

# Enhancing Pediatric Nursing Skills Through Simulated Burn Assessments Using Tanner's Clinical Judgement Model

Bridget Camien



The increasing complexity of healthcare necessitates that nursing students develop strong clinical judgment skills early in their education. To address this need, a hands-on, simulation-based project was introduced for Senior pediatric nursing students at a university in the Midwest. This project aimed to promote essential skills in assessing and managing pediatric burn injuries by integrating Tanner's Clinical Judgment Model. This model, includes, noticing, interpreting, responding, and reflecting, guided students through a structured, evidence-based approach to pediatric burn care, enhancing their clinical decision-making abilities (Tanner, 2006). The goal was to assess and improve students' ability to make quick, evidence-based decisions in pediatric burn scenarios.

Tanner's Clinical Judgment Model served as the foundation for the project, equipping students with the judgment necessary to handle real-life situations.

This model aligns closely with the National Council of State Boards of Nursing's (NCSBN) Clinical Judgment Measurement Model, which supports developing clinical reasoning vital for new graduates (Dickison et al., 2019). The structured approach of Tanner's model is especially useful for complex cases, such as pediatric burn care, where accurate assessment, interpretation, and timely interventions are crucial.

The project began with students working in small groups, each assigned a plastic doll with burns of varying degrees and locations. Students were tasked with calculating the burn's total body surface area (TBSA) and determining the necessary resuscitation needs. Utilizing the Rule of Nines, adapted for pediatric patients, they estimated TBSA percentages and calculated fluid requirements using the Parkland formula, a standard method for burn resuscitation. By noticing critical details and interpreting the TBSA to in-

form fluid needs, students practiced the initial stages of Tanner's model in a highly applied setting.

Students followed a standardized protocol and algorithm derived from a Level One Pediatric Trauma Center to deepen their comprehension. This protocol guided them in assessing the severity of injuries and applying evidence-based resuscitation practices for pediatric patients. As they navigated each case, students engaged in Tanner's responding phase, making treatment decisions collaboratively. This experience simulated a real-world environment where rapid decision-making and clear communication are essential for positive patient outcomes. Students appreciated the structured guidance provided by the protocol, noting that it helped them confidently assess, plan, and implement interventions systematically.

The project concluded with a debriefing session, aligning with Tanner's reflecting phase. Students were encouraged to discuss challenges encountered, apply their knowledge, and share insights on how they might handle similar cases in a clinical setting. Faculty assessed students based on their ability to accurately determine burn severity, apply clinical guidelines, and collaborate effectively. This hands-on, reflective activity allowed students to solidify their understanding of pediatric burn management principles and better comprehend their strengths and areas for growth in clinical judgment.

Feedback was overwhelmingly positive, with students reporting that the fun, hands-on experience clarified complex concepts in pediatric burn care and

*(continued on page 4)*

## Abbreviations and Definitions

**ECHO:** Extension for Community Health Outreach

**EDS:** Ehlers-Danlos Syndrome

**hEDS:** Hypermobile Ehlers-Danlos Syndrome

**MDA:** Multidisciplinary Approach

**PCP:** Primary Care Provider

**SDOH:** Social Determinants of Health

**\*Squimbyly:** A colloquial, compassionate term used to describe the lived experience of hEDS - including its diagnostic complexity, multisystem symptoms, and psychosocial impact. "Squimbyly" encapsulates the bendy, unpredictable, and often misunderstood nature of the condition, offering a patient-centered shorthand for both the diagnosis and its ripple effects.

providers and communities, offers an Extension for Community Health Outreach (ECHO) program to bridge this knowledge gap.

Patients also have unique barriers that must be considered. As with any illness, one of the biggest barriers is Social Determinants of Health (SDOH), including economic and social factors. Families often struggle to afford care with limited diagnostic availability (Bell & Pearce, 2021). Accessible, informed providers can help address SDOH-related issues.

Another issue is fractured trust in the medical community, creating a need for psychosocial support as part of treatment (Bell & Pearce, 2021). Patients often become "self-experts" due to lack of support. When they do present to healthcare, there's often delayed diagnosis or psychiatric mislabeling (Lee & Chopra, 2025). Many patients stop seeing their PCP, believing care is futile. Without management, hEDS can worsen unexpectedly (eg: joint dislocations) (Quigley et al., 2024).

A more insidious issue with these patients is that many don't recognize a problem until symptoms disrupt daily life (Song et al., 2020). Thus, it is important to catch hEDS in childhood to prevent severe clinical progression and crisis (Tofts et al., 2023).

## Abbreviations and Definitions

A special thanks to all who made this project possible, especially Michelle Heusi for supporting me throughout the process and all the people who helped refine it. ■

## References

1. Bell, L., & Pearce, G. (2021). Parents' experiences of children's health care for hypermobile Ehlers-Danlos syndrome and hypermobility spectrum disorders. *Children's Health Care*, 51(1), 37–61. <https://doi.org/10.1080/02739615.2021.1960165>
2. Black, W. C., Jones, J. T., Rush, E. T., Lindsey Malloy Walton, & Harding, A. (2023a). Development of a Multidisciplinary Clinic for Patients with Ehlers Danlos Syndromes: Considerations and Strategies. *Journal of Multidisciplinary Healthcare*, Volume 16, 191–195. PubMed Central. <https://doi.org/10.2147/jmdh.s396221>

3. Black, W. R., Black, L. L., & Jones, J. T. (2023b). Barriers to the Diagnosis, Care, and Management of Pediatric Patients With Ehlers-Danlos Syndrome in the United States: A Qualitative Analysis. *Global Pediatric Health*, 10(1-7). <https://doi.org/10.1177/2333794x231212081>

4. Burkhart, N. W., & Perkins, C. (2021, February). Recognizing the clinical signs of Ehlers-Danlos syndrome. *Rdhmag.com; Registered Dental Hygienists*. <https://www.rdhmag.com/pathology/article/14189665/recognizing-the-clinical-signs-of-ehlers-danlos-syndrome>

5. Harris, D. (2024a). Medications to avoid with Ehlers-Danlos Syndrome: Fluoroquinolones | *The EDS Clinic*. *Ecls.clinic*. <https://www.eds.clinic/articles/ehlers-danlos-syndrome-fluoroquinolones>

6. Harris, D. (2024b). The EDS Clinic - *How Long Does It Take to Get Diagnosed with EDS?* *Ecls.clinic*. <https://www.eds.clinic/articles/hard-to-get-eds-diagnosis>

7. Lee, C., & Chopra, P. (2025). Academic Editor: Senthilkumar Sadhasivam The Incidence of Misdiagnosis in Patients with Ehlers-Danlos Syndrome. *Children*, 12(698). <https://doi.org/10.3390/children12060698>

8. Quigley, E., Noble, O., Ansari, U., Eamonn, D., & Quigley, M. (2024). The Suggested Relationships Between Common GI Symptoms and Joint Hypermobility, POTS, and MCAS. *Gastroenterology & Hepatology*, 20(8), 479.

9. Song, B., Yeh, P., & Harrell, J. (2020). Systemic manifestations of Ehlers-Danlos syndrome. *Baylor University Medical Center Proceedings*, 34(1), 49–53. <https://doi.org/10.1080/08998280.2020.1805714>

10. Tofts, L., Simmonds, J., Schwartz, S., Richheimer, R., O'connor, C., Elias, E., Engelbert, R., Cleary, K., Tinkle, B., Kline, A., Hakim, A., Van Rossum, M., & Pacey, V. (2023). REVIEW Open Access Pediatric joint hypermobility: a diagnostic framework and narrative review. *Orphanet Journal of Rare Diseases*, 18(104), 104. <https://doi.org/10.1186/s13023-023-02717-2>

11. Van Dijk, F. S., Ghali, N., & Chandratheva, A. (2023). Ehlers-Danlos syndromes: importance of defining the type. *Practical Neurology*, 24(2), 90–97. <https://doi.org/10.1136/pn-2023-003703>

(continued from page 2)

helped build their confidence. While potential limitations included time constraints and the need for additional practice in adapting the Rule of Nines for various age groups, the project was a valuable addition to the curriculum, providing an immersive experience that brought theory to life.

This activity highlights the effective-

ness of Tanner's Clinical Judgment Model in nursing education, mainly when applied to challenging, high-stakes scenarios such as pediatric burn care. By structuring learning around this model, nursing educators can help students build critical skills in a controlled yet realistic setting, ultimately preparing them for the complexities of real-world patient care ■.

## References

- Dickinson, P., Haerling, K. A., & Lasater, K. (2019). Integrating the National Council of State Boards of Nursing Clinical Judgement Model into nursing educational frameworks. *Journal of Nursing Education*, 58(2), 72-78
- Tanner, C. A. (2006). Thinking like a nurse: A research-based model of clinical judgement in nursing. *Journal of Nursing Education*, 45(6), 204-211.