Huntington’s disease prevalence in Asia: a systematic review and meta-analysis

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- **Background**

Epidemiological studies suggest Huntington's disease (HD) prevalence is significantly lower in the Asian population than Western population.

We systematically reviewed epidemiological studies of HD in Asia comparing the level of impact of the disease on the Asian Population to that of Western population

- **Methods**

Original articles/reviews about HD prevalence in the Asian population were found through databases; Embase, Medline, PsychInfo and subsequently analysed.

A meta-analysis was performed on prevalence rates to find the degree of similarities with I2.

Point prevalence measured as the number of people affected by HD in a 100,000 population and was expressed as Point Prevalence (PP) = Number of people affected/ 100,000 with 95% Confidence Intervals (CI95).

- **Results**

Random-effect meta-analysis show the highest point prevalence of HD in the Middle East with PP=4.0 (CI95=2.90-5.30);

The lowest point in the Chinese population PP=0.25 (CI95=0.16-0.36).

Europe has a high prevalence than Asia with PP=1.00 (CI95=0.82-1.19).

Asia's overall prevalence is P=0.70 (CI95=0.44-1.0)

- **Discussion**

Our study reveals HD affects lesser extent Asian population than Europe.

Plausible explanations for difference in prevalence:

-Affected individuals may not self refer to HD screening for fear of social stigma, negative influence in marriage, lack of genetic and neurological testing.

-Studies that used genetic testing, were able to identify the CAG repeats, subgroups A1 & A2, and haplogroup C, which has less predisposition to high HD prevalence in Asians compared to the Caucasian population.