

AAP-CA2 32nd Annual Advances in Pediatrics Symposium

PEARLS

2021

Thank you for attending the Virtual Advances in Pediatrics Symposium, broadcast from Tamkin Auditorium at UCLA on February 27, 2021. In this document you will find the conference Pearls - a compilation of takeaway points submitted by each speaker. Please review the entire document, then access the [Reflective Statements](#) exercise to provide your responses. Reviewing the Pearls, followed by completion of the Reflective Statements meets compliance with the American Board of Pediatrics requirement for MOC Part 2 credit. Deadline for completion is 4/27/2021.

Self Care & Well-being of Healthcare Professionals - Nirmala Murthy, MD, FAAP

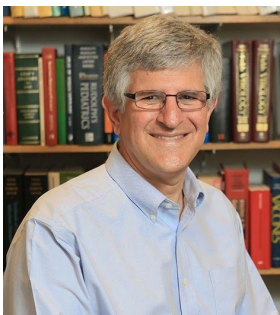


Pearl 1: Breath patterns are connected to emotions and State of our mind. Breathing techniques have helped to reduce the symptoms of burnout in Health Care Professional

Pearl 2: Research has shown certain Breathing techniques impacts depression, stress, mental health, mindfulness, positive affect and social connectedness
<https://www.frontiersin.org/articles/10.3389/fpsy.2020.00590/full>

Pearl 3: Rhythmic breathing techniques brings positive changes in immune system, sleep patterns, anxiety, depression (clinical & subclinical) in antioxidant enzyme levels, well-being (prolactin levels) Ref : aolresearch.org

Developing a SARS-CoV-2 Vaccine at Warp Speed - Paul A. Offit, MD



Pearl 1: How mRNA vaccines work

mRNA vaccines trick the body into making the viral protein itself which, in turn, triggers an immune response.

mRNA enters your cytoplasm. It can't not enter the nucleus of the cells, where DNA is, and therefore can't alter or change your DNA.

mRNA vaccine degrades quickly and only stays in the body for a couple of days.

Pearl 2. Understanding clinical trials and approvals process of COVID vaccine

The Pfizer/BioNTech vaccine Phase 3 trial involved more than 40,000 people. Same size of usual vaccine trials. They will continue to collect efficacy and safety data for another two years. Usually, serious safety issues are seen within 6 to 8 weeks after vaccination.

The process was faster than usual because researchers had already built an mRNA platform – a way of getting viral mRNA into the body – for cancer and other vaccines under trial. It meant this could be put into action as soon as the genomic sequence of the virus was discovered.

If the vaccine safety committee recommends that new vaccines be approved for EUA, FDA takes that recommendation and makes a decision. That decision goes to CDC and ACIP for an emergency meeting to decide if it should be recommended for use. This process takes 5 days.

Pearl 3: How and when will we reach Herd Immunity

About 30 percent of the population have had COVID in the US, even if they don't know it.

About 10 to 15 percent have been vaccinated and this number is rapidly increasing.

We are seeing some evidence of herd immunity right now with rapidly decreasing numbers of COVID and it should continue to decrease as the weather warms up and we go into spring and summer.

COVID in Schools - David Rubin, MD, MSCE, FAAP



Pearl 1. Avoid the pitfalls of confirmation bias when reviewing data on schools and transmission

Pearl 2. Decisions to resume in-school instruction need consider community transmission, emerging safety data from around the country, the strength of safety protocols, and a transparent dialogue within each school community.

Common General Surgical Considerations - Edward Tagge, MD, FAAP



Pearl 1. Bilious vomiting in infant indicates GI obstruction and one must first consider malrotation.

Pearl 2. Appendicitis is rarely a surgical emergency and can be treated either with surgery or antibiotics alone, depending on circumstances.

Pearl 3. Pediatric hernias are almost always 'bulges without pain', very rarely 'pain without bulge', and are best diagnosed by physical exam and not Ultrasound.

Pearl 4. Pyloric stenosis occurs in infants usually between 2 weeks and 2 months and is best diagnosed by ultrasound.

Common Causes of Arthralgias - Wendy De La Pena, MD



Pearl 1. Stiffness and pain upon awakening that improves with activity is most consistent with Juvenile Idiopathic arthritis

ARTHRITIS & RHEUMATOLOGY | Vol. 66, No. 2, February 2014, pp 462–469
DOI 10.1002/art.38223 © 2014, American College of Rheumatology

Pearl 2. Pain waking a child from sleep or pain after activity that responds to massage or warm packs is most likely benign joint hypermobility syndrome or growing pains.

Citation: Tofts, L.J., Elliott, E.J., Munns, C. *et al.* The differential diagnosis of children with joint hypermobility: a review of the literature. *Pediatr Rheumatol* 7, 1 (2009).

<https://doi.org/10.1186/1546-0096-7-1>

Pearl 3. Diffuse pain present throughout the day associated with headaches, abdominal pain, insomnia and fatigue is likely secondary to pain amplification syndrome.

Staud, R., Rodriguez, M. Mechanisms of Disease: pain in fibromyalgia syndrome. *Nat Rev Rheumatol* 2, 90–98 (2006).

<https://pubmed.ncbi.nlm.nih.gov/16932662/>

RESIDENT RESEARCH AWARDS AND PRESENTATION

Understanding the Motives of Donors for a Student-Run Breast Milk Bank

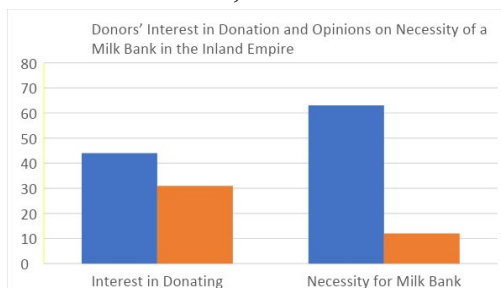
- Sonul Gupta, MS3 from UC Riverside School of Medicine



Pearl 1. Breast milk is the best form of nutrition in the first 6 months of life, especially for those who are born premature or are of VLBW (BW <1500g). As providers & future providers, it is important to be a resource for breastfeeding mothers

- Refer overproducing mothers to local milk depots and/or the UC Health Milk Bank (UCHMB) to donate their breast milk
- Refer underproducing mothers to lactation consultants and provide reassurance
- Refer out-patient families, if needed and if allowable by personal finances,

to Milk Banks for donor breast milk (DBM) purchase while advising on caloric intake, ounces consumed, etc.



Pearl 2. Potential breast milk donors in the Inland Empire are misunderstood; they value access to lactation consultants, mental health resources and a community of breastfeeding mothers as motivating factors for breast milk donation. Previous literature suggested that donors' motivations stem mainly from altruism.

Pearl 3. Milk banking is cumbersome, but an extremely worthwhile process. Milk depots are important and effective solutions to increase DBM availability regionally, as well as resources for postpartum lactating mothers.

Steps to Create a Breast Milk Depot

1. Partner with a Milk Bank Mentor
2. Obtain Tissue Bank License from CA Dept of Health
3. Secure Space for Milk Depot Operations (away from patient care)
4. Identify Milk Bank Director & Appropriate Staff
5. Obtain Industrial Equipment (\$3,000-5,000)
6. Receive Milk Donations from Pre-screened Mothers Weekly (Screening Done by Milk Bank)
7. Coordinate Shipments and/or Courier Pick-up with Milk Bank
8. Renewal of Tissue Bank License Yearly
9. Secure Donations for Creation of Milk Bank (\$\$\$)

Addressing Bias and Microaggressions in the Clinical Environment - Christopher J. Russell, MD, MS



Pearl 1. Microaggressions are brief, commonplace statements or actions that communicate hostile, derogatory, or negative views against a member of a marginalized group. Microaggressions and other forms of racism/bias are rooted in power differential and direct/indirect assertions of power.

Pearl 2. Frameworks, such as Open The Front Door (observe, think, feel, desired outcome) and “micro” interventions (make the “invisible” visible, disarm the microaggression, educate the offender, and seek external reinforcement or support, if needed) can help standardize one’s approach to responding to microaggressions in the clinical environment.

Pearl 3. After responding to microaggressions and other bias events, debrief with those involved outside of the room and acknowledge both the event and everyone’s discomfort with the event (e.g., “When I heard _____, it made me feel uncomfortable).

Teen Suicidality - Jonathan D. Warus, MD, FAAP



Pearl 1. Suicide has been the second leading cause of death in the United States among adolescents and young adults 15-24 years of age since 2011, but in 2019, rates of death by suicide were very similar to death rates from motor vehicle injuries.

From 2009-2019, the United States has seen an increase in the prevalence of suicide attempts in adolescents and young adults overall as well as among female, non-Hispanic white, non-Hispanic black, and 12th-grade students. In 2019, the death rate for motor vehicle injuries was 13.7 per 100,000 and for suicide was 13.9, compared to 11.2 for homicide.

References:

- [Ivey-Stephenson AZ, Demissie Z, Crosby AE, et al. Suicidal Ideation and Behaviors Among High School Students – Youth Risk Behavior Survey, United States, 2019. *MMWR Supplement*. 2002;69\(1\):47-55.](#)
- [QuickStats: Death Rates for Motor-Vehicle-Traffic Injuries, Suicide, and Homicide Among Adolescents and Young Adults Aged 15-24 Years – United States, 1999-2019. *MMWR*. 2021;70:184.](#)

Pearl 2. Depression screening should be included in annual well child visits for all youth 12-21 years of age.

Adolescents and young adults are at increased risk for depression and suicidality, but these concerns may go unrecognized by patients, families, and providers. Routine screening for depression in all patients between the ages of 12 and 21 years of age should occur at each annual well child visit using a standardized questionnaire such as the Patient Health Questionnaire-9 (PHQ-9). If there is concern for potential suicidality, screeners such as the Ask Suicide-Screening Questions (ASQ) can be used along with additional guidance in the ASQ Toolkit from the National Institutes of Mental Health.

References:

- [Bright Futures Medical Screening Reference Table: Adolescence Visits.](#)
- [American Academy of Child and Adolescent Psychiatry. PHQ-9: Modified for Teens.](#)
- [National Institutes of Mental Health: Ask Suicide-Screening Questions \(ASQ\) Toolkit.](#)
- [Guidelines for Adolescent Depression in Primary Care \(GLAD-PC\) Toolkit, The Reach Institute.](#)
- [Breslin K, Balaban J, Shubkin CD. Adolescent Suicide: What Can Pediatricians Do? *Curr Opin Pediatr*. 2020;32:595-600.](#)

Pearl 3. During the COVID-19 pandemic, there has been concern for increased risk factors for suicide in youth.

Risk factors for suicide include depression, social isolation, and stressful life events. While there have been reported increases in mental distress, anxiety, and depression related to these factors during the COVID-19 pandemic, there is currently no national data on suicide rates during this time. Given concerns about the increase in risk factors for suicide during the pandemic, providers should ensure routine mental health screening for all adolescents and young adults, support those with mental health concerns, and ensure timely access to mental health care when appropriate.

References:

- [Shain B and AAP COMMITTEE ON ADOLESCENCE. Suicide and Suicide Attempts in Adolescents. *Pediatrics*. 2016;138\(1\):e20161420.](#)
- [American Foundation for Suicide Prevention Statement: What Parents Can Do to Protect Children’s Mental Health During Remote Learning.](#)
- [Moutier C. Suicide Prevention in the COVID-19 Era: Transforming Threat Into Opportunity. *JAMA Psychiatry*. 2020;DOI: 10.1001/jamapsychiatry.2020.3746.](#)

MOC Part 2 Credit Completion Instructions
For conference attendees only

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[Click to provide your responses in the Reflective Statements form](#)