

# PREVALENCE OF INHERITED NEUROLOGICAL DISORDERS IN AZAD JAMMU AND KASHMIR

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**Background & Objectives:** Large scale epidemiological studies on inherited neurological diseases are rare in Pakistan and in Azad Jammu and Kashmir. Therefore, we conducted a population based cross sectional epidemiological study on a stratified randomly selected sample from the four major districts of AJ&K, to study the four major inherited neurological disorders which include: intellectual disability, microcephaly, neuromuscular dystrophy and Parkinson's disease.

**Methods:** Families with inherited neurological disorders were randomly recruited through door to door survey. Approval for this study was obtained from the Institutional Review Board of University of Azad Jammu and Kashmir. A simple easy-to-use questioner was developed to collect information from the affected individuals.

**Results:** Total 10,000 individuals were selected for interview among which 9711 (97.11%) took part in the study while 289 (2.89%) refused to take part in this study. Among responsive, the total number of affected individuals with different neurological disorders was 466 (4.80%) with an age range of 1-60 years. According to this data, prevalence of neurological disorders in males: 272 (5.67%) was more than the females: 194 (3.94%). The highest prevalence was recorded in age <18 years 253 (6.40%).

**Conclusions:** Among the total positive cases, intellectual disability was most frequent: 337 (72.31%), followed by microcephaly: 64 (13.7%), neuromuscular dystrophy: 51 (10.90%) and Parkinson: 14 (3.00%). These data suggested that intellectual disability is the most frequent among all neurological disorders. Therefore, further exploration of the remaining districts and genetic counseling is necessary.

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