

## Critical Review: Possible Causative Factors Related to the Occurrence of Otitis Media among Native North American Children

Cengage Learning

McGraw-Hill Education  
School of Communication Sciences and Disorders, Ohio State University

This critical review examines the possible causative factors related to increased incidence and prevalence rates of otitis media among Native North American children.

Studies selected for inclusion in this critical review were required to examine possible risk factors and the occurrence of otitis media in Native American children during the time period of 1970-1990. No inferential statistics were included in the review.

### Data Collection

Researching the aforementioned databases yielded studies with the best selection criteria. Study designs included cohort, critical review, and quantitative case study observations of health records, and a single experiment comparison.

### *Results*

Every *et al.* conducted a single experiment comparison study to observe Eustachian tube Eustachian tube function in Native Americans. Apache Native Americans were tested ranging in age from 1 year to 10 years, and the Eustachian tube function of the Eustachian tubes recorded using a special recorder with pneumatic pressure and frequency meter reports. A fluoroscopic examination was so performed on each subject in otoscopy and nasopharyngoscopy. Airflow was generated and controlled in order to open the Eustachian tube of the subject. Inflation deflation testing was performed first. Once the Eustachian tube had been opened, airflow was stopped to allow the middle ear to regulate equilibrium through the Eustachian tube. The middle ear pressure of the subject was then

exposed to so with the incidence of otitis media  
 Maternal history of otitis media significantly  
 related to children's increased incidence for  
 contracting otitis media. This indicates genetic  
 predisposition to otitis media for Aboriginal children.  
 Dewdney *et al.* attempted to observe the  
 prenatal effects of hereditary organochlorine  
 compounds in nitro other substances and these  
 compounds association with the incidence of otitis  
 media in their infants. Organochlorine compounds  
 are often found in the environment, which come from  
 number of pesticides and the compounds are  
 often found in species such as porbelem, beluga and  
 salmon, which the nitro finds persistence.  
 This cohort study examined nitro on en-  
 vironmental birth from July to September.  
 Data were collected for the other infants.  
 Questionnaires were given to mothers to obtain  
 information on residence, postnatal term body  
 weight, pregnancy duration, and breast feeding  
 history. Both bottle fed and breast fed infants were  
 examined due to the other prenatal exposures.

investigators did not find any relationship between the variables. In fact, the results were often highly inconsistent. In addition, chi-square testing, no significant

Soci and Education Consequences  
Partic r y for C n di n n it, M, tis, nd  
First N tions Chi dren nd Ado escents  
*Health Canada, Learning and Communication  
Task Force,*

D y, th een A, Pirie, Ph y is L, Rhodes, ristine  
L, nter, Lis L, D ey, Cynthi  
E r y Otitis Medi on g Minnesot  
A eric n ndi ns i he Litt e E rs t dy  
*American Journal of Public Health, 97,*

De i y, Eric, Ayotte, Pierre, r ne, z nne,  
Gingr s, z nne, e es es M rthe, Roy  
R yn d s cepti i ty to nfections