

OBJECTIVE

To develop an effective teaching tool to facilitate communication among medical providers, students and families, and school administration on how to best meet the needs of students with headache complaints, specifically chronic pediatric headache and migraine.

BACKGROUND LITERATURE

- In recent decades, the number of children with chronic illnesses transitioning back to school has increased. (1)
- Pediatric migraine is one of the five most prevalent childhood disorders in the US, affecting up to 10% of children and 28% of adolescents. (2)
- Children with chronic headache experience significant impairment to daily functioning, including difficulty with school performance and higher rates of school absenteeism than kids with other chronic illnesses. (3)
- Minimizing school drop-out rates for children with pain conditions such as chronic pediatric headache has evolved beyond individual patient care towards a global public health issue. (4)

METHODS

Participants:

- **31 school nurses** from 9 different counties in Massachusetts and New Hampshire
- **109 patients** seen at the Pediatric Headache Program at Boston Children's Hospital

School Demographics

Public School	96.2%
Middle/High School	73.1%
500+ Total Students	80.8%
20+ Nurse Visits per day	96.2%

Ethnicities Represented

- Non-Hispanic White
- Hispanic or Latin American
- Asian
- Black or African American

Student Reports Pre-Tool

Students who visited the nurse for headache/migraine	57.8%
Students who visited the nurse to receive headache/migraine medication	60.0%
Students sent back to class after visiting the nurse for headache	59.6%
Students sent home after visiting the nurse for headache	42.3%
Students & parents who said nurse could at least <i>somewhat</i> benefit from an educational headache guide	60.7%

RESULTS

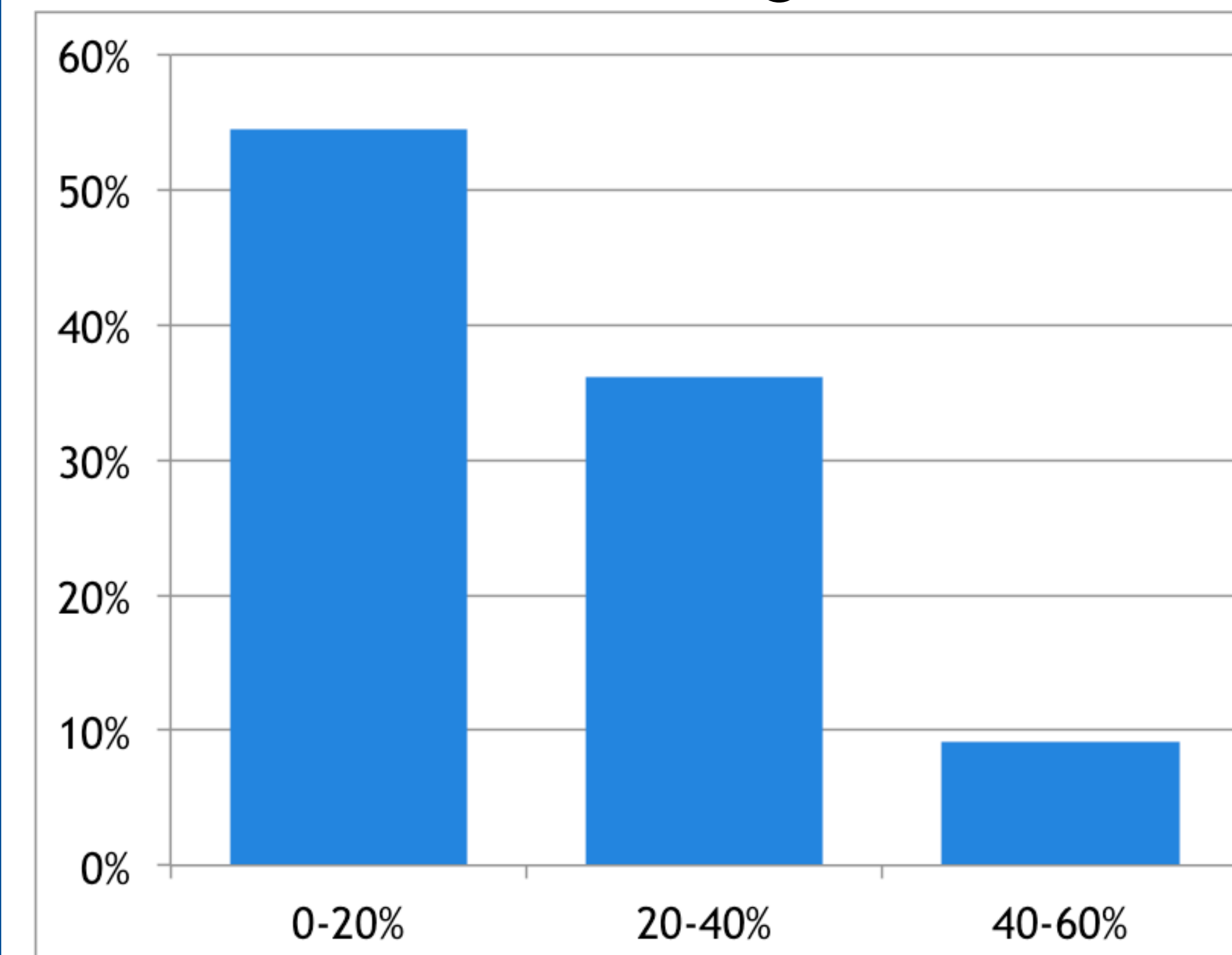
Mean Ratings (out of 5)

- Overall: **4.46**
- Introduction: **4.10**
- Headache as Chronic Illness: **4.40**
- Education on Lifestyle Factors: **4.48**
- Checklists for Scenarios: **4.29**
- Medication Overview Charts: **4.23**
- When to Contact a PCP, Neurologist, or a Headache Specialist: **4.33**
- Additional Resources: **4.05**

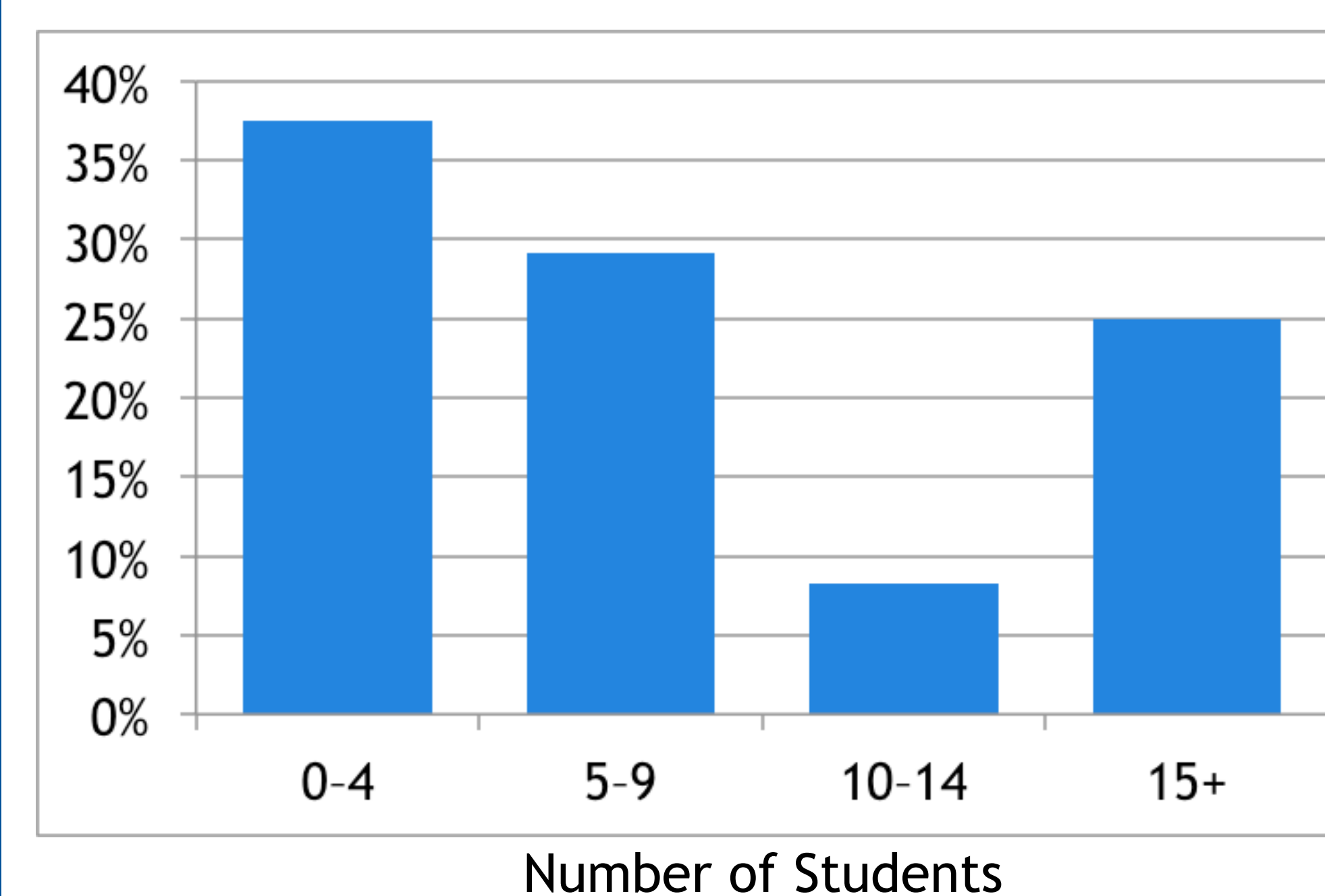
Most Popular Subsections

- Post-concussion headaches/syndrome (from *Headaches as Chronic Illness*)
- Sleep (from *Education on Lifestyle Factors*)
- Hydration (from *Education on Lifestyle Factors*)
- Chronic headache (from *Checklists for Scenarios*)
- Rescue medications (from *Medication Overview Charts*)
- Basic Treatment Strategies (from *When to Contact...*)
- Keeping a Headache Diary (from *When to Contact...*)

Nurse Visits Pertaining to Headache*



Back to School Guide Consults*



*in the last two months

CONCLUSION

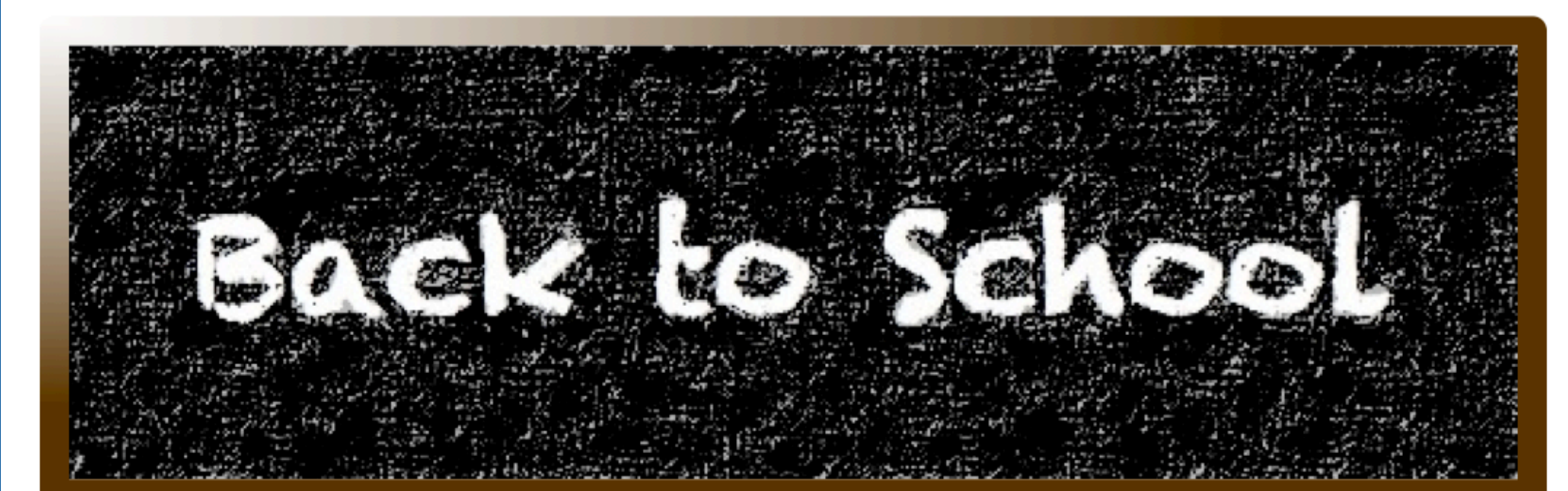
- Feedback from patients and school nurses confirms need to further educate school nurses on specific chronic pain conditions, including headache/migraine
- Overall positive feedback of *Back to School* guide (as rated by school nurses) emphasizes importance of providing concise, yet thorough reference tools to parties involved in a child's ongoing care
- Strong liaisons among medical providers, students, and school administrators are crucial to a child's successful recovery

REFERENCES

1. Kliebenstein, M. & Broome, M. (2000). School re-entry for the child with chronic illness: Parent and school personnel perceptions. *Pediatric Nursing*, 26(6), 579-584.
2. Split, W. & Neuman W. (1999). Epidemiology of migraine among students from randomly selected secondary schools in Lodz. *Headache*, 39 (7), 494-501.
3. Hershey, A. & Winner, P. (2007). Epidemiology and diagnosis of migraine in children. *Current Pain and Headache Reports*, 11(5), 375-382.
4. Freudenberg, N. & Ruglis, J. (2007). Reframing school dropout as a public health issue. *Preventing Chronic Disease: Public Health Research, Practice, and Policy*, 4(4), 1-11.

Acknowledgements

Thank you to our wonderful patients and local school nurses for your participation and enthusiasm!



An Educational Collaboration and Tool for School Nurses and their Students with Headache, Migraines, and Concussion