

## **BODY MASS, AGE, AND WEIGHT-RELATED MEDICAL PROBLEMS AMONG SUPER-OBESE WOMEN VARY SIGNIFICANTLY BY RACE**

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**Background:** The obesity epidemic and its life-shortening co-morbidities now involve 36% of Americans and affect all medical specialties. In the Emergency Department care of these fragile patients, every clinical insight helps. The objective of this study was to identify variation by race in the clinical characteristics of super-obese (BMI>50) women.

**Methods:** Data on 1217 females in the Surgical Review Corporation BOLD database, pre-operative for bilio-pancreatic diversion/duodenal switch, was analyzed in four groups: African Americans (AA, N=106), Caucasians (C, N=1000), Hispanics (H, N=32), and Other (O - Pacific Islander, Native American, or >1 race listed in BOLD - N=72). Statistics was by ANOVA and Chi-squared equation.

**Results:** AA BMI was highest (56+-1- versus C 51+-9, H 53+-11 and O 51+-9. P<0.05). C were oldest (C 45+-11 years versus AA 40+-10, H 42+-11, and O 42+-11). AA had highest % of abdominal hernia, alcohol use (both tie with C), dyslipidemia (tie with H), and obstructive sleep apnea, and lowest cholelithiasis, pseudotumor cerebri, and stress urinary incontinence. C had highest alcohol, hernia, cholelithiasis, GERD, psychiatric diagnoses, irregular menses, psuedotumor cerebri, and polycystic ovarian disease (n=11) and lowest in none. H were highest in abdominal panniculitis, dyslipidemia, pulmonary hypertension, and unemployed, and lowest in none. O had highest stress incontinence and lowest hernia, panniculitis, alcohol, psychological problems, irregular menses, sleep apnea, pulmonary hypertension, polycystic ovarian disease, and unemployment (n=12). Insurance type, angina, asthma, somatic pain, CHF, DVT/PE, fibromyalgia, functional status, diabetes, gout, hypertension, liver disease, leg edema, obesity hypoventilation, peripheral vascular disease, substance and tobacco abuse did not vary by race.

**Conclusions:** BMI, age, and many weight-related medical problems vary by race among super-obese women. Abdominal hernia and alcohol use were highest for AA and C, as was dyslipidemia in AA and H. AA sleep apnea was highest. C abdominal/biliary problems and gynecologic and psychiatric issues dominated. H had highest pulmonary hypertension and unemployment. O was lowest in 12 conditions and highest only in stress incontinence. Recognition of, and additional focus on, these co-morbidities in this medically fragile population may facilitate improved care in the emergency department.