



## PHYSICAL FITNESS REDUCES CHRONIC DISEASES RISK

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**ABSTRACT** Physical activity is widely recognized as a means for the primary prevention of chronic diseases as well as in patients' treatment and rehabilitation. Moreover, activity has beneficial effects on an individual's health and well-being. Despite the benefits of regular physical activity, the percentage of physically inactive adults in the world is high. Environmental and policy approaches aimed to increase physical activity require continual stress of the epidemiological evidence from studies investigating disease.

Chronic Disease such as Heart disease,stroke,cancer,chronic respiratory disease and Diabetes are by far the leading cause of mortality in the world,Representing 60% of all from chronic disease in 2005,Half were under 70 and half were womens.This invisible epidemic is an underappreciated cause of poverty and hinder of the econmic development of many countries.Contrary to common perception,80% of Chronic disease death occur in low and middle income countries.

**KEYWORDS :** Chronic Disease,physical Activity,Primary prevention,Secondary prevention.

### INTRODUCTION

Chronic diseases was an issue raised by many participants during the Conversation on Health. Lifestyle and social determinants, prevention and health promotion, and chronic disease management were highlighted in many discussions and submissions. Here is a selection of what British Columbians had to say on the subject of chronic diseases Participants feel that lifestyle choices and social determinants contribute to development and progression of chronic diseases. Some submissions linked inactivity, poor eating habits (both over-eating and eating low-nutrition foods) and smoking and drinking to the development of conditions like type II diabetes, obesity and hypertension. Others pointed out that level of income, education, housing, social supports and job type also are factors in whether or not an individual may get a chronic disease. Even though more Americans are exercising, rates of obesity and smoking have not changed. A survey by the U.S. Centers for Disease Control and Prevention found that obesity rates remained at around 28 percent of adults, the same as in 2008. However, 34.7 percent claimed that they engaged in regular leisure physical activity, up from 31.9 percent in 2008. According to the latest statistics cited above, obesity remains a growing concern in the United States, despite the fact that more people claim to be exercising. I'll address a potential piece of that puzzle at the end of this article, because HOW you exercise can have a major impact on whether or not you successfully lose weight. As for overweight children, teens and young adults, it's important to realize that carrying excess weight early in life increases the number of years they're exposed to all the health risks associated with obesity. As discussed in a previous article, there are at least 20 serious diseases and health conditions directly attributable to being overweight. Obese adults tend to have higher rates of high blood pressure, abnormal lipids, cancer and diabetes. And, making matters worse, the vast majority of them are treated with costly and potentially dangerous medications that in no way address the real problems but rather cause further deterioration of health. As a parent, one of the most valuable gifts you can give your child is to be a role model for a healthy lifestyle and help them achieve optimal health at an early age. This includes eating a health diet tailored-made to your individual biochemistry; full of fresh, preferably local, organic foods, and exercising to increase physical fitness.

Participants in the Conversation on Health generally agree that British Columbia lacks education about chronic diseases. This lack of understanding, according to some, can result in chronic disease patients feeling isolated from friends and family. Some also feel that the lack of public education on chronic disease may mean that the public is not informed enough to detect chronic illness early. Submissions identified specific gaps in information, services and programs for the following diseases: Lupus; Cancer; Diabetes; Asthma; Celiac Disease; and Crohn's Disease.

*Start looking at investing some funding into preventative health care. It makes more sense to utilize preventative measures instead of waiting for health to become chronic. At the chronic stage, treatment is far more costly.*

### Web Dialogue, Sooke

Many participants indicate that chronic disease education programs should be increased throughout the province and made more comprehensive. Some think that more education should be available in schools, while others believe that informing the public should be the responsibility of general practitioners and private institutions.

Another suggestion highlighted the need for disease-specific seminars and group sessions. Some that health professionals do not proactively treat chronic illness and provide care symptom-by-symptom rather than addressing the underlying causes of disease. However, other participants received quality care from British Columbia's chronic disease management facilities; one comment in particular said that the international community thought highly of British Columbia's contribution to chronic disease management.

Many participants believe that chronic disease management facilities should provide more comprehensive care. One solution put forward was that children with chronic illnesses need better transition services from youth to adult care; another, that many complex-care individuals do not have access to follow-up services in the community.

Others note that an overall increase of chronic diseases in British Columbia creates longer waiting lists and overcrowding in emergency rooms and leads to more pressure on the health care system. Participants felt that increased awareness could lead chronic disease sufferers to be more engaged in managing their health. Chronic Disease Management Opinions about how chronic diseases are treated by the health care system vary greatly.

### Data collection

The study was conducted by the valid and reliable methods. The population in this study was people of different ages and sexes who were suffering from various heart diseases, chronic respiratory disease and Diabetes. The subjects used to practice various physical activities like running, jogging, stretching etc in indoor sports stadium in my home town Tral pulwama. IN this purpose the only patients with Chronic Diseases were selected as subjects for research study by reliable quota sampling process the subjects were allotted a questionnaire containing questions regarding their health matters and problems. Also they were directly interviewed, for about 20 minutes. The verbal statements were recorded. The questions like Are you satisfied that physical activity brings improvement in your health?, etc were asked. Researcher collected data on socioeconomic status, smoking history, history of hypertension, diabetes, hypercholesterolaemia, family history of CHRONIC DISEASES (including HEART DISEASES, stroke, chronic respiratory diseases and diabetes types of fat or oils used in cooking, nutritional supplement use.

### Physical activity questionnaire

Physical activity levels were assessed using a validated physical activity questionnaire specific for the population that focused on

occupational and other non-leisure time activities, in addition to leisure-time exercise. It was validated by comparing energy expenditure (determined by the questionnaire) with energy intake as measured by 24-hour dietary recalls. A significant positive correlation was reported ( $r = 0.33$ ,  $P = 0.02$ ) which was comparable with other validation studies where energy expenditure was assessed using a physical activity questionnaire. Subjects were asked to report the average time spent at work and average frequency of activities related to leisure or recreation, household chores, as well as sedentary and daily activities over the last month. The intensity or metabolic equivalents (MET) of the reported activities were obtained from the Compendium of Physical Activities. For those activities not listed in the Compendium, the MET of a similar activity was assigned. Finally the response were recorded and was taken for further assessment of data and results.

### Direct interview

The direct face to face interview was conducted and subjects were asked about almost all necessary issues which were related to the study.

### Statistical analysis

To assess the potential for confounding, mean values of Chronic diseases factors were examined across levels of leisure-time exercise (assessed in met-minutes), sedentary activity (minutes), and work-related activities (minutes) among controls. Continuous covariates were categorized to avoid assumptions of linear associations with the outcome and to minimize the effect of outlying values. Participants were grouped into quartiles (sedentary activity), or into tertiles (leisure time exercise), or two categories depending on the distribution of each variable and the number of subjects within each category. To evaluate the relation between leisure-time exercise and risk of Chronic Diseases, we used conditional logistic regression, first controlling only for the matching factors (age, sex) and then, in addition, other potential risk factors. Analysis of leisure-time exercise compared risk associated with different levels of exercise to non-exercisers. Similar analyses were performed for sedentary (non-work) and work-related activities. For work-related activities, total time spent at work, and average time spent sitting, standing, walking, and in strenuous activities at work were assessed. We also examined whether the associations observed with leisure-time exercise and sedentary activity and chd risk were modified by: age, gender, cigarette and bidi smoking, BMI, WHR, alcohol intake, education, or income. All analyses were conducted in *Statistical Analysis Software* (version 8).

### Conclusion

In conclusion, although there is a large body of evidence clearly supporting physical activity to reduce risks of CHRONIC DISEASES, further research on older populations, particularly those older than 70 years is required for betterment and controlling chronic diseases.

### Reference

1. Ward BW, Schiller JS, Goodman RA. Multiple chronic conditions among US adults: a 2012 update. *Prev Chronic Dis*. 2014;11:130389. DOI.
2. Centers for Disease Control and Prevention. Death and Mortality. NCHS FastStats Web site. Accessed December 20, 2013.
3. Centers for Disease Control and Prevention. NCHS Obesity Data. Accessed December 20, 2013.
4. Hootman JM, Brault MW, Helmick CG, Theis KA, Armour BS. Prevalence and most common causes of disability among adults—United States, 2005. *MMWR*. 2009;58(16):421-6. Accessed December 23, 2013.
5. Barbour KE, Helmick CG, Theis KA, et al. Prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation—United States, 2010-2012. *MMWR*. 2013;62(14):869-73. Accessed March 13, 2014.
6. Centers for Disease Control and Prevention. *National Diabetes Fact Sheet, 2011*. Atlanta, GA: Centers for Disease Control and Prevention, US Dept. of Health and Human Services; 2013 Accessed December 20, 2013.
7. Centers for Disease Control and Prevention. Exercise or Physical Activity. NCHS FastStats Web site. Accessed December 20, 2013.
8. Fryar CD, Chen T, Li X. Prevalence of uncontrolled risk factors for cardiovascular disease: United States, 1999-2010. NCHS Data Brief, No. 103. Hyattsville, MD: National Center for Health Statistics, Centers for Disease Control and Prevention, US Dept. of Health and Human Services; 2012.
9. Cogswell ME, Zhang Z, Carriquiry AL, et al. Sodium and potassium intakes among US adults: NHANES 2003-2008. *Am J Clin Nutr*. 2012;96:647-57.
10. Centers for Disease Control and Prevention. *State Indicator Repo* Accessed December 23, 2013.
11. US Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: US Dept. of Health and Human Services, Center Accessed February 7, 2014.
12. Centers for Disease Control and Prevention. Alcohol and Public Health: Alcohol Related Disease Impact (ARDI). Accessed March 11, 2014.
13. Centers for Disease Control and Prevention. Alcohol-attributable deaths and years of potential life lost, United States, 2001. *MMWR*. 2004;53:866-70. Accessed April 9, 2014.
14. Kanny D, Liu Y, Brewer RD, Garvin WS, Balluz L. Vital signs: Binge drinking prevalence, frequency, and intensity among adults—United States, 2010. *MMWR*.

- 2012;61:14-19. Accessed April 9, 2014.
15. Gerteis J, Izrael D, Deitz D, LeRoy L, Ricciardi AHRQ Publications No, Q14-0038. Rockville, MD: Agency for Healthcare Research and Quality; 2014. Accessed November 18, 2014.
16. Go AS, Mozaffarian D, Roger VL, Benjamin EJ, Berry JD, Blaha MJ, et al; American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics--2014 update: a report from the American Heart Association. *Circulation*. 2014;129(3):e28-292. Accessed January 6, 2014.
17. National Cancer Institute. Cancer Prevalence and Cost of Care Projections. Accessed December 23, 2013.
18. American Diabetes Association. *The Cost of Diabetes*. <http://www.diabetes.org/advocacy/news-even>. Accessed December 23, 2013.
19. Centers for Disease Control and Prevention. Arthritis Cost Statistics. Accessed December 23, 2013.
20. Finkelstein EA, Trogdon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer- and service-specific estimates. *Health Aff*. 2009;28(5):w822-31. Accessed December 23, 2013.
21. Bouchery EE, Harwood HJ, Sacks JJ, Simon CJ, Brewer RD. Economic costs of excessive alcohol consumption in the US, 2006. *Am J Prev Med*. 2011;41(5):516-24. Accessed December 23, 2013.