

LETTER TO EDITOR

**CORRELATES OF HEARING DIFFICULTY IN ADULT
PAKISTANI POPULATION**

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Hearing impairment is common among the elderly and it compromises communication with resultant poor psychological functioning in affected individuals of all ages. To describe, age, gender, literacy and residency status associated with self reported hearing difficulty in adults and its prevalence in Pakistan, we used data from the National Health Survey of Pakistan (NHSP) 1990-94; with written permission from the Federal Ministry of Health, Islamabad. We selected all the adults aged 26 and above who responded to the question "Do you have difficulty in hearing?" Individuals responding affirmatively to this question were identified as having difficulty in hearing. A two-stage stratified sample design was adopted for NHSP. Design-based analysis with SUDAAN 9.01 was done using logistic regression. Odds Ratios (OR) were computed for the association of self reported difficulty in hearing with various demographic variables.

The overall prevalence of difficulty in hearing was 16%, and 95% Confidence Interval (CI) was 15%, 18% (n = 5843). In males prevalence of difficulty in hearing was 14%, 95% CI 12%, 15%, while prevalence in females was 19%, 95% CI 16%, 21%. In the 26- 40 year old adults, prevalence of difficulty in hearing was 8%, 95% CI 7%, 10%. Age gradient was observed, as 41-55 year old age group had prevalence of 13%, 95% CI 11%, 15%, while in the 56 years and above age group, prevalence was 36%, 95% CI 32%, 40%.

Adults with difficulty in hearing were more likely to be in the age group of 41 to 55 years (OR 1.64, 95% CI 1.31, 2.07), and 56 years and above group (OR 5.88, 95% CI 4.62,

7.48) compared to 26-40 year age group. Males were almost half as likely to report difficulty in hearing compared to females (OR 0.60, 95% CI 0.47, 0.76). Adults with difficulty in hearing were more likely to be rural dwellers (OR 1.14) compared to urban dwellers but this association was not statistically significant; no statistically significant differences were found between literate adults (defined as being able to read and write) and illiterate adults. Similarly no statistically significant differences were found between marital status and difficulty in hearing. Results of Hosmer-Lemeshow goodness-of-fit tests using Wald F and Chi-Square conclude that the model was a good fit for the data.

The results of this unique nationally representative survey, demonstrate that rural women above the age of 55 years were most likely to report difficulty in hearing; health education efforts at limiting hearing impairment, early diagnosis and treatment would be particularly beneficial for this demographic group in the country.

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