Pediculosis Management in the School Setting



School Nurses

Position Statement

SUMMARY

It is the position of the National Association of School Nurses that the management of pediculosis (infestation by head lice) should not disrupt the educational process. No disease is associated with head lice, and in-school transmission is considered to be rare. When transmission occurs, it is generally found among younger-age children with increased head-to-head contact (Frankowski & Bocchini, 2010).

Children found with live head lice should remain in class, but be discouraged from close direct head contact with others. The school nurse should contact the parents to discuss treating the child at the conclusion of the school day (Frankowski & Bocchini, 2010). Students with nits only should not be excluded from school (American School Health Association, 2005, Frankowski & Bocchini, 2010, Pollack, Kiszewski & Spielman, 2000), although further monitoring for signs of re-infestation is appropriate. It may be appropriate to screen other children who have had close head-to-head contact with a student with an active infestation, such as household family members, but classroom-wide or school-wide screening is not merited (Andresen & McCarthy, 2009). In cases that involve head lice, as in all school health issues, it is vital that the school nurse prevent stigmatizing and maintain the student's privacy as well as the family's right to confidentiality (Gordon, 2007).

The school nurse, as a student advocate and nursing expert, should be included in school district-community planning, implementation, and evaluation of vector control programs for the school setting. School nurses are also in a pivotal position to dispel myths and stigmas regarding pediculosis by providing education on the life cycle of the louse, methods of transmission, treatment options and care of the environment to the student's family, school and community at large.

HISTORY

Head lice (pediculosis capitus) are small parasitic insects that live on the scalp and neck hairs of their human hosts. The presence of lice is most often detected through the presence of adult lice or nits (eggs) attached to the hair shaft of the host, most often at the nape of the neck and behind the ears. Complications of infestations are rare and involve secondary bacterial skin infection (Lebwohl, Clark & Levitt, 2007). Pruritis (itching) is the most common symptom of a lice infestation, along with the following additional symptoms:

- a tickling feeling or a sensation of something moving in the hair;
- irritability and sleeplessness; and
- sores on the head caused by scratching. Sores caused by scratching can sometimes become infected with bacteria normally found on a person's skin (CDC, 2010).

DESCRIPTION OF ISSUE

Some people consider pediculosis to be a public health issue that is brought into the school setting. Families and school staff expend innumerable hours and resources attempting to eradicate lice infestations, both live lice and their nits. The Centers for Disease Control and Prevention (CDC) (2010) reports an estimated 6 million to 12 million infestations (some experts believe that the true prevalence is considerably lower) (Pollack, 2010) occur each year in the United States among children 3 to 11 years of age. It is thought that head lice infestations are often misdiagnosed when medical and lay individuals identify the presence of lice based on the presence of eggs

(Pollack, Kiszewski & Spielman, 2000). In addition, millions of dollars are spent annually on pediculicides, lice combs, physician visits, and parental time away from work. In an effort to find an easy, effective, and safe treatment, a variety of alternative therapies (e.g., occlusive agents such as oil-based and grease-based products, electric combs, herbal shampoos and enzyme solutions,) have been attempted by parents. There is little scientific evidence regarding the effectiveness of these alternative treatments, and all have an associated cost (Frankowski & Bocchini, 2010). Treatment recommendations for pediculosis should be based on evidence based literature from public health, medical and nursing content experts rather than anecdotal reports or commercial advertisements.

Parents, school staff, and the community often become unduly anxious when a case of head lice occurs within a classroom, and this anxiety is multiplied if more than one case is identified. A negative social stigma frequently accompanies the identification of pediculosis as well as the frustration involved with the cost, time and effort needed for treatment and environmental control (Gordon, 2007). It is important, as a part of a comprehensive educational program, that the school nurse emphasizes that head lice are not associated with poor hygiene (Lebwohl, Clark & Levitt, 2007).

In 2007, international guidelines established for effective control of head lice infestations reinforced that policies that required a student to be free of nits to attend school, known as "no nit" policies, were based on misinformation rather than objective science and were therefore unjust and should be discontinued (Mumcuoglu et. al., 2007). The CDC (2010) cites the following reasons to discontinue "no nit" policies in school:

- Many nits are more than ¼ inch from the scalp. Such nits are usually not viable and unlikely to hatch to become crawling lice, or may in fact be empty shells, also known as casings.
- Nits are cemented to hair shafts and unlikely to be transferred successfully to other people.
- The burden of unnecessary absenteeism to the students, families and communities far outweighs the risks associated with head lice.
- Misdiagnosis of nits is very common during nit checks conducted by nonmedical personnel.

RATIONALE

The school nurse is the key health professional to provide education and anticipatory guidance to the school community regarding best practice guidance in the management of pediculosis. The school nurse's goals are to facilitate an accurate assessment of the problem, contain infestation, provide appropriate health information for treatment and prevention, prevent overexposure to potentially hazardous chemicals, and minimize school absence.

There is discussion in the scientific community on the best way to control head lice infestation in school children. No pediculicide is 100% ovicidal, and resistance has been reported with lindane, pyrethrins, and permethrin (Frankowski & Bocchini, 2010). New categories of pediculicides have recently been developed, including benzyl alcohol (CDC, 2010).

Head lice screening programs have not had a significant effect on the incidence of head lice in the school setting over time and have not proven to be cost effective (Frankowski & Bocchini, 2010). Research data does not support immediate exclusion upon the identification of the presence of live lice or nits as an effective means of controlling pediculosis transmission. By the time a child with an active head lice infestation has been identified, he or she may have had the infestation for one month or more and, therefore, poses little additional risk of transmission to others (Frankowski & Boochini, 2010). The school nurse is in a position to take the lead in eliminating school

exclusion policies and, instead, incorporate evidence-based practices that reduce the stigma associated with head lice, and work to increase classroom time with an emphasis on keeping students in school (Gordon, 2007).

REFERENCES/RESOURCES

- American School Health Association (2005). School policies in the management of pediculosis. Retrieved from http://www.ashaweb.org/files/public/Resolutions/Pediculosis.pdf.
- Andresen, K., & McCarthy, A.M. (2009). A policy change strategy for head lice management. *The Journal of School Nursing*. 25 (6) 407-416. doi:10.1177/1059840509347316.
- Centers for Disease Control and Prevention (2010). *Head lice information for schools*. Retrieved from http://www.cdc.gov/parasites/lice/head/index.html
- Frankowski, B.L., & Bocchini, J.A.. (2010). Clinical Report-Head Lice. *Pediatrics*. 126(2) 392-403. Retrieved from http://pediatrics.aappublications.org/cgi/content/abstract/126/2/392 doi:10.1542/peds.2010-1308
- Gordon, S. (2007). Shared Vulnerability: A theory of caring for children with persistent head lice. *The Journal of School Nursing*. 23 (5) 283-292. doi: 10.1177/10598405070230050701
- Lebwohl, M., Clark, L., & Levitt, J. (2007). Therapy for head lice based on life cycle, resistance, and safety considerations. *Pediatrics* 119 (5) 965-974. Doi: 10.1542/peds. 2006-3087
- Mumcuoglu K.Y., Barker S.C., & Burgess I.F., et. al. (2007). International guidelines for effective control of head louse infestations. *Journal of Drugs in Dermatology*. 6 (4) 409-414.
- Pollock, R. J. (2010). *How many people are infested with head lice?* Retrieved from: https://identify.us.com/head-lice/head-lice-FAQS/how-many-people-infested.html
- Pollack R.J., Kiszewski A.E., Spielman A., (2000). Overdiagnosis and consequent mismanagement of head louse infestations in North America. *Pediatric Infectious Disease Journal*. 2000 (8):689-93.

Acknowledgment of Authors:

Deborah Pontius, MSN, RN, NCSN Carmen Teskey, BSN, MA, RN

Adopted: 1999 Revised: 2004

January 2011