

Indian Obesity Varies by Gender, Rural/Urban Divide

Research shows the need for targeted anti-obesity efforts based on group and community differences

Study Overview

TCI researchers used measured body mass index (BMI) along with individual and household level data from the National Family Health Surveys to identify differences in the incidence of overweight within India according to biological, technological, and environmental factors.

Background

While India has long struggled with high rates of undernutrition, in the last 15 years the country has experienced a surge in overweight and obesity, which is tied to noncommunicable diseases like heart disease and diabetes. Overweight incidence doubled between 2005 and 2015, with rural areas seeing the largest increase. While women have an overall higher prevalence of overweight, the recent increase was primarily driven by men.

RESULTS

The study shows that overweight and obesity rates are tied to such variables as gender and the level of economic development where individuals reside. Biological factors, such as increasing age and diminishing reproductive stress (when a woman stops having children), are associated with obesity among women but not men.

Obesity rates in men are more closely associated with the use of technology that reduces physical activity, such as motorized transportation.

Differences are also seen along the rural/urban divide. In rural areas, obesogenic technologies are correlated with overweight incidence, while in urban areas, obesogenic behaviors are to blame.

The researchers found differences between rural and urban dwellers within each gender. In rural areas where economic development is low, decreased reproductive stress is the main factor behind obesity in women, whereas in highly developed urban areas, age plays a larger role. For men, access to motorized transport drives obesity in rural areas, while behaviors like television-watching drive obesity in urban center.

POLICY RECOMMENDATIONS

- Policies and programs designed to reduce overweight and obesity rates should be targeted with respect to group- and communitybased differences. For example, nutrition education programs should include age- and gender-appropriate counseling services and account for differences in intrahousehold access to food and obesogenic technologies.
- Counter the effects of urbanization, such as increased sedentary behavior, with proactive campaigns that promote healthy, active lifestyle.

Aiyar, A., Dhingra, S., and Pingali, P. Transitioning to an obese India: Demographic and structural determinants of the rapid rise in overweight incidence. *Economics & Human Biology* Vol. 43 (2021).

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