Distribution of astigmatism among Sioux Indians in South Dakota.

Submitted by h2obor on Mon, 09/08/2014 - 1:56pm

Title
Distribution of astigmatism among Sioux Indians in South Dakota.

Publication Type
Journal Article

Year of Publication
1997

Authors
Pensyl, CD, Harrison, RA, Simpson, P, Waterbor, JW

Journal
J Am Optom Assoc

Volume
68

Issue
7

Pagination
425-31

Date Published
1997 Jul

ISSN
0003-0244

Keywords
Adolescent, Adult, Age Distribution, Aged, Aged, 80 and over, Astigmatism, Child, Child, Preschool, Cross-Sectional Studies, Female, Humans, Indians, North American, Infant, Infant, Newborn, Male, Middle Aged, Prevalence, Retrospective Studies, South Dakota, United States, United States Indian Health Service, Visual Acuity

Abstract

BACKGROUND: Previous studies have reported a greater prevalence of high astigmatism and vision disorders among Native Americans than occurs in the general U.S. population. The majority of these studies, however, have focused on Native American schoolchildren. This study assessed the distribution of astigmatism in a general clinic population at the Rosebud Indian Reservation in South Dakota.

METHODS: From examination of 174 patients, demographic information, visual acuities, refractive error, binocular vision status, and eye health were recorded.

RESULTS: The data showed more high astigmatism than would be expected in a general U.S. population. Three or more diopters of astigmatism were found in 9.2% of the right eyes and 10.8% of the left eyes in the study population. High astigmatism was noted less frequently among those ages 40 years and older (3.3% right eyes, 6.3% left eyes). Most of the astigmatism was with-the-rule, but a shift toward against-the-rule and oblique astigmatism was found in older individuals. No significant gender differences were noted.

CONCLUSIONS: The results suggest an ethnic difference in astigmatism and emphasize the need for continued and expanded vision services for Native American populations.
<table>
<thead>
<tr>
<th>Alternate Journal</th>
<th>J Am Optom Assoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>PubMed ID</td>
<td>9248249</td>
</tr>
</tbody>
</table>