasting state policies and conjunctural value strategies." The framework of this project was structured to outline and define the development of bio-pharma hubs in 4 regions: California's "Bay Area", Puerto Rico's "Bio-Island", China's "Greater Bay Area", Singapore's "Biopolis", and South Africa's "Cape Town Hub".

The research we conducted depicts the geopolitical relational structures of how each region's governing administrations developed the provision, protection, procurement, and production of pharmaceuticals.

I was fortunate to have this opportunity and work closely with Professor Matthew Sparke, Executive Vice Director of Global and Community Health. He introduced me to UAEM and supported my goal for unchallenged patient accessibility to essential medicines.

New frontiers in Bio-Pharma Production and Genetic Therapies (cont.)

BY JUSTIN MENDOZA, MPH

On July 6, 2023, the Innovative Genomics Institute, a collective of researchers focused on genome research, released a set of recommendations and a report titled: *Making Genetic Therapies Affordable and Accessible: IGI's New Recommendations.*

This release is the product of a yearlong process of deliberation among experts in the fields of genetic therapy, intellectual property, patient access, and more. Among those experts were James Love of Knowledge Ecology International (KEI), UAEM North America President Dr. Reshma Ramachandran, and Julia Barnes-Weise of the Global Healthcare Innovation Alliance Accelerator (GHIAA).



Making Genetic Therapies Affordable and Accessible Report, from the Innovative Genomics Institute

UAEM NA Executive Director Justin Mendoza, applauding this work, says, "Innovative Genomic Institute's report charts out a set of ethical and timely considerations for the business models and access policies that would make cutting edge genetic therapies actually available for low-income populations who may need them."

The report puts forward what the authors call a "dynamic cost-plus model" for pricing new genetic therapies, which could result in a 10x lower cost. It also presents alternative funding models, technology transfer policies, and manufacturing policies. The full report is linked on UAEM.org under the News tab.

A Spoonful of Sugar: UAEM's NACC Fellows

BY THE DOSE EDITORS

UAEM has a set of recent leadership members who serve as fellows to our coordinating committee, advising current members on projects and keeping in the loop. The Dose Team is excited to shine a spotlight on them.



Navya Dasari, JD

Field of study and graduation date: BA in Health and Societies, 2019: Juris Doctor, 2023

Current Career Interests: Law, Health Policy Hobbies: Reading, Writing, Cooking, Music, Art

Favorite thing about UAEM: Feeling inspired by my comrades :) **Fun fact:** I've had food stolen out of my hands by monkeys multiple

times

Anmol Gupta, MPP

Field of study and graduation date: Master of Public Policy, 2023; Doctor of Medicine, 2024

Current Career Interests: Pediatric medicine, global health, and health policy

Hobbies: Hiking, trail running, playing my violin, and board games (I love Dominion and Catan!)

Favorite thing about UAEM: That UAEMers are fearless and always willing to think outside the box.

Fun fact: I volunteered at the Houston Zoo during high school summers and took care of river otters, giraffes, and prairie dogs.





Declan Sakuls

Field of study and graduation date: BA in Political Science, 2020; Juris Doctor, 2024

Current Career Interests: Law, Bankruptcy and Insolvency (it's full of action... trust me on this)

Hobbies: Camping, biking, board games (Settlers of Catan), skiing, fantasy sports

Favorite thing about UAEM: The sense of community and the passion people have for improving the world

Fun Fact: When I was a kid, I went to circus camp and my act was the swinging trapeze

Neda Ashtari, MPP, MD

Field of study and graduation date: MD MPP, graduated in 2023 Current Career Interests: Internal medicine and public health policy Hobbies: Dog parking with my goldendoodle Sampson, camping, playing tennis (poorly), reading.

Favorite thing about UAEM: The community of devoted activists from all walks of life who become your closest friends

Fun Fact: I majored in fine art (before switching to an easier career in medicine)



The Wellness Corner: Updates and Events

BY THE UAEM NORTH AMERICAN COORDINATING COMMITTEE (NACC)

Current Events

- The application process and interviews for UAEM NACC Membership have concluded for the 2023-2024 academic year.
- UAEM just held it's digital alumni mixer on July 12, with more than 20 alumni in attendance!
- On July 18, UAEM held a campaign showcase you can watch the recording at uaem.org/tools

Upcoming Events

- Transforming Discoveries into Products: Maximizing NIH's Levers to Catalyze **Technology Transfer**
 - o UAEM ED, Justin Mendoza, will speak on a panel with outside experts on technology transfer and licensing.
- UAEM Garden Soiree
 - Tickets start at \$100, hosted in Washington, D.C. September 12
- UAEM Leadership Training Weekend September 15-17
 - Cost: \$100 (includes housing and food)
 - o 2 days of workshops on campaigns, running



UAEM Johns Hopkins students protesting at the FDA



Dr. Ali Greenberg, UAEM Board Member

Updates on Active Chapters

- · UC Berkeley working to guide other UC schools in implementing the Affordable Action Plan (AAP)
- · UCLA lobbying for bills and working to implement the AAP
- UCSC hosting events to raise awareness on campus and working to implement the AAP
- McGill University is designing a donation tracker to help the community of Montreal share resources among nonprofits
- · Johns Hopkins organizing actions to urge the FDA to act on clinical trial transparency
- Ohio State is developing a relationship with their Technology Transfer Office (TTO) to advocate for the adoption of more equitable licensing practices

About The Dose Editorial Team

MADELINE CHUNG, MBE

Editor-in-Chief

Madeline Chung, MBE, is a bioethicist and health disparities researcher from Case Western Reserve University, conducting research on barriers to health care access for underserved and marginalized populations with the goal of producing meaningful findings that practitioners can integrate in their clinical practice to achieve more culturally-responsive care. She is currently a health sciences student and medical scribe exploring pathophysiology and clinical workflows in the Stanford University-Cleveland Clinic MOST Fellowship. She served as the DEI Chair of Hiring in the Cleveland Clinic's Center for Health Sciences Education, where she worked to ensure effective and equitable practices in health profession programs and increase the representation of diverse voices, backgrounds, and experiences across all levels of organization.



ISHIKA SETH

News Editor

Ishika is a third-year undergraduate student at UCLA studying Human Biology and Society. She participated in a California legislative advocacy project, and she has since become the National Liaison for the UCLA chapter as well as a NACC member. Currently, she is involved with the Xtandi and Affordable Access Plan (AAP) campaigns and is spearheading a campaign to bring increased transparency around UCLA's use of the Affordable Access Plan. Outside of UAEM, Ishika is investigating and innovating new models of equity and social medicine that can be incorporated into healthcare systems. She is also researching the impact of clinical telehealth interventions in reducing the risk for substance use disorders and volunteering in a pain management clinic for underserved communities in Los Angeles.

ZAINAB JAMALI

Features Editor

Zainab is studying Human Biology and Arabic at UCLA and aspires to pursue a career addressing global health inequities, with an emphasis on maternal and child health and access to medicines in the developing world. Her previous work in the field includes involvement with breast cancer and diabetes screening initiatives locally as well as in international communities, including Sri Lanka and India. Additionally, she has worked on refugee health issues as an intern at the International Rescue Committee. She is passionate about advocating for and working with marginalized communities in the healthcare sector. She is dedicated to increasing access to medical care and pharmaceuticals, both domestically and globally and is excited to be a part of UAEM's efforts to raise awareness and initiate change in this area.

