

Prevalence of hypercholesterolemia in Japan

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Objective: To compare age- and BMI-specific prevalence of hypercholesterolemia in Japanese men and women.

Methods: Health examination data were accumulated from 24 different prefectural health service associations affiliated with the Japan Association of Health Service. Eligible 338677 men and 294429 women were analyzed to estimate age- and BMI-specific prevalence of hypercholesterolemia. Hypercholesterolemia was defined by a total cholesterol of ≥ 220 mg/dl or a LDL cholesterol of ≥ 140 mg/dl according to the 2002 Japanese expert committee criteria. BMI was classified as underweight (< 18.5), normal (18.6-24.9), obese1 (25.0-29.9), and obese2 (30.0-).

Results: Prevalence of hypercholesterolemia showed a significant sex difference in every age group: men $>$ women in 49 years or younger, men $<$ women in 50 years or older. For men, the prevalence reached a peak in 50-59 years, which was 40-49 years in the obese1 and obese2 groups. For women, the prevalence reached a peak in 60-69 years, which was 50-59 years in the obese1 and obese2 groups. The prevalence was increased with BMI among men, but not among women. Overall, the estimated rates by total cholesterol criteria were larger than those by LDL cholesterol criteria. These differences were 40% or more especially in the underweight group.

Conclusion: Prevalence of hypercholesterolemia is associated with age and BMI, differently in men and women.