Deliberate Practice as an Educational Method for Differentiating Abusive versus Accidental Burn and Bruise Injuries in Children

The project is a \$29,500.00 Resident Research grant funded from the Physician Services Incorporated (PSI) Foundation. This grant funds projects largely developed by residents, who are the principal investigators of the project. Our grant was funded for one year starting April 1, 2021.

Project Summary

Child abuse and neglect is a global problem, with nearly one in four adults worldwide having experienced physical abuse as a child. While burn and bruise injuries are common presentations of abusive injuries, these injuries also frequently occur from accidents. Unfortunately, research has demonstrated that it remains difficult for front-line physicians to distinguish between injuries that have occurred from accidents versus those that should raise suspicious for abuse. It is important to differentiate these injuries as children with undetected abusive injuries often go on to experience more serious forms of abuse; 20–30% of children who die from abuse were previously seen by health care providers for abusive injuries before abuse was formally identified. Fortunately, there are specific patterns of bruise and burn injuries that suggest accidental versus abusive injuries, and our project will use this knowledge to teach physicians the skill of differentiating these mechanisms of injury. The main goal of this project is to adapt photograph-based cases of children with and bruise injuries to this learning platform and examine if physicians can improve their skill in differentiating accidental versus abusive burn or bruise injuries. If this is effective, doctors can potentially improve their bedside diagnosis of these injuries, minimizing the harms created by missing abuse.