Pain Assessment in Elementary and High School Students who cannot self report: A pilot study





Michelle Rybicki, RN NCSN; Brenna Quinn PhD, RN-BC, NSCN, CNE, & Cathy Riccio, BSN, MS, MSN

Introduction

Aim: This pilot study examined pain assessment in individuals with intellectual disability in the schools.

Background: This idea was brought about after attending a conference "What if they can't tell us?" with Dr. Brenna Quinn

Methods: This study utilized surveys both pre and post education to gain understanding of parents/caregivers and educators knowledge of pain assessment techniques and then with input an individualized scale was created for each student with ID.

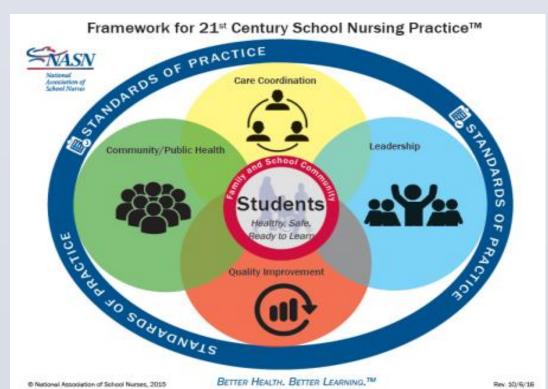
Results: Increased awareness of pain assessment and identification techniques and increased collaboration between families and schools.

Implications: Addressed the need for using different method of pain assessment along with input from parents in those students who cannot express pain or discomfort themselves.

Outcomes

Following a review of this poster the learner should be able to:

- Identify at least 2 different methods of pain assessment.
- List benefits of understanding about pain assessment and early intervention
- Share the process of the collaborative effort between school nurses and researchers in real time.

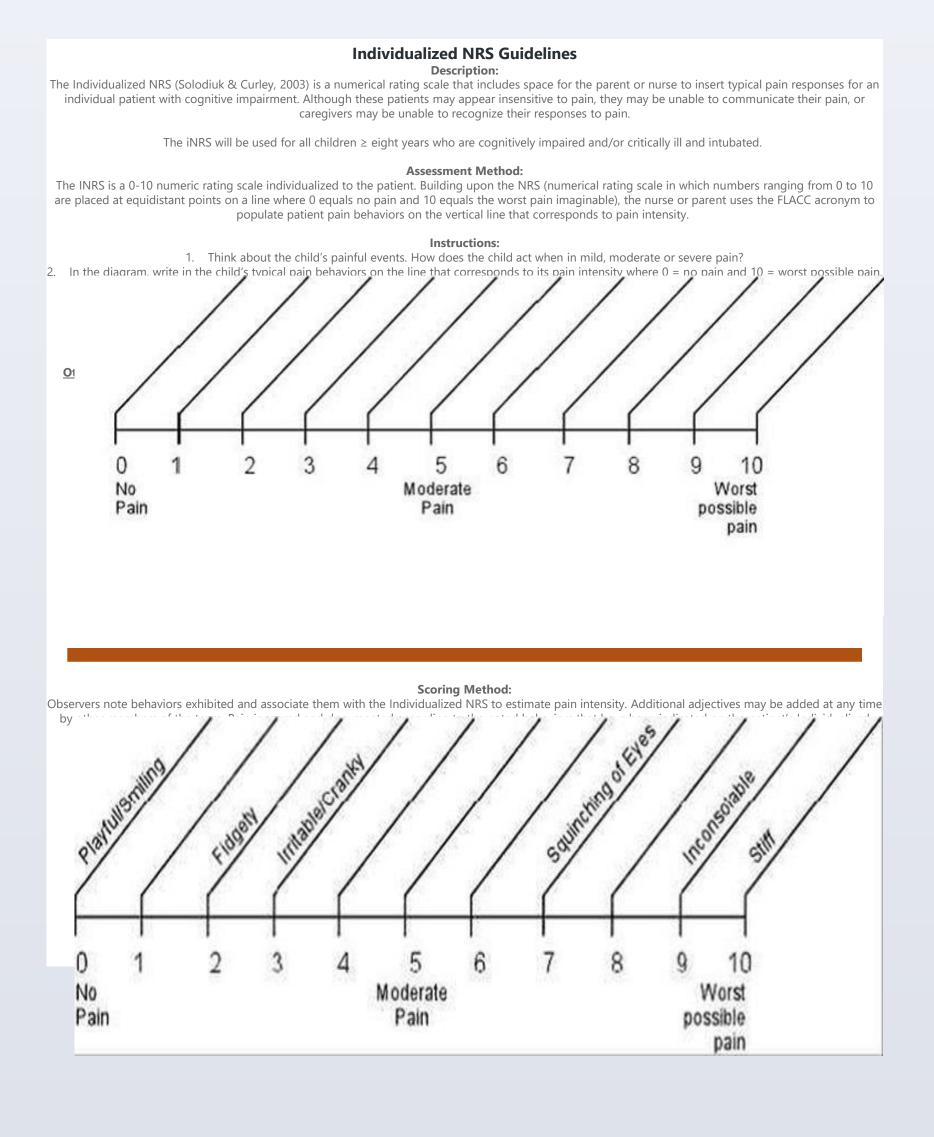


Review Of Literature

- The understanding of pain and assessment reveals that new perspectives are needed especially in regard to those individuals that cannot express pain through self report.
- "A longstanding set of assumptions have held that individuals with intellectual disabilities (ID) are insensitive or indifferent to pain." (Symons, 2008)
- School nurses care for students of many differing abilities and that 14% of school children have a disability and receive support services in school and with that comes that challenges of caring for these students.
- Assessment techniques and guidelines are minimal based on the survey of literature that was completed.

Methods and Materials

Pilot study in collaboration with UMASS Lowell IRB approval protocol # 17-165, utilizing a pre and post survey to parents and educators using Likert scale and introducing the Individualized Numeric Rating Scale (INRS) developed by Jean Solodiuk 2010 and is primarily used post surgically in a children's hospital setting.



Example of Parent Survey

Please circle one choice for each of the following questions:

- 1. How confident are you in assessing pain in your child?

 Not at all A little Moderately A lot Fully
- 1. How knowledgeable are you in regarding assessing pain in your child?

 Not at all A little Moderately A lot Fully
- 1. Are you familiar with pain assessment tools that are appropriate to use for your child?

 Not at all A little Moderately A lot Fully
- 1. How well do you understand the prevalence and occurrence of pain in your child?

 Not at all A little Somewhat A lot

Fully

- 1. Can you list 3 ways in which your child displays pain that is different from how neurotypical students display pain?

 Yes No Not sure
- 1. Can you name 5 methods of pain assessment that may be helpful in the school setting?

 Yes No Not sure
- 1. Can you identify 3 methods of pain assessment most helpful your child?

 Yes No Not sure
- How confident are you in the ability of the school staff to identify pain and discomfort in your child?

 Not at all A little Moderately A lot Fully
- 1. How confident are you in the ability of the school nurse to assess pain and discomfort in your child?
 Not at all A little Moderately A lot

Thank you for your participation in this survey. Please return to Cathy Riccio and Michelle Rybicki using the enclosed pre-addressed postage-paid envelope.

RESULTS

- Participants N = 40
- 30 staff (teachers, nurses...) and 10 parents
- No statistically significant change in knowledge of pain identification or assessment
- Parents and teachers were able to describe better methods of pain assessment.
- Looking at the overall behavioral picture of the child and typical deviations from typical behavior are essential to finding pain in students who are nonverbal or have limited verbal abilities.

Implications

- Knowledge that being able to understand students behaviors may represent pain or discomfort based on parent and teacher survey input.
- Assessing and treating pain will allow the student to remain in school and be able to access the curriculum and be ready to learn.
 - Continue the conversation regarding the importance of pain assessment in students that cannot express pain or discomfort verbally.
- Adoption of the INRS rating scale for use in the district.
- Improved collaboration and connectedness with students, families and school personnel.
- Increase confidence in school providers regarding finding and addressing pain in their child.

What hurts? Head Shoulder Shoulder Stomach Legs Motivation Without Borders © 2019

LIMITATIONS:

Study size was small but it did reveal that the conversation, that all stakeholders caring for these children with intellectual disabilities have, is very important in the collaborative process.

DISCUSSION:

This pilot study was found to be feasible and useful to parents and school personnel promoting collaboration and student-centered continuity of care. This project allowed parents, teachers and nurses to start a conversation about the importance and impact of pain in our students that cannot self report. The use of a combination of tools in assessment practices should be used to look at the overall behavioral picture of the child.

One parent moved out of district and asked to share this with the new school the student was to attend.

SELECT REFERENCES

American Nurses Association and National Association of School Nurses. (2011). *School nursing: Scope and standards of practice*. 2nd Edition. Silver Spring, MD: Nursebooks.org

McClanahan, R., & Weismuller, P. C. (2015). School nurses and care coordination for children with complex needs: An integrative review. *Journal of School Nursing*, 31(1), 34–43. doi.org/10.1177/1059840514550484

National Association of School Nurses. (2017). *Students with chronic health conditions: The role of the school nurse* (Position Statement). Silver Spring, MD: Combe, L.G., Mattern, C., Fleming, L., Killingsworth, S., Students with Chronic Health Conditions.

https://www.nasn.org/nasn/advocacy/professional-practice-documents/position-statements/ps-chronic-health

National Center for Education Statistics. *Children and Youth with Disabilities* (May 2019)Retrieved from

https://nces.ed.gov/programs/coe/indicator cgg.asp

Porter, S., Branowicki, P.A., Palfrey, J.S. (2014). *Supporting students with special health care needs: Guidelines and procedures for schools*. 3rd Edition. Baltimore, MD. Brookes

Quinn, B. L., & Smolinski, M. (2018). Improving school nurse pain assessment practices for students with intellectual disability. *Journal of School Nursing*, 34(6), 480–488.https://doi.org/10.1177/1059840517722591

Quinn, B.L., Rybicki, M.L., Riccio, C. (2018) Partnerships between clinical nurses and nurse researchers. *Massachusetts Report on Nursing,* 16(4)8., https://cdn.ymaws.com/www.anamass.org/resource/resmgr/docs/N
https://cdn.ymaws.com/www.anamass.org/resource/resmgr/docs/N
https://cdn.ymaws.com/www.anamass.org/resource/resmgr/docs/N

Quinn, B. L. (2016). 'It's not easy': School nurse pain assessment practices for students with special needs. *Pain Management Nursing*, *17*(2), 119-131.doi:10.1016/jupon.2016.01.005.

Quinn, B. L., & Serna, R. W. (2017). Educators' Experiences Identifying Pain Among Students in Special Education Settings. *The Journal of School Nursing*. https://doi.org/10.1177/1059840517747974

Solodiuk, J. C., Scott-Sutherland, J., Meyers, M., Myette, B., Shusterman, C., Karian, V. E., Harris, S. K., & Curley, M. A. Q. *(2010)*. Validation of the individualized Numeric rating scale (INRS): A pain assessment tool for nonverbal children with intellectual disability. *Pain*, *150*(2), 231–236 (PMID: 20363075).

Symons F. J., Shinde S. K. & Gilles E. (2008) Perspectives on pain and intellectual disability. *Journal of Intellectual Disability Research* 52, 275–86.

REFERENCES AVAILABLE ON REQUEST.

M_Rybicki1@salemstate.edu