PCNA
Preventive Cardiovascular Nurses Association

PCNA Position Statement on Physical Activity

The Issue

In 2011 the age-adjusted proportion who reported engaging in moderate or vigorous PA of at least 150 minutes of moderate physical activity or 75 minutes of vigorous activity on a weekly basis was 49% (53% men and 46% women).

In 2011, 29% of students met activity recommendations of at least 60 minutes of physical activity on 7 days of the week nationwide. However this number declined from 9th (31%) to 12th (25%) grades. At each grade level, the proportion was higher in boys than in girls.

Physical inactivity is responsible for 12% of the global burden of myocardial infarction after accounting for other cardiovascular disease (CVD) risk factors such as cigarette smoking, diabetes, hypertension, abdominal obesity, lipid profile, no alcohol intake, and psychosocial factors.

The economic consequences of physical inactivity are substantial. In a summary of WHO data sources, the economic costs of physical inactivity were estimated to account for 1.5% to 3.0% of total direct healthcare expenditures in developed countries such as the United States. On the basis of a self-reported prevalence of inactivity of 48% and a prevalence of CVD of 22%, direct expenditures for CVD associated with inactivity were estimated to be $24 billion in 2001.

We, as health professionals, need to individualize activity plans for our patients and their families. Our goal is to assist sedentary persons to begin a low-level physical activity program as well as to target the 50% of Americans doing some but not enough exercise to increase their activity programs. This intervention could result in an enormous positive impact on our patients, society in general and on health care dollars.

PCNA supports the 2008 US Department of Health and Human Services physical activity recommendations. We provide education and educational materials for both patients and healthcare professionals. PCNA recommends we treat physical activity as a vital part of reducing risk for heart disease and stroke.

The Facts

- In 2011, 31% of adolescents used a computer for activities other than school work (e.g., videogames or other computer games) for ≥3 hours per day on an average school day.

- In 2011, among students nationwide, there was a significant increase in the prevalence of participation in muscle strengthening activities on ≥3 days per week, from 48% in 1991 to 56%.

- The percentage of adults ≥18 years of age reporting at least 150 minutes of moderate physical activity or 75 minutes of vigorous physical activity or an equivalent combination weekly decreased with age, from 56% for adults 18 to 44 years of age to 27% for those ≥75 years of age, according to 2011 data from the National Health Interview Survey (NHIS),

- In adults exercise for weight loss, without dietary interventions, was associated with significant reductions in diastolic BP, triglycerides and fasting glucose.

- 150 minutes per week of moderate-intensity aerobic activity, compared with none, can reduce the risk of CVD.

- Unfit individuals who improved their fitness status had a 35% lower mortality risk (HR 0.65; 95% CI, 0.46–0.93) than those who remained unfit.

- On the basis of a meta-analysis of 34 randomized controlled trials, exercise-based cardiac rehabilitation after MI was associated with lower rates of reinfarction, cardiac mortality, and overall mortality

Conclusion

PCNA supports the US Department of Health and Human Services recommendations for the public:

- Adults should obtain a minimum of 150 minutes a week of moderate-intensity, or 75 minutes of vigorous-intensity aerobic activity, or an equivalent combination of moderate- and vigorous-intensity physical activity.
- Aerobic activity should be performed in episodes of at least 10 minutes and preferably done throughout the week.

- Furthermore, adults should also perform muscle-strengthening activities that are moderate or high intensity and involve all major muscle groups on 2-3 days a week.

- Before starting an exercise program, people with CVD should talk to their health care provider for exercise program advice.

- Children and adolescents should perform 60 minutes or more of moderate- to vigorous-intensity aerobic physical activity daily. Muscle-strengthening and bone-strengthening activities should be included at least 3 days a week.

PCNA recommends that all health professionals:

- Implement national guidelines for physical activity through the use of PCNA and other organizational tools.
- Assess patients' physical activity during hospitalizations and at each outpatient visit.
- Assist patients to set target goals for physical activity.

- Improve adherence to physical activity programs by tailoring to the individual e.g., Be Active Your Way—A Guide for Adults http://www.health.gov/paguidelines/adultguide/activeguide.aspx
- Access PCNA's Heart Healthy Toolbox for healthcare professionals and patients http://pcna.net/clinical-tools/tools-for-healthcare-providers/heart-healthy-toolbox

References

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U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans.

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