JULY 2025 | THE PREMED SCENE'S MONTHLY MEDICAL NEWSLETTER



THE OFFICIAL NEWSLETTER OF THE PREMED SCENE



Dear medical newsletter readers,

We wish all of you an incredible summer! This month, we bring you the most updated news in the field of medical research. June was PTSD Awareness Month. Ilana Saidov is this month's Rising Stars in Medicine writer, talking more about Dr. Eilat Shinar and her lifesaving work as a hematologist and director of National Blood Services for MDA. Next, Siri Nikku gives an overview of the history of Yaws eradication. Ashby Glover ends by sharing more about PTSD due to the COVID-19 pandemic.

Please enjoy reading The Premed Scene's July 2025 Medical Newsletter!

Ilana Saidov

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PTSD Awareness Month By: Ilana Saidov

Each day, countless veterans are affected by Post-Traumatic Stress Disorder (PTSD). Though its effects are deeply real, PTSD remains one of the most misunderstood challenges facing those who've served. PTSD is a mental health condition that affects individuals who have witnessed or gone through a traumatic event. Individuals with PTSD can have trouble sleeping, feel irritable and anxious, and experience nightmares and flashbacks about the traumatic event. These symptoms can begin as early as three months after the trauma. If not treated, these symptoms can become more intense, making it difficult for the person to work, complete daily tasks, and attend social events.

Veterans are at a higher risk of experiencing PTSD following prolonged periods of combat exposure. As many as 30% of veterans who served in the Vietnam War have been diagnosed with PTSD. Among those who served in Iraq and Afghanistan, an estimated 11% to 20% have also experienced this condition. These statistics depict how imperative it is to give veterans the support and help they need following intense experiences during combat. While every soldier's experience following a traumatic event is different, providing a safe space that allows the veteran to speak openly about their trauma is imperative.

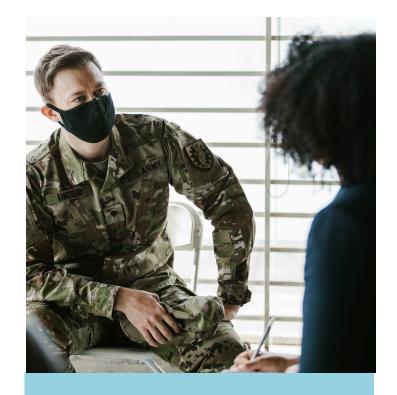
To help veterans coping with PTSD, it is essential to listen, be patient and present, offer support and resources. Veterans have also benefited from talk therapy and participating in activities such as yoga and meditation. With proper resources and a strong support system, veterans can reclaim a fulfilling life after serving and sacrificing for our nation.

Sources:

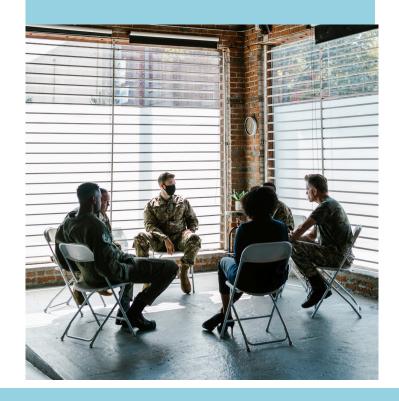
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"PTSD is very common among veterans, but having an open, honest conversation about getting help, is not so common. Veterans who have been diagnosed with PTSD are more likely to attempt suicide, use drugs, drink alcohol in excess and their personal lives can greatly suffer from that. Relationship loss, financial struggles, job loss, loss of friendships can all be a result of not addressing PTSD."



Rising Stars in Medicine: Dr. Eilat Shinar By: Ilana Saidov

The recent conflict in Israel has led to significant medical advancements, most notably the introduction of whole blood transfusions to save the lives of IDF soldiers and civilians.

Dr. Eilat Shinar is a renowned hematologist and Director of Magen David Adom's (MDA) Blood Services division. At MDA, she oversees the collection, testing, and distribution of blood to Israeli civilians and the IDF. Since the October 7th attack, Dr. Shinar has coordinated numerous blood drives to maintain a sufficient supply for wounded soldiers and civilians. In addition, she has collaborated with the IDF to initiate the provision of low-titer O whole blood (LTOWB) to soldiers on the battlefield. Whole blood is a comprehensive component composed of red blood cells, white blood cells, platelets, and plasma. While modern blood transfusions separate blood components, whole blood transfusions deliver all the components at once. In the IDF, whole blood is prepared beforehand and given to soldiers to carry in their supply bag. It can be used immediately during an emergency, allowing the soldier to receive a blood transfusion before being taken to the hospital. This innovation has reshaped how injured soldiers are cared for on the battlefield and has significantly reduced overall battlefield fatalities. Dr. Shinar's efforts at MDA have increased the survival rates for soldiers suffering from massive bleeding to 93%. Whole blood is now being used for battlefield care to treat severe trauma, massive bleeding, and to provide oxygen and clotting support. This method of blood transfusion can not only provide life-saving care to soldiers, but also to victims of gun violence, car accidents, and other traumas.

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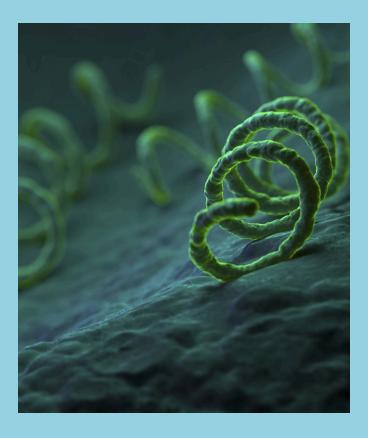




An Overview of Yaws By: Siri Nikku

Yaws is an infectious and commonly forgotten tropical disease prevalent and endemic in humid and tropical areas of Africa, Southeast Asia, and the Pacific Islands. This disease primarily affects the skin of young people in low-income and rural communities, caused by Treponema pallidum subspecies pertenue (T. pallidum subspecies pertenue). This corkscrew-shaped Gram-negative bacterium is closely related to Treponema bacteria, which cause syphilis. Discovered in 1905 by physician Aldo Castellani, he found that the yaws lesions from patients in Sri Lanka were contracted from patients in Africa who had the same lesions. At first, yaws appears as a wart-like skin tumor that changes into lesions and is passed through direct skin contact. The lesions from yaws can often heal spontaneously based on the patient's immunity. However, the bacterium of yaws can also stay dormant in the host for years at a time, appearing through inflammation and destruction of surrounding bone tissue in about 10% of immunocompromised patients. As mentioned earlier, this condition affects younger people in lower-income rural neighborhoods, especially those under 15. The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) first implemented an eradication effort of yaws from 1952 to 1964. This strategy included mass treatment of the 50 million cases out of 300 million through benzathine penicillin, leading to a 95% reduction of the global burden of yaws. Despite their best efforts, yaws still reemerged in the late 1970s. This was attributed to the lack of focus on yaws, failed surveillance, and low commitment to yaws eradication after the combined eradication effort. Additionally, the lack of governmental commitment and resources to reach the endemic communities and the children's intolerance to intramuscular benzathine penicillin injection combined to make the effort nonpermanent in reducing yaws. After determining the flaws, WHO modified its method to a Total Community Treatment (TCT), focusing on eradication within communities, case-finding, and azithromycin as a more tolerable treatment. Even more, the Dual Path Platform (DPP) syphilis immunoassay was more accurate in finding treponemal and non-treponemal antigens antibodies in patients with yaws. With these new methods, yaws eradication through a smaller-scale approach shows more success than the previous campaign.

Source: https://www.mdpi.com/2079-9721/13/1/14





COVID-19 Pandemic-Induced Posttraumatic Stress Symptoms By: Ashby Glover

Through the lens of movies and media, the onset of post-traumatic stress disorder is often associated with a singular, distressing, frightening event. However, PTSD can also be caused by a prolonged traumatic experience. For much of the general public, the COVID-19 pandemic and related economic and social turmoil were an extended period of high stress. Several studies have indicated that the pandemic caused a significant increase in the incidence of PTSD among the general population, especially among those who were low-income or experienced specific social or economic stressors induced by the pandemic.

On average, 15% of the general population displayed post-traumatic stress symptoms during the COVID-19 pandemic. However, lack of access to resources was associated with a higher prevalence of symptoms. Those earning \$75,000 or less had a prevalence of 24%, while those in higher earning brackets had increasingly fewer symptoms as income increased. Low income at the beginning of the pandemic has been positively associated with persistent probable PTSD two years later.

Higher rates of PTSD have also been correlated with people who experienced specific social or economic stressors during the pandemic. Those who lost health insurance coverage, had housing-related problems, financial difficulties, or difficulty accessing food and other necessities, have an increased risk of PTSD. Worsening economic status due to the pandemic has been associated with a 1.8 times greater chance of PTSD symptoms.

The data indicates that those with fewer resources had a much greater risk of developing symptoms and long-term PTSD due to the pandemic. However, those who are most vulnerable also often have the least access to mental health services that could treat their symptoms. In the 2020 Census, 28 million Americans reported having no health insurance throughout the entire year. For those who do have the health insurance necessary to receive care, studies have shown that the offices of mental health professionals are more likely to be found in higher-income areas. To best serve those who still have COVID-19-related PTSD, reducing mental health disparities is a key part of the road to recovery.

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