

Obesity Proposal

1. Problem Statement

Numerous studies of the chronic disease risks associated with obesity have been reported in both the scientific literature and popular media recently and metabolic syndrome, in particular, is receiving increased attention. Metabolic syndrome is a cluster of risk factors, most commonly understood to include impaired glucose tolerance, elevated blood pressure, hypertriglyceridemia, low high-density lipoprotein or low HDL cholesterol, insulin resistance, and abdominal fat accumulation. Abdominal fat accumulation is considered to be a type of overweight or obesity which results in greater health risk than fat which is more evenly distributed over the body. Obesity is associated with a wide range of chronic diseases such as certain cancers including breast cancer (relative risk, RR 1 – 2), cardiovascular disease (CVD) including stroke (RR 2 – 3), gallbladder disease (RR 3 – 4), and type 2 diabetes (RR >> 3). (1-3) With respect to health disparities, the mortality rate among African American women with breast cancer is greater than their white counterparts of the same age and double that of white women at ages below 25. (4-5)

When smoking and weight loss related to illness are controlled in analysis, mortality rates are linearly associated with Body Mass Index (BMI). Depending on age and severity of obesity, the years of life lost (YLL), for white men (non-smoking) is between 6 – 13. For non-smoking women YLL ranges from 7 – 8. Smoking tends to lessen the YLL. The US Surgeon General estimates that approximately 300,000 deaths per year can be attributed to adult obesity. (1-3, 6-7)

Adult overweight and obesity are estimated to result in \$61 in direct medical costs and \$56 in indirect costs on an annual basis (3). In addition to chronic, life-threatening illness, obesity and overweight contribute to a number of debilitating health problems including osteoarthritis, gout, respiratory disease, sleep apnea and psychosocial problems resulting from prejudice and discrimination. (1- 2)

The World Health Organization describes a life-time continuum of chronic disease related to obesity and metabolic syndrome which starts in the womb and lasts through the final stages of life. WHO presents a convincing argument that risk factors for CVD including stroke, type 2 diabetes, gallbladder disease and to a lesser extent, certain cancers begin initially in the womb and continue through childhood, adolescence and adulthood and contribute to an astonishingly high proportion of chronic disease and economic losses. (1 – 2) The lesson to be taken from this discussion is that early intervention to prevent overweight and obesity is crucial to limiting years of lost life and costly, debilitating disease which will place a greater and greater burden on medical and social resources across the globe in coming years.

2. Proposed Solution

We propose to host a workshop for experts in the field of weight management and obesity prevention. Because the risk factors related to obesity and its subsequent chronic diseases start early in life, the workshop's focus will be on prevention of *childhood* overweight and obesity. Physicians are in a unique position to monitor and influence the weight of children. The workshop is designed to focus on specific actions physicians, their young patients and their patients' caregivers can take to prevent obesity. The workshop will devote a special session to the discussion of health disparities related to obesity and culturally-sensitive actions designed to address weight issues. In addition, we propose to develop, during the workshop, actions for social advocacy to address current trends in school menus, food preparation and marketing, and inactivity among children.

The workshop will begin with an overview of the current knowledge relating to childhood obesity, specifically:

- The epidemiology of childhood obesity, with special attention to the short and long term medical, public health and cost implications, particularly due to the alarming rise in type 2 diabetes in children.
- The etiological precipitants for childhood obesity:
 - Genetic, physiological, psychological, and developmental influences
 - Family and cultural influences
 - School and community influences (food choices and portions, recreational opportunities)
 - Societal influences (media, food processing and marketing)

The specific actions developed during the course of the workshop will address the following issues with respect to childhood obesity and overweight:

- assessing childhood overweight and obesity in a sensitive manner
- counseling adult caregivers on inappropriate weight gain and loss in children
- counseling adult caregivers on the importance of daily physical activity for their children
- counseling adult caregivers on the importance of healthy diets for their children's development
- identifying culturally-appropriate resources for adult caregivers of overweight children
- becoming community advocates for obesity prevention

All recommended actions will be designed by the leading experts in the field of overweight and obesity and will be based on available evidence for successful interventions for weight control. Obesity experts will be invited to attend from the fields of family medicine, internal medicine, pediatrics, obstetrics /gynecology, preventive

medicine, psychiatry, bariatrics, endocrinology, nursing, community and public health, dietetics and exercise physiology.

The recommended actions developed in the workshop will be compiled in a scientific report. Hard copies of the report will be mailed to pediatricians, bariatric physicians, internal medicine physicians and family practice physicians. Additional copies will be available for mailing upon request. The report will be placed on our web site devoted to obesity and overweight issues. A speaker's kit, to aid doctors and other professionals during community presentations, will be developed to accompany the report

References

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4. Forshee RA, Storey ML, Ritenbaugh C. "Breast Cancer Risk and Lifestyle Differences among Premenopausal and Postmenopausal African-American Women and White Women". *Cancer Supplement*. 2003; 97: 280-288.
5. Swanson GM, Haslam SZ, Azzouz F. "Breast Cancer among Young African-American Women". *Cancer Supplement*. 2003; 97:273-279.
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