Consequences of Inadequate Physical Activity

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Karen Ngowe] Welcome to this edition of *PCD* Sound Bites. I'm Karen Ngowe, filling in for your host, Latoya Simmons. Current guidelines recommend adults get at least two and a half hours of moderate-intensity aerobic activity a week, like brisk walking. But many Americans don't get enough physical activity to meet this guideline, which can lead to chronic disease and premature death. Joining me today is Dr. Susan Carlson, a lead epidemiologist in CDC's Division of Nutrition, Physical Activity, and Obesity. We'll be discussing her research, which aims to estimate the percentage of U.S. deaths attributed to inadequate levels of physical activity. Thank you for being here, Susan.

[Susan Carlson] Thank you for inviting me, Karen.

[Karen Ngowe] Susan, give us a brief overview of your study.

[Susan Carlson] As Karen stated, the current aerobic physical activity guideline recommends that adults participate weekly in at least 150 minutes of moderate-intensity physical activity, or its equivalent, for substantial health benefits. The health benefits include such things as lowering the risk of premature death, heart disease, stroke, type 2 diabetes, certain types of cancers, and depression. In our study, we first examined what influence physical activity levels below the current guideline have on premature mortality. And we wanted to look at whether this association differed by age. The second purpose was really to estimate the percentage of deaths that are attributable to levels of physical activity that are inadequate to meet the current guideline.

[Karen Ngowe] What did your research reveal about the association between inadequate physical activity and premature death among American adults?

[Susan Carlson] So, in a nationally representative sample of U.S. adults, we found that adults with levels of physical activity inadequate to meet current guidelines had an increased risk of premature death. Overall, we found that 8.3 percent of deaths were attributed to inadequate levels of physical activity. Our findings suggest that if you increase adults' physical activity levels to meet the current guidelines, this is likely one way to reduce the risk of premature death in the United States.

[Karen Ngowe] What did you find when you looked at this association in different age groups?

[Susan Carlson] We did not find a significant association between physical activity level and mortality in adults aged 25 to 39. However, for those aged 40 to 69 and 70 or older, we found that not meeting the guideline was associated with an increased risk of premature mortality.

[Karen Ngowe] How do these findings compare to previous, similar studies?

[Susan Carlson] We found that our estimates were similar or slightly lower when comparing to similar studies that examined this association. In general, our estimates of the percent of deaths attributable to inadequate levels of physical activity is not practically different from other studies.

[Karen Ngowe] Do you think researchers have become better at estimating the percentage of deaths attributed to inadequate physical activity?

[Susan Carlson] Estimating the percentage can be challenging. Many of the previous studies that have provided these estimates have done so by combining estimates across different sources. This can really bias results, especially if there are differences in the populations or if the physical activity measure differs. When you use a survival analysis conducted in a single population, which is what we did in this study, you can overcome a lot of these biases and improve your estimates. Facilitating the linking of CDC survey data from systems like the National Health Interview Survey to mortality data, can really help researchers explore these issues.

[Karen Ngowe] How do you think this research can be used to help get adults moving and reduce the risk of premature death associated with inadequate physical activity?

[Susan Carlson] So we found in this study that a significant portion of deaths were attributed to lower levels of physical activity. By estimating the public health burden of low levels of physical activity, this can be important for setting research and program priorities and for public health planning at the national, state, and local level. Ultimately, individuals make the decision to be active; however, this decision can be made easier by programs and policies that provide opportunities for physical activity and by making communities more activity-friendly. By working collaboratively across different sectors, communities across the nation can help to increase physical activity levels and potentially reduce the risk of premature death.

[Karen Ngowe] Thank you, Susan. You can read her study, "Percentage of Deaths Associated with Inadequate Physical Activity in the United States", online at cdc.gov/pcd.

The findings and conclusions in this report are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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