Obesity

ESTIMATED 15-YEAR RATES OF PROGRESSION TO OBESITY IN A GENERAL CHINESE POPULATION

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Objectives To assess the 15-year rates of progression to obesity in a general Chinese population without obesity at baseline.

Methods In 2007, a health examination was performed in 711 individuals for cardiovascular disease (CVD) risk factors in an urban community located in Chengdu, Sichuan province, China. These individuals also accepted a health examination in 1992 for CVD risk factors; therefore, we picked up the data of these individuals in 1992. Since 52 individuals had underweight or obesity in 1992, 659 individuals were available for analysis. The incidence of obesity was studied in the initial normal BMI group and the initial overweight group.

Results At the end of follow-up, the initial overweight group had significantly more individuals progressing to obesity than the initial normal BMI group (15.1% vs 0.5%, p<0.001). The initial overweight group, as compared with the initial normal BMI group, had an increased risk of obesity (OR: 20.231, 95% CI 4.407 to 92.874, p<0.001). On the other hand, the initial overweight group always had higher levels of cardiovascular disease (CVD) risk factors. The 15-year rates of progression to obesity exceeded 15.0% in the initial overweight group, accompanied by more CVD risk factors.

Conclusions The estimates suggest that the future burden of obesity-associated CVD might be substantial in the initial overweight group. For preventing or delaying obesity and interrelated CVD from developing, the overweight group should accept early interventions.