

Overweight in the Military

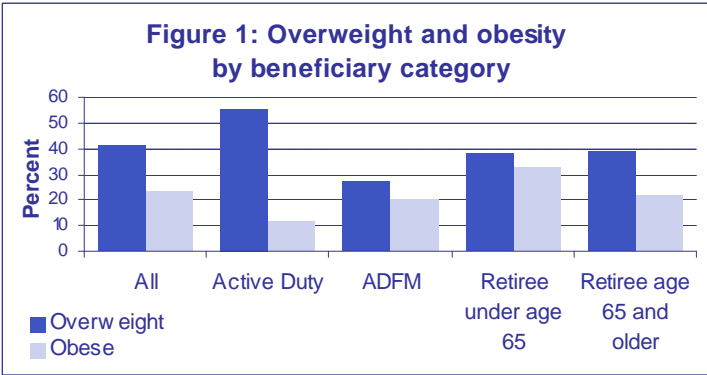
Issue Brief ♦ Health Care Survey of DoD Beneficiaries

HEALTH PROGRAM ANALYSIS & EVALUATION DIRECTORATE

As among civilians, weight problems appear to be increasing among MHS beneficiaries. Excess weight is implicated in many diseases and chronic conditions, including hypertension, type 2 diabetes, heart disease, stroke, and arthritis. Hence, the prevalence of overweight is a key indicator of population health.

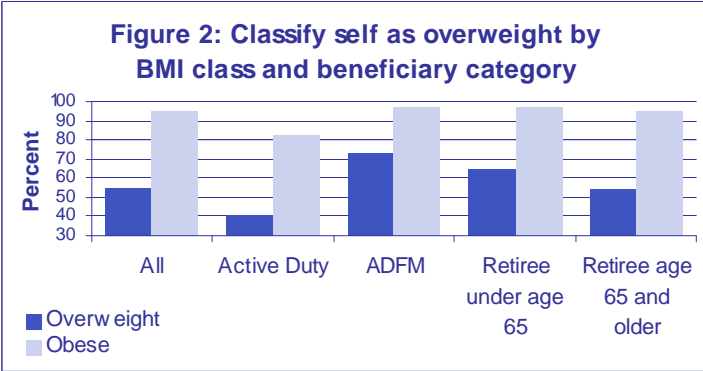
Prevalence

The most commonly used measure of overweight is the body mass index (BMI), which is calculated from weight divided by the square of height. A BMI of 25 or more is considered to indicate overweight, while a BMI of 30 or above indicates obesity (NHLBI, 1998). Classification based on BMI is not very accurate because weight increases when fat is replaced with muscle, but it is widely used because information on height and weight is easy to get. In this brief, we will refer to a BMI between 25 and 30 as overweight to distinguish it from obesity, which is a BMI of 30 or above.



From the HCSDB, we collect self-reported height and weight and use them to calculate the BMI of respondents. Figure 1 shows that nearly two-thirds of all MHS beneficiaries are overweight (41%) or obese (22%) according to their BMI. In particular, nearly two thirds of active duty are classed as overweight or obese. However, only 12 percent of active duty are obese. Obesity is much higher among retirees under 65, 33 percent of whom are obese.

Most active duty classed as overweight do not consider their weight to be a problem. As shown by Figure 2, only about 40 percent of active duty who are overweight according to their BMI consider themselves overweight. Men, who make up the majority of active duty, are less likely than women to think their weight too high, whether overweight or obese. For men and active duty, measured



overweight may be overstated due to muscle. Family members of active duty and retirees and their family members who are overweight are more likely than active duty to consider their weight a problem. In contrast with the overweight, most obese beneficiaries in all categories do believe that their weight is too high.

Table 1 indicates that overweight beneficiaries (middle columns) are not significantly more likely than beneficiaries of normal weight (first columns) to rate their health as fair or poor. Beneficiaries under age 65, including active duty, who are classed as overweight by BMI are more likely to report limitations in their activities due to their health. Compared to the overweight, the obese are much more likely than those of normal weight to rate their health as fair or poor and to report activity limitations.

Weight loss methods

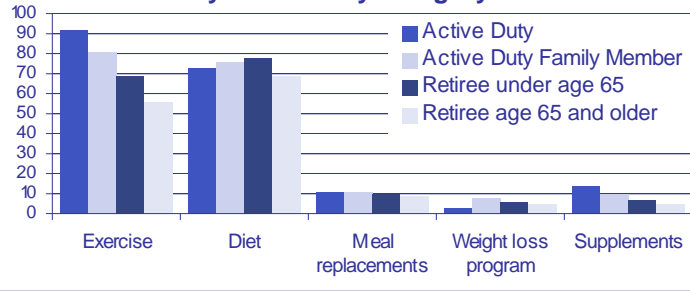
Most beneficiaries who are obese consider their weight to

| | Normal | | Overweight | | Obese | |
|--------------------------|------------------|---------|------------------|---------|------------------|---------|
| | Poor/fair health | Limited | Poor/fair health | Limited | Poor/fair health | Limited |
| | Percent | | | | | |
| Active Duty | 7 | 18 | 6 | 25* | 14* | 36* |
| ADFM | 5 | 13 | 8 | 17* | 15* | 24* |
| Retiree under age 65 | 13 | 24 | 15 | 35* | 25* | 47* |
| Retiree age 65 and older | 26 | 43 | 24 | 41* | 34* | 62* |

* Greater than normal at p > 0.05

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Figure 3: Weight loss methods by beneficiary category

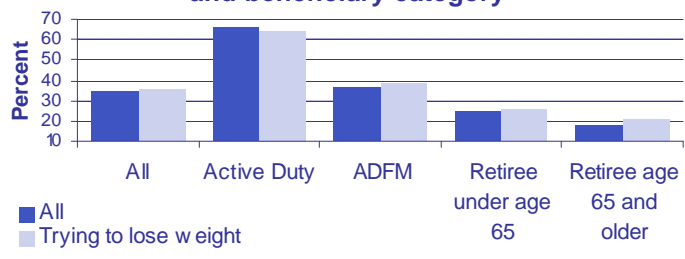


be too high and most (82 percent, not shown) are trying to lose weight. Figure 3 indicates that most who are trying to lose weight do so through both diet and exercise. Among active duty, exercise is favored. More than 90 percent of active duty who are trying to lose weight are using exercise compared to 73 percent using diet control. Retirees and their dependents use diet more often than exercise as a method of weight reduction, though a majority, even of retirees over 65, tries to lose weight through exercise. Approximately 10 percent of beneficiaries trying to lose weight in each beneficiary group use meal replacements as part of their regimen, while smaller numbers participate in weight reduction programs. Active duty are more likely than other groups to use dietary supplements (14 percent) as a weight loss method and less likely to use weight loss programs.

Exercise

Exercise offers health benefits besides weight reduction. These benefits include strengthening bones, muscles and joints, reducing stress and anxiety and lowering the use of health care services. Results from the HCSDB indicate that two-thirds of active duty take at least 20 minutes of vigorous exercise three or more times per week. Other beneficiary groups exercise substantially less. Among active duty family members about one third get as much vigorous exercise as active duty, and among retirees under age 65 only 25 percent do. There is little difference in the frequency of vigorous exercise between those trying to lose

Figure 4: Vigorous exercise at least 3 times a week by weight loss goal and beneficiary category



weight and those who are not, in spite of the many who report they are using exercise to reduce their weight.

Conclusion

The prevalence of overweight and obesity in the MHS population is similar to their prevalence in the civilian population. Nearly two thirds of civilians report they are overweight or obese according to their BMI, and over 30 percent are obese (CDC, 2004). Most active duty are overweight according to the BMI methodology, yet fewer than half of these consider their weight to be too high. According to their responses, the prevalence of overweight does not reflect an unhealthy active duty lifestyle. Most active duty vigorously exercise on a frequent basis, and their overweight may be due to muscle, not fat. Even among non-active duty family members the prevalence of vigorous exercise exceeds the Healthy People 2010 goal of 30 percent, and the proportion of civilians exercising vigorously (USHHS, 2000).

The prevalence of obesity and its adverse consequences for health increase among retirees and their dependents. Although this group may be more physically vigorous than its civilian counterparts, exercise levels decline following retirement. The earlier reliance of active duty and their families on exercise to maintain weight control may result in problems with obesity when their lifestyles become less active. Encouragement to maintain an active lifestyle among retirees and more attention to diet among active duty may reduce these problems.

Sources

Health Care Survey of DoD Beneficiaries, fielded January, 2005.

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