

STRONG CHILDREN'S RESEARCH CENTER

Summer Research Scholar

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ABSTRACT

Title: Association Between Hearing Loss and Elevated Blood Lead Levels in Urban Pediatric Population

Background: Lead poisoning is known to be a cause for delayed development and to have a negative effect on neurological development. The most common exposure to lead is through lead paint chips and lead dust. Thus, children are uniquely at risk as they exhibit more risky behavior like hand-to-mouth behaviors with non-food items to explore their environment, particularly in the toddler years. This exposure is where older houses have more lead paint before 1950, including urban settings. One notable problem associated with elevated blood lead levels (BLL) is hearing loss. Many studies have established a relationship between elevated BLL, however, the identification of hearing loss among children with elevated BLL in an urban pediatric population is unknown. For this study, we looked at the association between elevated blood lead levels and hearing loss at an urban pediatrics clinic in Upstate New York.

Objectives: For this study, we looked at the association between elevated blood lead levels (BLL) and hearing loss and describe the demographic characteristics of children with elevated BLL at an urban pediatrics clinic in Upstate New York.

Methods: We conducted retrospective chart review of electronic medical records for a subsample of patients aged 4 months to 20 years who were identified as having elevated blood lead levels (greater than

References

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