

Medical Practice Interventions Physician Practices

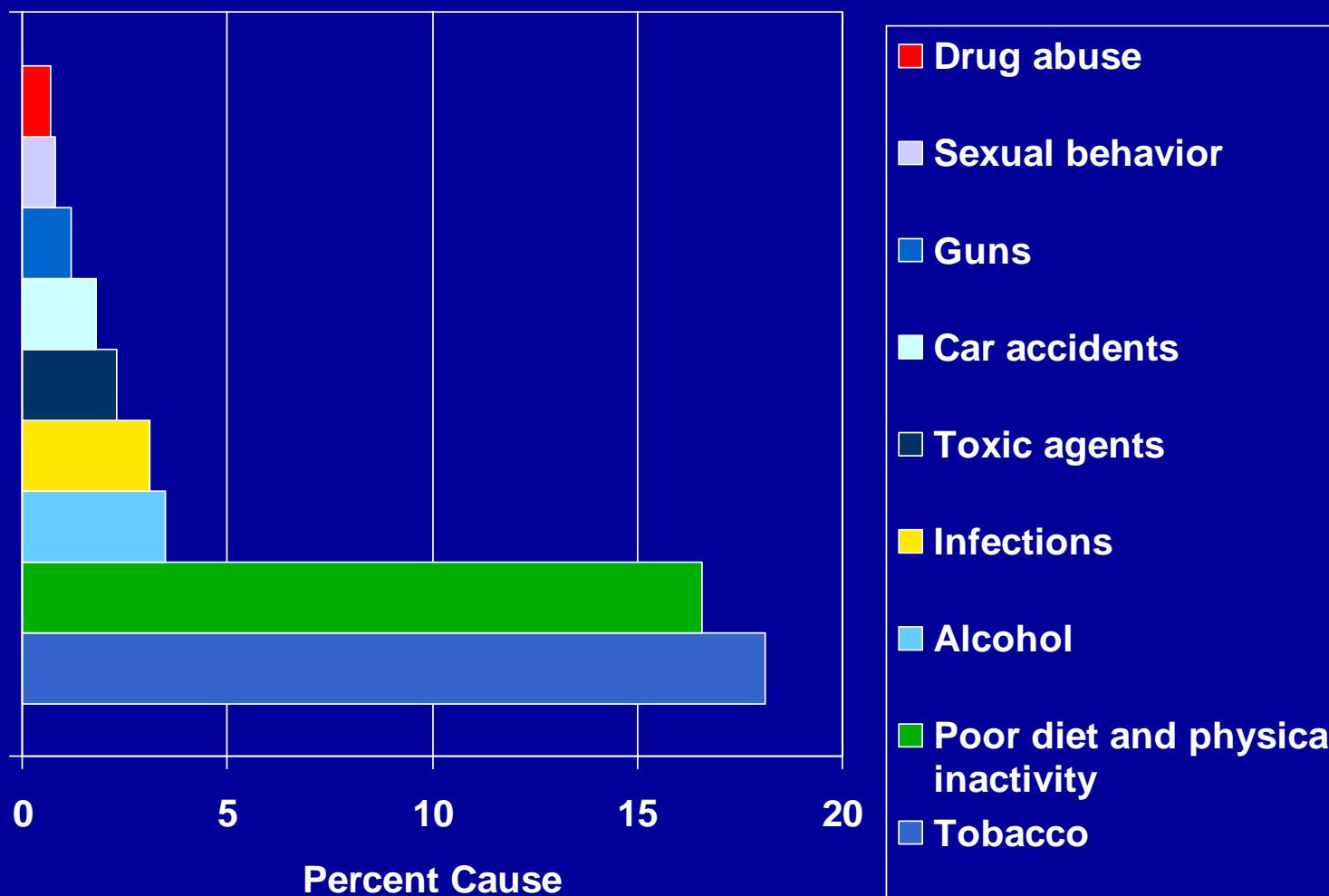
Robert F. Kushner, MD
Professor of Medicine
Northwestern University Feinberg
School of Medicine
Medical Director, Wellness Institute
Northwestern Memorial Hospital

What Do We Know About Obesity

- Prevalence continues to rise at alarming rate among adults, children and adolescents. Most common medical problem seen in primary care office.
- Predicted to overtake cigarette smoking as most preventable cause of death.
- Causes over 40 medical problems affecting 9 organ systems.
- Morbidity and mortality rise with increasing BMI.

Actual Causes of Death in the US

The Link Between Behavior and Mortality



**How Are We Doing As a
Medical Profession?**

Identification and Treatment of Obesity

- Clinical Inertia
- “Failure of the health care providers to initiate or intensify therapy when indicated”¹
 - Lack of education, training, and practice organization aimed at evaluating & treating obesity as a chronic illness
 - Practice barriers
 - Attitudes of futility, lack of perceived benefit and unrewarding

Identification & Counseling

- Physicians reported obesity in only 8.6% of all patient visits¹
- Weight loss counseling reported by 29% of overweight patients²
- Weight loss counseling reported by 42% of overweight patients³
- Obesity documented in medical record for only 53% of obese children⁴

1. Stafford et al. Arch Fam Med 2000; 2. Hawaz et al. Am J Publ Health 1999; 3. Galuska et al. JAMA 1999; 4. O'Brien et al. Pediatrics 2004

Identification & Counseling

- 18.7% physicians likely or very likely to discuss weight problems in overweight patients; 42.2% for mildly obese; 87.7% for moderately obese; 94.1% for severely obese¹
- 5.6% patients counseled to lose weight with BMI 25-27, increased to 13.6% with comorbidity; 32.4% with BMI greater than 30, increased to 47.3% with comorbidity
- Identification of problem in children increases with increasing degree of obesity: 18% with lowest quartile, 49% 2nd quartile, 68% 3rd quartile, 82% with 4th quartile³

1. Kristeller et al. Prev Med 1997; 2. Sciamanna et al. Arch Intern Med 2000
3. O'Brien et al. Pediatrics 2004

Identification & Counseling

- Summary
 - We are failing to identify the overweight and mildly obese patient – missed opportunities for early prevention and treatment
 - We are doing a better job identifying the moderately and severely obese patient presenting with co-morbid conditions

Barriers to Obesity Care

“Counseling is unlikely to be effective without understanding the barriers that patients, providers, and systems face and applying targeted strategies to overcome those behaviors.”

PROVIDING OBESITY CARE



Adapted from Jaen et al. J Fam Prac, 1994

Barriers to Obesity Care

- Lack of reimbursement for obesity as a diagnostic ICD-9-CM code, or treatment by ancillary staff.
- Time. Average office patient visit 18.3-21.5 minutes¹; average duration of direct MD-patient contact 10 minutes.²
- Lack of training in behavioral counseling (diet, physical activity and cognitive behavior therapy)³ and use of adjunct modalities (pharmacotherapy) in medical school, residency and clinical practice.

Barriers to Obesity Care (cont)

Lack of Efficacy

- “Despite the escalating prevalence of obesity, physicians and healthcare providers have no proven intervention with evidence of long-term success to offer.”
- “There is no convincing evidence for the consistent effectiveness of any single currently used, weight-loss method.”

NHLBI Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults (1998)

- “There is strong evidence that combined interventions of a low calorie diet, increased physical activity, and behavior therapy provide the most successful therapy for weight loss and weight maintenance.”*

*Evidence Category A

Summary of Findings from Other Systematic Reviews: Counseling & Behavioral Therapy (Ave BMI range 25 – 38 kg/m²)

Evidence Source	Median Follow up (Range), mo	RCTs (n)	Mean Weight Change (Range), kg
US NIH (1998)	12 (12-60)	29	-5.7 (8 to 21.6)
UK NHS (1997)	24 (12-60)	24	-4.5 (5.4 to 12.9)
CTFPHC (1999)	24 (24-60)	6	-3.3 (2.7 to 9.2)
Updated Search 1	12 (12-54)	12	-3.7 (9.2 to 17)
Updated Search 2	12 (12-54)	13	-4.6 (9.2 to 17.9)

*US Preventive Services Task Force, 2003. Ann Intern Med 2003;139:933-949

Long-term Weight Maintenance: A Meta-analysis of US Studies*

Group	Years F/U	No. of Studies	No. of Subjects	Initial Wt (kg)	Wt Loss (kg,%)	Mean Maintenance (kg, %)
All	4.5	13	1081	98	14 (14%)	3 (3%)
LCD	4.5	8	448	93	8.8 (12.8%)	2.1 (2.2%)
VLCD	4.5	4	578	106	24 (22.6%)	6.6 (6.2%)

Percent of initial subjects available for follow up and actual vs self-report weights varied among studies.

For all studies, follow up data available for 10, 8, and 8 studies at 3, 4 and 5 years, respectively.

*Anderson JW et al. Am J Clin Nutr 2001;74:579-584.

Summary of Pharmacotherapy: Quantitative Analysis of RCTs

Drug	N of studies	% using Lifestyle Tx	kg lost
Sibutramine	4	100	5.3 (4.0-7.3)
Orlistat	6	100	7.1 (4.0-10.3)

Haddack CK et al. Int J Obesity 2002;26:262-273.

Provision of Obesity Care

- Three factors necessary for physician's to intervene¹
 - Adequate recognition of obesity as a medical problem
 - Willingness to provide intervention
 - Adequate skills or resources to do so

Advancement of Practice

BMI
Metabolic Syndrome
Hypertriglyceridemic waist
CRP

Bench \longrightarrow Bedside \longrightarrow Practice

- 1994 Leptin
- Neurotransmitters and gut hormones
NPY, Melanocortin, Ghrelin, PYY
- Adipocyte & adipose tissue
as endocrine organ - adipokines

1998 NHLBI Guidelines
2000 Practical Guide
2003 AMA Obesity Primer
2004 USPSTF

Provision of office tools, procedures and protocols

- BMI as a fifth vital sign (smoking status stamp)¹
- Ready-to-copy materials and handouts²
- Goal-oriented exercise written prescriptions³
- Exercise and dietary counseling protocols^{4,5}
- Obesity protocols (A Quick Reference Tool to ACT) and algorithms⁶
- Prompts, alerts and other reminders

1. Ahluwalia et al. J Gen Intern Med 1999; 2. Kreuter et al. Arch Fam Med 2000; 3. Swinburn et al. Am J Public Health 1998; 4. Calfas et al. Prev Med 1996; 5. Albright et al. Am J Prev Med 2000; 6. Practical Guide. NHLBI 2000.

Opportunities For Improvement

- Further identify and directly address barriers to providing obesity care in various practice settings.
- Evaluate interventions and strategies to improve implementation of obesity clinical practice guidelines in primary care.

Opportunities For Improvement

- Identify & characterize “Best Practices” that are providing obesity care.
- Develop, implement and test office tools, procedures, protocols and organizational systems to facilitate provision of obesity care.