## Speech Abnormality among Saudi Arabian Children With Hearing Impairment♣

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Objectives: To determine the prevalence of speech abnormalities in Saudi children and hearing impairment.

Methods: Children between 4-15 years were assessed as part of a national survey of hearing impairment. They were selected randomly from the four major provinces of Saudi Arabia representing different socioeconomic and demographic groups. A WHO/PDH modified questionnaire was filled by the families and each child was clinically and audiologically assessed.

Results: Nine thousand five hundred and forty children were surveyed. Two thousand and two children were excluded from the study as they were too young to be assessed. Speech abnormalities and delayed speech development were seen more in children whose parents were cousins or relatives. The incidence of speech abnormality was 61.11% and 12.45% in exposed and unexposed (to risk factors) children respectively. The odd ratio for hearing impairment and the risk of impairment in relation to speech abnormality was found to be 19.13% and 8.02% respectively.

Conclusion: Speech abnormalities and delayed speech development were seen more in children whose parents were cousins or relatives. Speech abnormalities were much higher in the children from the Southern province (3.76%) as compared to the Central (1%), the Eastern (1.23%) and the Western (0.56%) provinces.