

Excess Gestational Weight Gain Ups Obesity Risk

BY MITCHEL L. ZOLER

FROM THE INTERNATIONAL CONGRESS ON OBESITY

STOCKHOLM – Women whose gestational weight gain exceeded current recommendations have a significantly increased risk for being overweight or obese 2 decades later, according to an analysis of 2,000 Australian women.

“The findings suggest that the amount of weight gained during pregnancy is an independent predictor of later weight development. This is the first study to show

VITALS

Major Finding: Women who exceeded the 2009 Institute of Medicine’s gestational weight-gain guidelines had a 4.5-fold increased risk of being obese 21 years later.

Data Source: Review of 2,055 women who delivered at hospitals in Brisbane, Australia, during 1981-1983.

Disclosures: Dr. Al Mamun and his associates all said that they had no disclosures.

that excess pregnancy weight gain tends to persist for decades,” Abdullah Al Mamun, Ph.D., said at the International Congress on Obesity. “Most women are probably unaware if their weight gain is too much. We need to increase awareness of this,” said Dr. Al Mamun, an epidemiologist at the University of Queensland in Herston, Australia.

For many years, the long-term health consequences

of gestational weight gain did not receive as much attention as the impact of weight gain on the child’s health and shorter-term maternal health, although that began to change about 5 years ago, commented Dr. W. Philip T. James, a nutritionist at the London School of Hygiene and Tropical Medicine and president of the International Association for the Study of Obesity. The U.S. Institute of Medicine (IOM) issued revised recommendations for weight gain during pregnancy in May last year.

Dr. Al Mamun and his associates examined the long-term weight associations with gestational weight gain in 2,055 women who gave birth in Brisbane, Australia, during 1981-1983, part of the full group of more than 7,000 women who delivered in a Brisbane hospital in those years. The researchers examined medical records for each woman in the study 21 years after the index pregnancy. Next, they correlated the prevalence of overweight and obesity at that time with compliance with the 2009 IOM revised weight-gain guidelines. They applied the 2009 standards to a cohort of women who carried their pregnancies more than 25 years before the revision appeared.

For women pregnant with singletons, the 2009 standards call for a gestational weight-gain range of 28-40 pounds for women underweight at conception, with a body mass index of less than 18.5 kg/m², to a gain of 11-

20 pounds in obese women with a BMI of at least 30 kg/m². For women with a normal BMI, the IOM recommended a gain of 25-35 pounds.

Based on contemporary standards, a third of the women gained too much weight during pregnancy, 26% gained too little, and 41% were just right.

The analysis showed that for every 0.1-kg/week excess weight gain during pregnancy (or 4 kg excess for the entire pregnancy), BMI increased by 0.5 kg/m² 21

years later. Women who exceeded the IOM recommendations had a 2-fold increased rate of being overweight and a 4.5-fold greater risk for obesity 21 years later compared with the those whose weight gains fell within current guidelines. The odds ratios came from multivariate analyses that controlled for maternal age, prepregnancy BMI, education, smoking, parity, diabetes, method of delivery, breast-feeding, and menopausal status.

‘This is the first study to show that excess pregnancy weight gain tends to persist for decades.’

DR. AL MAMUN

Dr. Al Mamun cautioned that it is currently unclear what causes women to gain excess gestational weight, and also unclear is the best management strategy when it happens. “Randomized trials are needed to investigate interventions to limit excess weight gain during pregnancy, whether it’s advisable to restrict calories in overweight pregnant women, and whether that can reduce the risk of obesity later in life,” he said.



CDC: Adult Obesity Rates Reached New High in 2009

BY MITCHEL L. ZOLER

FROM MORBIDITY AND MORTALITY WEEKLY REPORT

U.S. waistlines grew once again in 2009, with results from a national, annual telephone survey of more than 400,000 Americans showing that national obesity prevalence in adults reached a new high of 26.7%, up more than 1% from 2007, and by nearly 7% from 2000.

Nine states clustered in the South and southern Midwest had obesity prevalence rates of at least 30% in 2009, up from no states in 2000, and up from three states in 2005 and 2007.

The new data show “obesity continues to be a major public health problem. We need intensive, comprehensive and ongoing efforts to address obesity,” said Dr. Thomas R. Frieden, director of the Centers for Disease Control and Prevention in Atlanta. The CDC runs the annual Behavioral Risk Factor Surveillance System (BRFSS) survey that generated these data (MMWR 2010;59 [Aug. 3]:1-5).

“Over the past decades, obesity has risen faster than anyone could have imagined,” Dr. Frieden said at a press conference.

Its continued growth has substantial health and economic consequences. The CDC report noted that each obese person (body mass index of at least 30 kg/m²) accrued on average \$1,429 in-

creased cost annually for medical care, compared with those at normal weight. With the report estimating roughly 75 million obese American adults in 2009 – up by 2.4 million from 2007 – the total medical-cost price tag for adult, American obesity ran to beyond \$150 billion per year.

The new report highlighted the need to intensify efforts already underway to reduce and prevent obesity in America. “Obesity is a complex problem that requires both personal and community action. We need to change our communities into places where healthy eating and active living are the easiest path,” said Dr. William Dietz, director of the CDC’s Division of Nutrition, Physical Activity, and Obesity.

As with tobacco, “we believe that changes in policy, environment, and systems are necessary to control and prevent the epidemic. There has been a broad cultural shift that has made high-calorie food more readily available and has reduced the opportunities for physical activity,” Dr. Dietz said at the press conference. He was optimistic that “there has never before been a greater convergence of energy and interest in the problem of obesity” as there now is in the United States.

“Obesity is a societal problem that will take a societal response,” Dr. Frieden said.

VITALS

Major Finding: Prevalence of obesity among U.S. adults rose to 26.7% in 2009, up by 1.1% and 2.4 million people compared with 2007.

Data Source: The Behavioral Risk Factor Surveillance System, an annual telephone survey of more than 400,000 Americans done by the Centers for Disease Control and Prevention.

Disclosures: Dr. Frieden and Dr. Dietz had no disclosures.

Dr. Dietz also noted that these findings derived from self-reports to the BRFSS are underestimates of true obesity prevalence because of the unreliability of self-reported height and weight data in telephone surveys.

The 2009 obesity rates varied substantially by several demographic factors. The highest prevalence rates occurred in Americans aged 50-59 and 60-69, with a 31% obesity rate in both age groups. Obesity prevalence only reached 20% in those aged 18-29, and 21% in those 70 or older.

Race or ethnicity also had a substantial impact, with African Americans having a 37% obesity prevalence, followed by a 31% rate in Hispanics and a 25% rate in whites. Among African American women the obesity rate soared to 42%, compared with a 31% rate in African American men. Overall, however, gender had a modest effect, with a 27% obesity rate in all American men and a 26% rate in all women.

Education also tracked with obesity, with college graduates having an overall 21% rate, compared with a 29% rate among those with even some college-level education, and a 33% obesity rate in people who did not finish high school.

Geography also linked with major

variations in obesity rates. The rate reached 28% in the South and Midwest, and 24% in the East and West. A state-by-state breakdown showed even wider variation. Nine states, all clustered in the south-central United States, had statewide obesity rates at or above 30%: Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, and West Virginia all fell into this group, with Mississippi topping the list with a statewide prevalence of 34.4%. At the other end of the spectrum, Colorado had the lowest prevalence rate, at 18.6%. The only other part of the United States with a rate less than 20% was Washington, D.C., at 19.7%.

The reasons that Colorado residents have had relative success warding off obesity remains unclear, Dr. Dietz said. The high altitude where many residents live may be a factor, as people expend more energy to breathe at higher altitudes. Also, the state has supported physical activity for many years by, for example, building biking and walking paths, and Colorado residents responded by developing a culture of activity, he said. Explanations of why D.C. residents also had a relatively low obesity rate are also unclear; one factor may be high reliance on public transit in the city.

