

## Sperm counts in Asian men: reviewing the trend of past 50 years

### ABSTRACT

**Objective:** To reveal the trend in alterations of sperm counts in Asian men over the past 50 years. **Methods:** This study reviewed all the published reports to unveil the specific pattern of alterations of sperm concentrations in Asian men from 1965 till 2015. The time-related changes in sperm concentration were studied using linear regression analyses. **Results:** The present study elucidated the trend using the reports from Carlsen et al (1965-1990) and non-Carlsen studies published until 2015, on fertile Asian men. In the reports of Carlsen et al., no overall declining trend in Asian men ( $r = 0.509$ ,  $P = 0.760$ ) was observed during this tenure, but non-Carsen reports showed a significant time-dependent decline of sperm concentration ( $r = -0.754$ ,  $P = 0.005$ ) in Asian men. This present review also showed a mild time-dependant decline in sperm concentration ( $-0.44 \times 10^6/\text{mL}/\text{year}$ , 95% CI:  $-0.65$  to  $-0.23$ ;  $r = -0.473$ ,  $P = 0.040$ ) which accounted for an overall 22.17% decrease in past 50 years. **Conclusions:** This study brings to the forefront that sperm concentration among Asian men follows a mild declining trend over the period of 50 years, and further studies addressing the causes of this decline are required.

**Keyword:** Asian men; Semen quality; Sperm concentration; Sperm count