PRACTICAL POINTERS

FOR

PRIMARY CARE MEDICINE

A Free Public-Service Publication

JANUARY 2013

JAMA, NEJM, BMJ, LANCET
JAMA INTERNAL MEDICINE
ANNALS INTERNAL MEDICINE

http://www.practicalpointers.org/

PUBLISHED BY PRACTICAL POINTERS, INC.
EDITED BY RICHARD T. JAMES JR. MD
400 AVINGER LANE, SUITE 203
DAVIDSON NC 28036 USA
A free public-service publication.

To request monthly issues go to Rjames6556@aol.com

27th YEAR OF PUBLICATION

I hope you will find *Practical Pointers* interesting and helpful. The complete content of all issues for the past 10 years can be accessed at HTTP://www.practicalpointers.org/

Richard T. James Jr. M.D.
Editor/Publisher.

Practical Pointers is published every month on the internet as a public service. It is available on a more timely basis by e-mail attachment. It contains no advertising. It is completely without bias. There is never any charge.

Requests for "subscription" to rjames6556@aol.com

Substantial Hazards Of Smoking And Remarkable Benefits Of Stopping

1-1 THE 21ST CENTURY HAZARDS OF SMOKING AND BENEFITS OF STOPPING:

Prospective Study Of One Million Women In The UK

Smoking (mainly cigarettes) remains the leading preventable cause of death in the UK and USA. This is despite declines in smoking prevalence and reductions in the tar content of cigarettes.

Women born around 1940 in the UK and the USA were the first generation in which many smoked substantial numbers of cigarettes throughout adult life. Only in the 21st century can we observe directly the full effects of prolonged smoking, and of prolonged cessation, on mortality.

Prevalence did not peak until the 1960s, so previous studies of women might have underestimated the full eventual risks of smoking.

This prospective study of 1 180 652 women in the UK, reports the hazards of smoking and the benefits of stopping at various ages.

STUDY

1. Recruited women age 50-69 in 1996-2001. All completed a questionnaire about lifestyle, medical history, and socio-demographic factors. They were re-surveyed about 3 and 8 years later. Followed the women until 2011, a mean of 12 years. Excluded those with history of cancer, heart disease, stroke, and those under treatment for respiratory disease.
2. At entry, asked women if they were a current or ex-smoker, and how many cigarettes they now smoked per day (in categories of: none; < 5; 5-9; 10-14; 15-19; 20-25; or 25 and 25 and over).
3. Asked at what ages they had first smoked regularly and had stopped. Those who were ex-smokers at both entry and at 3-years and had stopped before age 55 were categorized by the age they stopped (under 25; 25-34; 35-44; 45-54). Almost half the women who were smokers in the 1990s gave up by 2010.
4. Did not analyze results by pack-years, since having smoked 10 cigarettes a day for 40 years could produce, at age 60, a risk of lung cancer vastly greater than that from smoking 20 cigarettes per day for the past 20 years.
5. Determined data on deaths with underlying cause of death coded from the Classification of Diseases. National mortality statistics provide virtually complete follow-up of deaths.

RESULTS

1. Women were, on average, born in 1942, recruited in 1998 at age 55, and followed for 12 years (to 2011)

2. At end of study, 66 489 had died at mean age 65.

3. At baseline, 20% were current smokers; 28% were ex-smokers; 52% never-smokers. The main differences were that smokers were more likely than non-smokers to live in deprived areas, drink more alcohol, and avoid strenuous exercise. Analyses of the effects of smoking were adjusted for these and other differences.

4. Exposure to second-hand smoke was uncommon.

5. At re-survey 3 years after baseline, 23% had stopped smoking; 44% had stopped at 8 years (especially light smokers).

6. Those still smoking at 3 years started at age 18, and were currently smoking 15 cigarettes a day. On average, the amount consumed per smoker seemed to change little during the lifetime (mean 14 per day at age 20; 14 per day after 12 years).

Over-all mortality; smokers vs never-smokers:

During a 12-year follow-up, those who had been current smokers at baseline had almost 3 times the overall mortality rate of never-smokers (Relative risk [**RR**] = 2.7) even though within just a few years after recruitment many had stopped smoking, thereby reducing risk.

Causes of death:

The most extreme risk ratios for death were for chronic lung disease and lung cancer. Risk for coronary heart disease and stroke were also high.

	Number of deaths		
	Current smoker	Never smoker	RR
Chronic lung disease	1789	121	35
Cancer of lung	5633	698	21
CHD	2726	1732	4.5
Cerebrovascular	1528	1458	3.0

Overall mortality related to amount smoked:

The mortality risk in smokers increased steeply with the amount smoked. But even those smoking fewer than 10 cigarettes a day at baseline, had almost double the overall mortality than never-smokers.

All-cause mortality, current smokers vs never-smokers

Cigarettes/d	0	5	10	15	20

Relative risk (RR)	1.00	2.0	2.8	3.7

Women who smoked throughout adulthood reduced life expectancy by about 11 years.

Effect of number of cigarettes smoked daily on risk of specific diseases:

12-year relative risk current smoker vs never smoker by amount smoked

Cigarettes / day	0	5	10	15	20
			Relative risk (RR)		
Chronic lung disease	0		22	32	60
Cancer of lung	0		10	22	36
CHD	0		3	5	6
Cerebrovascular disease	0		2	3	4

Even women in the lowest category of amount smoked had, compared with never-smokers, substantial excess mortality from all 4 conditions.

At 3 years, those who were current smokers reported consuming an average of 15 cigarettes per day. During the remainder of the study, they had a RR of 3.0 for overall mortality and 24 for lung cancer mortality.

Effect of age at onset of smoking:

The age at which women started smoking regularly affected overall mortality decades later. Those who had started at about age 15 were at greater risk (especially for cancer) than those who started only 4 years later.

	Age began smoking regularly		
	16	17-21	22 and over
Mortality RR	3.2	2.9	2.2

Benefit of stopping smoking: :

Women who stopped at ages under 25, 25-34, 35-44, and 45-54 (ie, about ages 20, 30, 40, or 50) had, on average, started smoking at ages 17, 18, 19, and 20 years, and had smoked 9, 12, 15, and 16 cigarettes per day.

Relative risk (RR) for ex-smokers vs never-smoker for all-cause mortality and lung cancer mortality by ages at stopping (as reported at the 3-year re-survey)

Age at stopping	20	30	40	50

All-cause mortality (RR)	1.00	1.05	1.20	1.56
Lung cancer mortality (RR)	1.00	1.8	3.3	5.9

Women who stopped at mean age 50 were mainly in their 60s during follow-up at which time they had substantially higher overall mortality (RR = 1.5) and lung cancer mortality (RR = 6) than never smokers. Nevertheless, even the upper limit for the excess overall mortality was only about a third that of continuing smokers—avoiding 2/3 the mortality among smokers in middle age.

Women who stopped at about age 40 also still had, 20 to 30 years later, higher overall mortality (RR = 1.2) and lung cancer mortality (RR = 3.3) than never smokers. Although these are not small residual risks, those who quit avoided about 90% of the excess overall mortality among continuing smokers.

Likewise, for chronic lung disease, CHD, and stroke, about 90% of the excess risk was avoided by stopping at around age 40 (and more by stopping earlier).

Women who stopped at a mean age of 30 still had, decades later, measurably higher lung cancer mortality than among never-smokers. But they avoided about 97% of the excess lung cancer mortality and excess overall mortality.

Few women in this generation stopped smoking before age 25, so estimates of the small risks that remained later in life were not reliable.

DISCUSSION

1. The excess mortality among smokers was chiefly due to diseases known to be affected by smoking—chronic lung disease, lung cancer, CHD, and stroke.
2. There was little difference between smokers and others in potential confounding factors such as adiposity, BP, or lipid profile. There were differences between smokers and non-smokers in factors such as alcohol intake, physical activity, and socio-economic status. The study adjusted for these factors. Thus, the large majority of excess mortality among smokers was actually caused by smoking.
3. Among continuing smokers in this population who died, two-thirds died at the age they did because smoking caused their death. This is despite large declines in tar yields in recent decades. Women in this study smoked cigarettes containing, on average, less than 10 mg of tar per cigarette. Low tar cigarettes are not low-risk cigarettes.
4. More than half of the women who smoke will eventually be killed by the cigarettes, unless they stop smoking in time.
5. Most women were recruited at ages 50-65 and were followed for 9-15 years. So this study was on

mortality at ages 50-80 (mainly 55-74). Within this range, the smoker vs never-smoker mortality ratio was roughly independent of age, so the conclusion that smoking triples mortality rates can be applied as a reasonable approximation not only through ages 50-80, but also at somewhat younger ages.

6. Smokers lost about 11 years of lifespan. The probabilities of death before age 70 were 24% for smokers and 9% for never-smokers. The probabilities of death before age 80 were 53% and 22%.
7. The absolute hazards of prolonged smoking are substantial, so also are the absolute benefits of cessation. Even cessation about age 50 avoids at least 2/3 of the continuing smoker's excess mortality in later middle life. Benefits are considerably greater for those who quit earlier.
8. Smokers who stop at age 40 avoid about 90% of the excess hazard among continuing smokers. Those who stop at about age 30 avoid 97%. This does not mean that it is safe to smoke until age 40 and then stop. For women who do stop, the mortality rate throughout the next few decades is 1.2 times that of never-smokers. This is a substantial excess risk, causing one in six of the deaths among these ex-smokers. In women who smoked until age 40 and then stopped, mortality (at any subsequent age) is three times that of never-smokers.
9. In any population in the world in which young adults smoke cigarettes, the benefits of early cessation will be substantial in comparison with their own eventual risks if they continue smoking.
10. The hazards among smokers in later middle age depend strongly, not on their recent smoking pattern, but also on the patterns of smoking early in adult life.
11. Women who have smoked throughout adult life have 3 times the overall mortality rate of otherwise similar women who have never-smoked, or who stopped well before middle age.
12. Stopping early enough gains 10 extra years of life expectancy for women and men.

Lancer January 12, 2013; 381: 133-41 Original investigation, first author Kristin Pirie, University of Oxford, UK

Lancet January 12, 2013; 381: 96-98 Editorial, first author Rachael R Huxley, University of Minnesota, Minneapolis

Funded by the Cancer Research UK , Medical Research Council

First presented on the 100th anniversary of the death of Richard Doll

---

This is a monumental study—detailed, complicated, and difficult to abstract.

It is memorable, not only for describing (in detail) the harms of smoking, but for emphasizing the benefits of cessation.

Primary care clinicians bear the major burden of promoting primary prevention of smoking among individual patients. And in promoting cessation in those that do smoke. Few interventions are more important.

Overall, prevention and cessation is a public health concern, requiring multiple facets of intervention.

The authors make the interesting point that duration of smoking (even light smoking) is more hazardous than the amount of daily smoking.. There is always benefit from stopping..

Are we making any progress in curtailing smoking in the general population? See the following.

No Improvement Overall. Some Hope For The Younger Generation

1-2 CURRENT CIGARETTE SMOKING AMONG ADULTS –UNITED STATES, 2011: From the CDC

Approximately 443 000 U.S. adults still die from smoking-related illnesses each year.

Smoking costs the country close to 100 billion dollars in direct medical expenses each year, and a like amount in lost productivity.

This report assessed the progress toward the Healthy People 2020 objective to reduce smoking to 12%. The CDC's Office on Smoking and Health used data from the 2011 National Health Interview Survey to estimate the current national cigarette smoking prevalence. Nineteen percent of adults smoked cigarettes in 2011. No statistically significant change occurred from 2010 (19,3%) to 2011 (19.0%).

Among daily smokers, the proportion who smoked 30 or more cigarettes per day (CPD) declined significantly from 12.6% in 2005 to 9.1% in 2011. The proportion who smoked 1 to 9 CPD increased from 16.4% to 22.0%,

In 2011, an estimated 19% of adults were currently smoking. Of these, 77% smoked every day. Overall, 52% had made a quit attempt during the preceding year.

Smoking prevalence in 2011 was 21.6% in males and 16.5% in females. Prevalence was lowest among those age 65 and older (7.9%), and highest among those age 25-44 (22.1%). Prevalence was highest among those living below the poverty level. Prevalence was also higher among those reporting having a disability.

During the period 2005-2011, there was a slight decline in smoking prevalence. The largest decline was at age 18-24 (from 24.4% to 18.9%). From 2005 to 2011, among daily smokers there was also a

decline in mean CPD from 2005 (16.7 to 15,1). The proportion who smoked over 30 CPD also declined from 12.% to 9.1%, while those smoking 1 to 9 CPD increased.

Editorial note.

Smoking prevalence from 2005 to 2011 declined most markedly among those age 18-24. This age group, which had the highest prevalence in 2005, now has the lowest of any group below age 65.

Despite increases in excise tax revenue, state funding for tobacco control has actually decreased in the past 5 years.

JAMA February 13, 2013; 309: 539-41 First author Israel Agaku, CDC. Atlanta, GA MMWR. 2012;44: 889-894 Editorial Note by the JAMA staff.

The reported drop in smoking among the 18-24 age group is encouraging.

Most smokers want to quit. Few succeed. This is despite steep costs, taxation, smoke free zones, warnings about the dangers, prohibition in work and public places, and restrictions in advertising, promotion and sponsorship.

Overweight Was Associated With Significantly <u>Lower</u> All-Cause Mortality

1-3 ASSOCIATION OF ALL-CAUSE MORTALITY WITH OVERWEIGHT AND OBESITY USING STANDARD BODY MASS INDEX CATEGORIES: Systematic Review and Meta-analysis

Body mass index (BMI): weight in kilograms divided by height in meters squared.

In 1997, the WHO Consultation on Obesity defined BMI-based categories. The US Heart, Lung, and Blood Institute adopted the same cutoff BMI values in 1998.

Underweight	<18.5
Normal weight	18.5 to 24.9
Overweight	25 to 29.9
Obesity.	30 and over.
Grade 1 obesity	30 to 34.9;
Grade 2	35 to 39.9;
Grade 3	40 and over.

Estimates of the relative mortality risks associated with normal weight, overweight, and obesity may help to inform decision-making in the clinical setting.

This study compiled and summarized analyses associations between BMI and all-cause mortality.

STUDY

1. Extensive literature search (up to 2012) found 97 articles suitable for analysis. All were prospective studies of the general population from several different countries. (N = 2.88 million; 270 000 deaths.) All reported hazard rations (HRs) for all-cause mortality using standard BMI categories.

RESULTS

1. Ninety three studies included BMI categories of 25-29.9 (overweight); 32 for BMI 30-34.9 (grade 1 obesity); and 35 for BMI 35 and greater (grade 2 and 3 obesity).
2. Considered the results adequately adjusted if they were adjusted for age, sex, and smoking—53 were classified as adequately adjusted, 35 as possibly over-adjusted, and 10 as possibly under-adjusted.
3. Summary hazard ratios (HRs) for all-cause mortality for overweight and obesity relative to normal weight from studies considered adequately adjusted:

BMI	HR	
25-29.9	0.94	(Overweight)
30-34.9	0.97	(Grade 1 obesity)
35 and over	1.34	(Grades 2, 3 obesity)

Overweight and grade 1 obesity were not significantly associated with increased mortality. The higher grades were significantly associated with increased mortality.

7. Heterogeneity appeared to have had little effect on the conclusions.

DISCUSSION

1. This study presents comprehensive estimates (derived from a systematic review) of the association of all-cause mortality in adults with current standard BMI categories.
2. The most recent data from the U.S. showed that almost 40% of adult men and almost 30% of adult women fall in the overweight category of 25 to 29.9.
3. According to the results of this study, overweight (BMI 25-29.9) is associated with significantly lower mortality overall relative to normal weight, with an overall summary HR of 0.94.
4. Recent estimates for prevalence of obesity (defined as BMI 30 and over) among

adults in the U.S. is 36%.

5. More than half of those who are obese fall in the grade 1 category (BMI 30-34.9).

   This study did not find significant excess mortality associated with grade 1 obesity, suggesting that the main contributors of excess mortality in obesity comes from higher levels of BMI.

6. The study has limitations. It addresses only all-cause mortality, and not morbidity or cause-specific mortality. It addresses only BMI and not other aspects of body composition such as visceral fat and fat distribution.

CONCLUSION

Relative to normal weight, obesity grades 2 and 3 obesity were associated with significantly higher all-cause mortality.

Grade 1 obesity was not associated with higher mortality, suggesting that the excess mortality in obesity may predominantly be due to elevated mortality at higher BMI levels.

Overweight was associated with significantly lower all-cause mortality

JAMA January 2, 2913; 309; 71-82 Original investigation, first author Katherine M Flegal, National Center for health Statistics, CDC, Hyattsville, Maryland.

Not a very convincing review. I did not expect a decreased mortality risk in overweight and grade 1 obesity. This points out that we should not rely on one risk marker alone.

BMI is likely to be a predictor of all-cause mortality, but the exact cut-off points may vary between individuals and ethnicities.

See the following editorial.

This article was mentioned in the lay press. The Charlotte (NC) Observer January 3, 2013 ran a headline "A Few Extra Pounds Don't Raise Mortality, Report Says"

The article quoted Pam Bellock of the New York Times:

"A century age, Elsie Scheel was the perfect woman. So said a 1912 article in the New York Times about Shheel, 24, who was chosen by the medical examiner of the 400 co-eds at Cornell University as a woman whose very presence bespeaks perfection.

"Scheel, however, was hardly model-thin. At 5-foot-7 and 171 pounds, she would, by today's medical standards, be clearly overweight. (Her body mass index was 27; 25 to 29.9 is overweight.)

" But a new report suggests that the 1912 standards may have been onto something. The report on nearly 3 million people found that those whose BMI ranked them as overweight had less risk of dying than people of normal weight. And while obese people had a greater mortality risk overall, those with the lowest obesity level (BM of 30 to 34.9) were no more likely to die than normal weight people."

I expect the recommended BMI scale to change again.

Mortality Was Significantly Lower Among Those Who Were Overweight Compared With Normal Weight. These Findings Remained Consistent After Adjustment For Confounding Factors

1-4 DOES BODY MASS INDEX ADEQUATELY CONVEY A PATIENT'S MORTALITY RISK?

What adult body weight best advances health, minimizes the risk of chronic disease, and promotes longevity? The consequences of answering this question have profound public health, social, and economic implications.

A history of authoritative suggestions about height, weight, and obesity:

1942 The Metropolitan Life Insurance Company (MLIC) statisticians determined that lifespan was longest when body weight was maintained at the same level as 25-year old adults with similar height and frame size. In 1959 and again in 1983, the initial MLIC weight tables were revised to desirable height and weight tables. Obesity was considered present when weight exceeded desirable weight by 20%. However, the tables were complex, had technical limitations, and were not easily applied.

1985 Because body weight increases with height, there was a need to establish normal body weight as a function of height. This was accomplished by the BMI (weight in kilograms divided by height in meters squared) which increases with greater adiposity. The NIH defined overweight-obesity as BMI of 27.8 or greater for men, and 27.3 or greater for women. BMIs at these levels are approximately 20% above the MLIC desirable weights. Weight loss was recommended for people whose BMI exceeded these thresholds.

1997 The WHO consultation on obesity defined pre-obesity (overweight) as a BMI of 25 or greater; grade 1 obesity as a BMI of 30 or greater; grade 2 as 35 or greater; and grade 3 as 40 or greater.

1998 The NIH expert panel recommended a similar BMI-based definition.

1832 Editor's note: The relationship between weight and height squared was first

described by Adolph Qietelet (1796-1874) as the Qietelet Index. He was a Belgium polymath: mathematician, astronomer, social scientist, and statistician. The term Body Mass Index was coined by Ancel Keys in 1972

Source: "Adolph Qietelet—the average man and indices of obesity" by Garabed Eknoyan, Baylor School of Medicine, Houston, TX. Published by the Oxford University Press.]

Total mortality has a U-shaped relationship with BMI. Rates sharply rise at BMI less than 18.5, and greater than 30.

However, the proceeding study did not find higher mortality associated with grade 1 obesity (BMI 30 to 34.9), and mortality was significantly lower among those who were overweight compared with normal weight. These findings remained consistent after adjustment for smoking, pre-existing disease, or weight and height reporting method (self-reported or measured).

A 2005 study by the NHANES also did not find an increased mortality risk in overweight persons.

Also in 2005. a meta-analysis of 388 6322 individuals found no increase in all-cause mortality for overweight males (HR = 0.96) and females (HR = 0.96).

In 2010 a nationally representative sample of 11 326 Canadians found a relative mortality risk of 0.76 in overweight non-smokers.

Based on these observations, are the concerns about overweight, as currently defined, unfounded?

Are the concerns about overweight and grade 1 obesity, as currently defined, unfounded? BMI does not account for sex, race, age, fitness, and differences in fat mass even in the same body weight. Race and age influence the associations among disease risk, mortality, and BMI. Fat distribution varies widely among individuals at the same level of adiposity, with an abdominal fat pattern conveying the greatest health risk.

The NIH guidelines recognize the limitations of BMI. Waist circumference is recommended as an additional surrogate marker of health risks associated with adiposity and adipose fat distribution.

BMI is known to be an imperfect predictor of metabolic risk. Some individuals with normal BMI have an overweight-obesity metabolic pattern. Some with high BMI appear to have a healthy metabolic pattern. Cardio- respiratory fitness is an independent predictor of total mortality after controlling for BMI, waist circumference, and percentage of body fat. A relatively large fat mass can mask small muscle mass (sarcopenic obesity).

Sole use of BMI as a health-risk phenotype aggregates people with substantial differences in nutritional status, disability, disease, and mortality risk.

Identification of at-risk individuals for overweight and grade 1 obesity is best captured by considering traditional risk factors, including BP, lipids, and glucose levels in addition to BMI and waist circumference.

Apart from the imperfect relationship between BMI and phenotype, are there explanations why overweight may be associated with lower mortality risk? Physicians are increasingly aggressive in managing risk factors among overweight-obese patients. This has led to substantial declines in cardiovascular disease risk factors, more so than in those with normal weight. New pharmacological therapies and intensive treatments may prolong survival, and may account for the weaker associations between obesity and mortality.

What appears to be a reduced or very low all-cause mortality risk in overweight people may represent an artifact of applying a wide range of BMIs in the normal weight reference category. In most studies, the lowest all-cause mortality is observed between BMI 22-25. Persons between 18.5 and 22 have higher mortality. Placing these persons into a single group raises the mortality rate for the normal weight group. The average resulting from combining persons with the lowest mortality category (BMI 22-25) with those who have greater mortality (BMI 18.5-22) might explain why the normal weight category has an observed mortality similar to class 1 obesity.

Can overweight as defined by BMI actually have preventive associations with mortality? The presence of wasting disease, heart disease, diabetes, renal disease, or older age are associated with an inverse relationship between BMI and mortality.

The optimal BMI linked with lower mortality in patients with chronic diseases may be within the overweight and obese range. Even in the absence of chronic disease, small excess amounts of adipose tissue may provide needed energy reserves during acute catabolic illnesses, have beneficial mechanical effects with some types of traumatic injuries, and convey other salutary effects that need to be investigated.

Obese individuals with a BMI of 35 or greater, are at increased risk of mortality, as are those with BMI less than 18.5. The large BMI range between includes persons with differing adiposity, adipose tissue distribution, muscularity, nutritional status, and disease risk factors. Not all patients classified as being overweight or having grade 1 obesity, particularly those with chronic diseases, can be assumed to require weight loss treatment. Establishing BMI is only a first sep toward a more comprehensive risk evaluation.

JAMA January 2, 2012, 309; 87-88 Editorial fisrst author Steven B Heymsfield, Pennington Biomedical Research Center, Baton Rouge, LA

I believe BMI classifications related to mortality need re-working.

The author struggled for reasons why overweight and grade 1 obesity might be related to lower mortality. Do persons in these categories have lower BP, better lipid profiles, better glucose tolerance? Are they less likely to have the metabolic syndrome? I doubt it. Do they have better fat patterns, better fitness?

If persons with grade 1 obesity had no risk factors other than the increased BMI alone, would their risk of mortality be lower?

Are the various BMI classifications, as now constructed, too broad?

How is the primary care clinician now to advise a person with grade 1 obesity and overweight?

What is the best BMI on average for the population?

Be A Role Model—Incorporate Short Bouts Of Exercise Into Daily Routine

1-5 CHANGING PHYSICAL ACTIVITY PARTICIPATION FOR THE MEDICAL PROFESSION

Being sedentary is a way of life for many health professionals, as for many other professions. Physicians encounter multiple busy activities resulting in little movement. They especially lack moderate to vigorous physical activity (MVPA) at the level recommended by the Physical Activity Guidelines for Americans.

Health professionals have called for changes in the food environment, and yet have paid little attention to the nutrient-poor quality of the food where physicians work, meet, and learn. Just as problematic, and despite its minimal cost and proven value to health, essentially no attention has been directed toward incorporating short bouts of physical activity (PA) into the organizational routine during meetings, conferences, and other ordinary daily medical professional gatherings.

Re-integrating fitness and movement into the daily lives of health professionals is as critical as attending to the quality of their diets.

Emerging data suggest that PA bouts as short as 3 to 5 minutes (which interrupt sedentary time) may contribute to positive health outcomes. Ten minutes of PA have been counted toward the 30 minute daily accrual of MVPA.

With the thousands of medical conferences and meetings held annually in the US, opportunities abound for incorporating brief and energizing bouts of PA into the organizational routine.

Many physicians, both male and female, are overweight or obese. In the National Women Physicians Health Study, only 49% met recommended MVPA levels. Certainly, less than optimal MVPA is attained by many physicians.

The IOM has recommended that health care professionals be role models for patients. Overweight physicians are less likely to counsel patients about obesity and exercise. Physicians are beginning to accept their non-clinical responsibilities to be role models and advocates, although most of these activities have been directed toward the food environment.

Simple measures such as instituting structured group exercise breaks at certain times of day, using stairs instead of elevators, and moving parking places farther from the work place could help integrate some physical activity into the daily routine.

Society is replete with opportunities for reintegrating PA into daily life. But there is little attention paid to being sedentary for long periods, by systematically interrupting prolonged sitting. Attendees at meetings could be refreshed with brief activity bouts.

Activity breaks are becoming increasingly popular. One example is the concept of a 10-minute structured group exercise break. Movement breaks can be designed to maximize enjoyment and energy expenditure, and minimize injury risk in the average sedentary overweight adult. This concept has been adopted by many local health departments, clinics, and non-profit agencies. In California one agency has used paid time for one 10-minute activity break each day; 39 cities have adopted policies advocating activity breaks in events lasting an hour or longer. Several corporations have adopted activity breaks as part of their worksite wellness programs.

Simple and quick episodes of MVPA can be incorporated into the workplace without disrupting workflow of productivity. Given the value of regular PA to health, the medical profession should lead the way in adopting such practices.

JAMA January 9, 2013; 309: 141-42 “Viewpoint”, first author Antronette K Yancey, University of California, Los Angeles

---

Physicians need to incorporate PA into daily living.

I especially noted the advice to climb stairs and park at a distance from the office.

We can take a few minutes several times each day to exercise—at our desks if necessary. These daily minutes may quickly add up to 30 minutes. Acting as role models, others may follow.