

Sex differences in Parkinson's disease

Males are on average ~ 1.5 times more likely to develop [Parkinson's disease](#) compared to females with [European](#) ancestry.

After aging, epidemiological studies have revealed the male sex as a prominent risk factor for developing PD at all ages and for all nationalities studied. Reports of male to female ratios for incidence rates vary from 1.37 to 3.7 ^{1) 2) 3) 4) 5) 6)}

Over the years [Genome-wide association study](#) (GWAS) have identified numerous [genetic risk](#) factors, however it is unclear whether genetics contribute to disease [Parkinson's disease etiology](#) in a sex-specific manner.

A study does not support the notion that common genetic variation on the [autosomes](#) could explain the difference in [prevalence](#) of PD between males and females at least when considering the current sample size under study. Further studies are warranted to investigate the genetic architecture of PD explained by [X](#) and [Y chromosomes](#) and further evaluate environmental effects that could potentially contribute to PD etiology in male versus females ⁷⁾.

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