



VALIDITY OF CLINICAL HISTORY AND AUDIOMETRY FOR HEARING LOSS DETECTION IN INDIGENOUS STUDENTS OF PANAMA



BASIS : Detection of probable hearing alterations in students shall enable the implementation of preventive and therapeutic measures to avoid complications and sequel compromising communication. This knowledge can approximate the prevalence data of hearing loss in indigenous population.

OBJECTIVE: Detect hearing loss in indigenous students of UPEL.

METHODOLOGY: Forty four indigenous students were assessed for hearing testing, using gold standard test (tonal audiometry), in order to determine hearing ability. They were also asked about personal history and possible symptoms of hearing loss. A normal audiometry is considered when hearing threshold ranges from 0 to 25 db. Subjects above 30 db will clearly be considered within abnormal audiometry. The identified risk factors were: history family of deafness and history of previous sign language training.

RESULTS

Table No. 1
Risk Factors for Hearing Loss

	Hearing Loss	Without Hearing Loss
With Risk Factors	6	6
Without Risk Factors	15	17

Students exposed to risk factors had a weak relationship to hearing loss (Odd Ratio = 1.1).

CONCLUSION

Identification of a unique risk factor is probably not enough for detecting hearing loss predisposition. Validity of clinical history test for hearing loss detection shall also be proved with other specific hearing tests, such as acumetry test, impedanciometry, othoacoustic emissions in combination with tonal audiometry.

Table No. 2
Clinical History and Gold Standard for Hearing Loss (Audiometry)

	Abnormal Audiometry	Normal Audiometry
Positive Clinical History	17	7
Negative Clinical History	4	16

Validity of Clinical History Test for Hearing Loss Detection was based on:

Sensibility = 81 %,

Specificity = 70%,

Positive Predictive Value = 71%,

Negative Predictive Value = 80%.

This data suggest that clinical history is a reliable screening test for hearing loss detection.

REFERENCE

Sebastián G. (1999). Audiología Práctica 5º Edición. Buenos Aires, Argentina.

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Campos R, Carrasco N, Castillo I, Chavarría S, Espinosa A, González S, González M, López V, Navarro E, Ortega O, Ortíz N, Ríos J, Santamaría L, Saavedra S, Villalobos O, Villarreal N. Class of Master in Speech and Language Pathology.

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Centro Interdisciplinario de Atención e Investigación en Educación y Salud (CIAES), UPEL, 2010.