Obesity Prevention in Pediatrics: A Pilot Pediatric Resident Curriculum Intervention on Nutrition and Obesity Education and Counseling

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Institutional review board (IRB) approval: The Scott & White Hospital's IRB reviewed and approved the pilot study. All participants signed a consent form to participate prior to the start of the study.

Introduction: Obesity is a highly burdensome public health issue associated with premature death, multiple comorbid disabilities and staggering healthcare costs. Between 1980-2000, the prevalence of obesity among children and adolescents nearly tripled. Obesity subjects youth to social stigmatization and discrimination. These economic and personal burdens mandate targeted prevention and detection educational programs for all individuals at risk. The most cost-effective method of approaching this obesity epidemic is through education of health professionals.

Methods: As part of an "Obesity Prevention in Pediatrics" curriculum, postgraduate-year (PGY)-2 residents first observed and then participated in the dietary evaluation and counseling of pediatric patients and their families. Attitudinal questionnaires, multiple-choice knowledge examinations and a pre-established checklist of desired skills and behaviors provided evaluation of the curriculum's effect on the participants' ability and willingness to manage actually obese or at-risk pediatric patients and their families.

Results: Attitudinal survey and knowledge test scores from control PGY-3 residents generally confirmed that their knowledge and counseling skills on obesity prevention and management were well below expectation. Following participation in the curriculum, study residents' knowledge tended to improve, as did their level of comfort in counseling obese and at-risk children, adolescents and their parents.

Conclusion: Implementation of an "Obesity Prevention in Pediatrics" curriculum appears to improve participants' knowledge base as well as their skills and level of personal comfort in the recognition, evaluation and management, including counseling, of both obese and at-risk pediatric patients and their families.

Key words: obesity II nutrition II education II resident training

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INTRODUCTION

besity today is a public health pandemic manifesting itself in premature death, multiple disabilities, lost productivity, social stigmatization and staggering health care costs.¹ Over the last four decades, the incidence of childhood and adolescent obesity in the United States has risen dramatically (Table 1), with 14% of all children and adolescents age 6–19 years in 2000 classified as obese, as defined by a body mass index (BMI) above the age-adjusted 95th percentile.²⁻³ Between 1980–2000, the prevalence of pediatric obesity nearly tripled, with the largest increase occurring within the Native-American, African-American and Hispanic populations,^{2.3} and the trend still shows no tendency to level off.⁴ Worse still, as many as 80% of obese adolescents will remain obese as adults.⁵

Compared to smoking and heavy drinking, obesity and its comorbid conditions represent the most serious drain on U.S. healthcare expenditures, costing billions of dollars annually in medical services and treatment medications.⁶⁻⁷ Obesity in both adults and children has been established as a significant risk factor for premature death and disability⁸ and predisposes children and adolescents to multiple comorbid conditions, includingamong others-cardiovascular disease, steatohepatopathy, proteinuria, glucose intolerance and frank diabetes mellitus.9 Chronically obese children are also subject to early and systemic discrimination,¹⁰ contributing to the development of a negative self-image and depression that frequently persists into adulthood.¹¹⁻¹² Obesity-related burdens mandate the implementation and maintenance of targeted educational, prevention and detection programs for those individuals at greatest risk.^{1,3}

Medical literature abounds with epidemiological articles that strongly support an increased energy intake, together with a decreased level of exercise activity, as the principal etiologies for the rapidly rising incidence of children and adolescent obesity.¹³⁻¹⁵ The evaluation and successful diagnosis and treatment of pediatric obesity rests primarily on identifying and correcting the underlying, unhealthy dietary and activity attitudes and lifestyles that contribute to the excess weight gain.^{9,16} These contributing behavioral and environmental factors, however, also provide the greatest opportunity for interventions designed to address the prevention and treatment of obesity.

Although there is no simple or quick fix to the obesity epidemic, interventions to modify undesirable eating and exercise behaviors among our nation's youth have been repeatedly advocated as the best means for containing the rapidly rising incidence of pediatric obesity.^{1,3} Given the development of children's behaviors early in life,¹⁷⁻¹⁸ any successful obesity preventive intervention and education strategy will need to target children and high-risk youths as well as their families,^{19,20} thus appealing to the strong influence that parents can have over their children's eating and exercise behaviors through role modeling and the maintenance of a supportive environment.^{17,18}

A proposed, cost-effective venue for interventions aimed at reducing the prevalence of pediatric obesity and its comorbid consequences is through the education of healthcare professionals.^{3,21,22} Recommendations by pediatric healthcare providers offer a powerful and influential setting for improving their patients' dietary choices and patterns of physical activity.²³ Together with schools and other community organizations, physicians can reinforce the adoption and maintenance of healthy lifestyle behaviors within the families they serve.^{24,25} Potentially of greatest value are prevention efforts targeted at high-risk ethnic populations and presently obese pediatric patients.^{13,26}

Naming reducing obesity in children and adolescents as one of its main objectives (Objective 19-3),³ the Healthy People 2010 report distinctly acknowledged that prevention offers the best, potentially most effective method of arresting the current epidemic of obesity. The report further suggested that prevention is ideally best effected through combined family and patient education efforts within both the community and the healthcare setting. In promoting the prevention and treatment of obesity as important public health goals, the U.S. surgeon general's December 2001 Call to Action similarly outlined the following cornerstone recommendations:

- Inform and educate the healthcare community about the importance of healthy eating, ..., and physical activity and fitness for the promotion of health,
- Inform and educate the healthcare community about assessment of weight status and the risk of inappropriate weight change.¹

The surgeon general further prescribed that "... prevention efforts [be] targeted at social and environmental causes of overweight and obesity [and that] healthcare providers and *health profession students* [be trained] in effective prevention and treatment techniques for overweight and obesity"¹ (emphasis added).

In a 1995 survey, three-quarters of primary care physicians who provided nutrition counseling to their patients had received focused training during their residency.²⁷ Yet, even within this group, only one-third actually spent >5 minutes per patient discussing healthy eating behaviors.^{27,28} Even though lack of time was predictably the most frequent response, 67% of respondents also listed lack of knowledge and skills in nutrition counseling as additional barriers to nutrition counseling.^{27,28} Nevertheless, in spite of these perceived barriers, a substantial majority of survey responders still considered nutrition counseling a health priority and a principal responsibility of all physicians.^{27,28}

Today's cohort of residents will be the practicing physicians of the future. Within the boundaries of our complex healthcare system and its burgeoning costs, intraining medical providers will be expected to offer an expanding array of clinical services with the aim of improving the health and overall well-being of their encatchment communities. Residents will need to develop the skills and confidence necessary to counsel their patients and families on healthy eating behaviors and regular exercise activity. A teaching model addressing both obesity detection and prevention needs to be developed and introduced within the existing resident curricula to improve the quality and quantity of effective healthy lifestyle nutrition and exercise counseling. Present population projections estimate that by the year 2010, approx-

Table 1. Prevalence of overweight among children and adolescents aged 6–19 years, for selected years 1963–1965 through 1999.^

Age (Years)	1963–1965, 1966–1970*	1971–1974	1976–1980	1988-1994	1999
6–11	4%	4%	7%	11%	13%
12-19	5%	6%	5%	11%	14%

imately 40% of school-age children will be from minority groups shown to be at greatest risk for overweight and obesity. Through the institution of preventive instructional strategies, the desirable long-term effects of decreasing the present prevalence of obesity and its many comorbidities may someday become a reality.

The present study implemented and evaluated an "Obesity Prevention in Pediatrics" curriculum incorporated into an existing pediatric residency program's year-2 community rotation.

METHODS

The community health rotation is taken during pediatric residents' second year of training and exposes them to a large variety of community-based healthcare services for children and adolescents. Six second-year pediatric residents participated in the "Obesity Prevention in Pediatrics" curriculum. Voluntary consent to participate was obtained by one of the investigators from each of the residents at the start of the community health rotation and before participating in this project.

A short, 20-minute, knowledge-centered written lecture on childhood and adolescent obesity, along with a prelecture, detailed orientation to the curriculum goals, objectives, instructional strategies and evaluation methods, was provided to each resident on their first day of orientation to the community health rotation. At the same time, residents also received various assigned readings on relevant pediatric obesity topics.^{10,12,15} Prior to orientation, a previously piloted attitudinal questionnaire assessing the individual learner's comfort and confidence in nutrition counseling of at-risk pediatric patients and their families, as well as a multiple-choice nutrition and obesity knowledge examination, were administered to all pediatric level (PL)-2 study participants. The attitudinal questionnaire used a Likert scale format for indirectly assessing the residents' confidence in performing various obesity-associated, evaluation, management and counseling skills within the context of a general pediatrics clinic-based, physician-patient interaction.

Subsequent to the curricular introduction, pediatric residents spent two half-day sessions in the pediatric

obesity clinic assigned to a pediatric nutritionist. During these sessions, pediatric residents first observed and then, as appropriate, participated in the dietary evaluation and counseling of pediatric patients and their family. As part of the residents' exposure to pediatric nutrition, residents also received focused nutritional instruction on label content and interpretation, available low-calorie foodstuffs and associated specific costs.

In the last week of the community health rotation, residents met in small groups with the pediatric nutritionist for a one-hour, problem-based learning case presentation and discussion. Later in the same week, the pediatric nutritionist directly observed and assessed the residents during an evaluation and counseling session with a preselected pediatric patient and family in the obesity clinic.

To determine our pediatric residents' baseline attitudes and level of knowledge on pediatric and adolescent obesity, its health consequences and its possible prevention through patient counseling and education, the above-mentioned attitudinal questionnaire and multiple-choice knowledge examination were administered to the PL-3 pediatric resident class just before graduation as well as to the entering PL-1 resident class at residency orientation. The results of these control evaluation methods were statistically compared to the resident study participants' baseline questionnaire and multiplechoice examination results obtained from the study PL-2 resident participants at entry orientation to the community health rotation.

To evaluate the effectiveness of the educational curriculum on the PL-2 resident participants' knowledge and attitudes, a postintervention attitudinal questionnaire and summative multiple-choice objective examination were administered to the study group on the last day of the month-long community health rotation. Although the same questionnaire was used for the preand postcurriculum attitudinal evaluation, the Likert scale response continuum was changed to decrease memory bias. Similarly, although the pre- and postcurriculum knowledge exams differed in the questions asked, their content was analogous, and the order of their administration was assigned randomly to each

Table 2. Prevalence of a structured teaching curriculum on the evaluation, management and counseling of actually obese or at-risk children and adolescents among U.S. ACGME-accredited pediatric residency training programs, 2001

Structured Teach Curriculum Offer	•	•	
Yes	2	9	6
No	24	29	9
Percent of All Sa	me-Size Programs Res	ponding	
	8%	24%	40%

study resident participant to ensure a consistent and concurrent validity.

Similar postsession questionnaires were administered to the PL-2 resident class just before completion of their three-year residency training to determine the "Obesity Prevention in Pediatric" curriculum's longterm educational effect on resident comfort and selfperceived ability to effectively evaluate and preventively counsel and educate obese or at-risk pediatric patients and their families.

A pre-established checklist assessing desired skills and behaviors was used to evaluate the effectiveness of the resident's obesity prevention and healthy lifestyle education counseling performance during a directly observed, independently managed session with an obese or at-risk pediatric patient and family. The checklist used was developed by the pediatric nutritionist and the curriculum director with the assistance of the program's cochief residents and piloted on nonparticipant residents prior to implementation. The same pediatric nutritionist responsible for the resident's clinical instruction monitored each of the study resident's clinic patient sessions either in person or via videotape.

Statistical comparisons between the experimental and control groups were performed to evaluate the effectiveness of the implemented interventional curriculum. Two-sided, paired statistical t tests were employed to assess the differences between the control and intervention groups pre- and postparticipation. Because of the small sample size, nonparametric analysis, Sign test and Wilcoxon Signed Rank test were also applied to analyze the differences between the results' data sets.

RESULTS

Informal interviews with residents within the Scott & White Hospital pediatrics residency training program revealed that most felt ineffective in nutritional counsel-

Table 3. Research participants data

ing and in the overall management of obese pediatric patients. Prevalent patterns of patient referrals by the resident housestaff further suggested a widespread lack of understanding of the common pathophysiologic mechanisms of pediatric obesity. Our own needs-assessment survey showed that pediatric residents at all levels of training were dissatisfied with their nutrition knowledge as well as with their self-perceived comfort and ability to effectively counsel children and adolescents on healthy weight and exercise lifestyle behaviors. Further, a questionnaire sent to 200 pediatric residency training programs registered with the Accreditation Council for Graduate Medical Education (ACGME), and addressing similar topics, confirmed that only 17 of 79 (21.5%) of respondents offered a structured teaching curriculum on the evaluation, management and counseling of actually obese or at-risk children and adolescent patients (Table 2).

Attitudinal survey and knowledge tests scores obtained at program graduation from the control PL-3 residents and at residency program orientation from the entering PL-1 class (results not shown) were statistically similar to the scores obtained from the PL-2 study participants at orientation to the month-long community health rotation (Table 3). These results generally confirmed that the residents' knowledge of obesity prevention and management, as well as their skills and overall comfort with counseling both actually obese and at-risk pediatric patients and their families, were well below expectation for physicians soon to be independently delivering healthcare to their communities.

As also listed within Table 3, the study residents' level of knowledge, as portrayed by their percentage correct scores in the pre- and postintervention multiple-choice question examinations, tended to improve significantly following their participation in the "Obesity Prevention in Pediatrics" curriculum (p=0.029) In fact, each resi-

	PL-2a	PL-2b	PL-2c	PL-2d	PL-2e	PL-2f	PL-2 Class Average
MCQ Pre Score	15	12.5	16	13.75	13	12	
Percent Correct	0.75	0.625	0.8	0.68	0.65	0.6	0.68
Attitudinal Survey							
Mean	4	2.14	2.21	2.57	3.57	2.57	2.8
MCQ Post Score	18.75	18	16.75	14	18.5	13.5	
Percent Correct	0.94	0.9	0.84	0.7	0.925	0.67	0.83
Attitudinal Survey Post							
, Mean	4.29	4.64	3.57	4.14	4.57	3.00	4.04

Affitudinal survey administered to participants employed a 1–5 Likert scale for each question with 1 = very uncomfortable or perceived inadequately skilled and 5 = very comfortable or perceived adequately skilled. (Individual survey questions and resident's responses are available upon request from principal author.); PL: pediatric level

dent participant experienced a measurable gain in their percentage-correct score for the exam, with an average group gain of 15 percentage points from 68 to 83%. Similarly, at the conclusion of the obesity prevention curriculum, the study residents' subjective responses to the attitudinal surveys, both individually and as a group, also tended to describe a significantly higher level of comfort and perceived competency (p=0.016) in the nutrition counseling and weight management of actually obese and at-risk children and adolescents and their parents. Likewise, within the limits of the Likert scale employed, the mean response score for the whole attitudinal survey, as well as for each individual attitudinal question, also increased from a mean of 2.8 to 4.04, a 45% rise. Nonparametric analysis yielded similar results with probability levels between 0.01 and 0.05 (not listed).

DISCUSSION

The recent educational and medical literature is replete with multiple survey results suggesting that current nutrition training is not meeting the needs of currently practicing pediatric providers and that educational efforts ought to be focused on teaching practical healthy lifestyle counseling skills to primary care physicians. The goal of our "Obesity Prevention in Pediatrics" curriculum was to improve pediatric residents' awareness of the rapidly rising incidence of obesity in children and adolescents over the last four decades,^{2,4,14} to increase their level of knowledge on the various factors contributing to this obesity epidemic, and to empower residents to effectively counsel patients and their families about health and social problems related to obesity and suggest appropriate overweight prevention and healthy weight lifestyle management programs. Further, the purpose of our proposed educational intervention was to increase the frequency and level of obesity prevention counseling provided by pediatric residents to actually obese and atrisk pediatric patients and their families.

Attitudinal survey and knowledge tests scores from our own control resident population were statistically similar to those obtained from the PL-2 study participants at orientation to the month-long community health rotation and generally confirmed that the residents' level of knowledge on obesity prevention and management, as well as their skills and overall comfort with counseling both actually obese and at-risk pediatric patients and their families, were well below expectation for physicians soon to graduate and expected to independently deliver primary healthcare to their communities (Table 3).

Our pilot "Obesity Prevention in Pediatrics" curriculum confirmed that a structured, educational intervention is likely to objectively increase a physician-in-training's level of knowledge on the multifactorial, social and cultural causes of obesity and its multiple associated comorbidities as would be commonly expected. No less important, the integration of this obesity prevention curriculum into primary care training is also likely to improve the resident participants' perceived level of comfort and skills in the counseling and management of obese and at-risk pediatric patients and their families and therefrom result in an increased frequency and extent of preventive, healthy dietary and lifestyle counseling at both well-child and sick physician-patient contacts. As described under Results, following participation in the "Obesity Prevention in Pediatrics" curriculum, the residents' level of knowledge showed a tendency to improve significantly. Similarly, at the conclusion of the curriculum, the study residents also tended to describe a significantly higher level of comfort in counseling actually obese and at-risk children and adolescents and their parents.

As with many other graduate medical education interventions, the number of resident study participants was unavoidably low. As such, attributing the positive results of our educational intervention to the study curriculum is difficult and will require further investigations with a larger number of subjects. Further, given the historically poor correlation between nutrition and fitness counseling with changes in behavior, the reader is surely to question the importance of teaching a seemingly useless skill. Nonetheless, a variety of interventional measures such as increased education, effective advertising and increased healthcare system attention have been previously employed to address the negative, national public health consequences of smoking and problem drinking. Many of these have in fact resulted in substantially decreased rates for both of these risk behaviors over the last few years. With its associated comorbidities and massive health costs, obesity is now recognized as an urgent public health issue that requires our nation's immediate attention and intervention. Increasing residents' knowledge through a structured and integrated training curriculum on issues related to pediatric obesity is an important preventive strategy that must be immediately accorded the highest level of priority within all graduate medical education programs.

Given the promising results of our pilot curriculum intervention, we plan to expand our study to include additional residents within our pediatrics residency as well as in-training resident physicians enrolled in other primary care training programs at our academic institution. The inclusion of additional resident study subjects should permit evaluation of the importance, if any, of ethnic, gender or body habitus differences among the study participants on the effectiveness of the "Obesity Prevention Curriculum." With continuous success, the true worth of our teaching intervention will lie in its generalizability to healthcare professionals at all levels from medical students to practicing physicians.

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REFERENCES

1. The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. www.surgeongeneral.gov/topics/obesity/callto action/principles.htm.

2. Strauss RS, Pollack HA. Epidemic Increase in Childhood Overweight. JAMA. 2001; 286: 2845-2848.

3. U.S. Department of Health and Human Services, Healthy People 2010, Goals 5,19,22. www.gov/healthypeople. Washington DC; 2000.

4. National Center for Health Statistics, Centers for Disease Control. Prevalence of Overweight among Children and Adolescents: United States, 1999 National Health and Nutrition Examination Survey (NHANES). www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm.

5. Whitaker RC, Wright JA, Pepe MS, et al. Predicting obesity in young Adulthood from Childhood and Parental Obesity. N Engl J Med. 1997;337:869-873.

6. Wolf AA, Colditz GA. Current estimates of the economic costs of obesity in the United States of America. Obes Res. 1998;6:97-106.

7. Sturm R. The Effects of Obesity, Smoking and Problem Drinking on Chronic Medical Problems and Health Care Costs. Health Aff. 2002;21(2):245-253.

8. Freedman DS, Khan LK, Dietz WH, et al. Relationship of Childhood Obesity to Coronary Heart Disease Risk Factors in Adulthood: the Bogalusa Heart Study. Pediatrics. 2001;108:712-718.

9. Epstein LH, Myers MD, Raynor HA, et al. Treatment of Pediatric Obesity: The causes and health consequences of obesity in children and adolescent. Pediatrics. 1998;101 (3 suppl), Part 2 of 2:554-570.

10. Gortmaker SL, Must A, Perrin JM, et al. Social and Economic Consequences of Overweight in Adolescence and Young Adulthood. N Engl J Med. 1993:329:1008-1012.

11. Robinson TN, Chang JY, Haydel KF, et al. Overweight Concerns and Body Dissatisfaction among Third-Grade Children: the Impacts of Ethnicity and Socioeconomic Status. J Pediatr. 2001;138:181-187.

12. Davison KK, Birch LL, Weight Status, Parent Reaction and Self-Concept in Five Year Old Girls. Pediatrics. 2001;107:46-53.

13. Evans JM, Newton RW, Ruta DA, et al. Socio-economic Status, Obesity and Prevalence of Type 1 and Type 2 Diabetes Mellitus. Diabet Med. 2000;17:478-480.

14. Troiano RP, Flegal KM. Overweight Children and Adolescents: Description, Epidemiology and Demographics. Pediatrics. 1998;101:497-504.

15. Hill J. Peters J. Environmental Contributions to the Obesity Epidemic. Science. 1991; 280:1371-1374.

16. Strauss RS, Rodzilsky D, Burack G, et al. Psychosocial Correlates of Physical Activity in Healthy Children. Arch Pediatr Adolesc Med. 2001;155:897-902.

17. Birch LL, Fisher JO. Development of Eating Behaviors among Children and Adolescents. Pediatrics. 1998;101:539-540.

18. Finn K, Johannsen N, Specker, B, et al. Factors Associated with Physical Activity in Preschool Children. J Pediatr. 2002 140:81-85.

19. Gortmaker SL, Peterson K, Wiecha J, et al. Reducing obesity via a school-based interdisciplinary intervention among youth: Planet Health. Arch Pediatr Adolesc Med. 1999;153(4):409-418.

20. Pisacano JC, Lichter H, Ritter J, et al. An Attempt at Prevention of Obesity in Infancy. Pediatrics. 1978;61:360-364.

21. Kushner RF, McGaghie WC, Pendarvis L, et al. Medical residency training in the management of obesity. Acad Med. 2000;75(5):550.

22. Schulman JA. Nutrition Education in Medical Schools: Trends and Implications for Health Educators. Med Ed Online. www.med.ed/Online.org/ f0000015.htm.

23. Tuomilehto J, Lindstrom J, Eriksson JG, et al. Prevention of Type II Diabetes Mellitus by changes in Lifestyle among Subjects with Impaired Glucose Tolerance. N Engl J Med. 2001;344:1343-1350.

24. The Writing Group for the ACT Research Group. Effects of Physical Activity Counseling in Primary Care: The Activity Counseling Trial (ACT). JAMA. 2001;286:677-687.

25. Trevino RP, Marshall RM, Hale, DE, et al. Diabetes Risk Factors in Low-Income Mexican-American Children. Diabetes Care. 1999;22:202-207.

26. Kushner RF. Barriers to Providing Nutrition Counseling by Physicians: A Survey of Primary Care Practitioners. Prev Med. 1995;24:546-552.

27. Galuska DA, Will JC, Serdula MK, et al. Are Health Care Professionals advising Obese Patients to Lose Weight ? JAMA. 1999;282:1576-1578.

28. Story MT, Neumark-Stzainer DR, Sherwood NE, et al. Management of Child and Adolescent Obesity: Attitudes, Barriers, Skills and Training Needs among Health Care Professionals. Pediatrics. 2002;110:210-214. ■



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