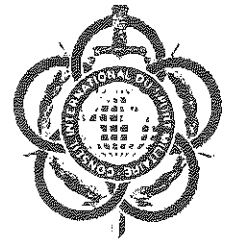


International Symposium ON *Sport for all!*



PHYSICAL ACTIVITY AND SPORT: THEIR IMPORTANCE FOR HEALTH

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Note: This paper is based in part on a World Health Organization document, in press, written by the author, entitled: A National Model Strategic Plan for Physical Activity Promotion for the Prevention of Coronary Heart Disease in Islamic Countries, Nicosia, Cyprus, 8 December 1995. Further information on this document can be obtained by the author.

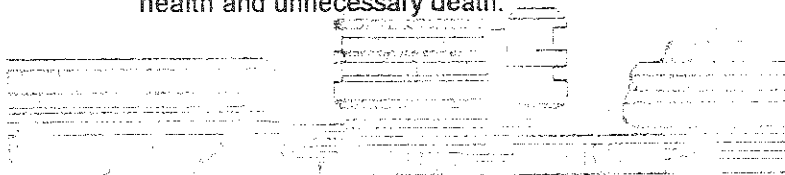
A. PHYSICAL ACTIVITY AND HEALTH: THE PROBLEM:

Sedentary lifestyle is a prevalent risk factors for CVD and several other non-communicable diseases and poses a serious threat to health, similar in magnitude to the risk of smoking or hypertension. The results of extensive research efforts have led to the conclusion that physical activity (PA) increases longevity, and, to a large extent, protects against the development of major noncommunicable, chronic conditions such as CHD, hypertension, stroke, non-insulin dependent diabetes, osteoporosis and colon cancer. Some studies suggest that physical inactivity (sedentary lifestyle) increases the risk of prostate cancer, lung cancer, breast cancer and clinical depression. Furthermore, appropriate levels of PA assist in the rehabilitation of patients with cardiovascular and other diseases.

Physical activity (PA) can be defined as movement that is 1. isotonic or dynamic, as in muscle contractions that result in movement, 2. isometric, not resulting in movement, or 3. resistance. Isotonic exercise is preferred from a public health perspective because of the greater stress it puts on the cardiovascular system. Most isotonic exercise includes resistance and isometric components. PA is also defined as the purposeful movement of the body for exercise, sport, life maintenance or enjoyment. It encompasses but is not limited to exercise, sport and leisure activity. Sport is commonly defined as activity that is competitive, organised and requires other individuals to accomplish. Exercise tends to be non-competitive, and may not be organised or require equipment or co-participants. Leisure activities include play, traditional, cultural or religious activities involving body movement.

B. THE PUBLIC HEALTH SIGNIFICANCE OF PHYSICAL ACTIVITY:

Physical activity and sport are of fundamental importance for society as an influence on health and quality of life. Physical activity contributes to the physical, mental and social well-being of individuals of all ages. Today there are enormous waste of human potential that can be attributed to physical inactivity. Sedentary lifestyle is recognised as a major contributor to ill health and unnecessary death.



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Research has demonstrated protective effects of varying strength between physical activity and risk for several chronic diseases, including 1) coronary heart disease (1-3); 2) non-insulin dependent diabetes mellitus(6,7); 3) osteoporosis (8,9) 4) colon cancer (10); and anxiety and depression (11, 12). Low levels of habitual physical activity and low levels of physical fitness are associated by markedly increased all-cause mortality rates (13).

Exercise training improves CVD risk factors and other health related factors, including 1) blood lipid profile (14); 2) resting blood pressure in borderline hypertensives (4); 3) body composition (15); 4) glucose tolerance and insulin sensitivity (16,17); 5) bone density (18); 6) immune function (19); and 7) psychological function (20).

Addressing the issue of physical inactivity is not simply a matter of encouraging inactive people to become more active. Sedentary living is a complex mix of individual and environmental factors that work to limit or diminish interest, ability and access to opportunities to participate in physical activity.

C. GOALS AND OBJECTIVES FOR THE PROMOTION OF PA

1. To increase awareness of benefits of physical activity for health
2. To increase knowledge of the types and levels of physical activity that prevent cardiovascular and other chronic diseases
3. To increase physical activity participation in all sectors of society.
4. To support education, training, research in physical activity promotion
5. To identify and encourage implementation of national, regional, local policies and environmental changes to promote physical activity.
6. To help establish an interagency commission to promote physical activity, including government and non-governmental agencies already involved in sport, recreation, and cultural, traditional or religious activity involving movement.
7. To recommend 30 or more minutes daily moderate intensity activity.

D. POLICIES TO PROMOTE PHYSICAL ACTIVITY

1. Initiate a co-ordination and planning effort to increase PA knowledge and practice.
2. Promote the funding of research, training and educational curricula for professionals and consumers, for men and women and their families.
3. Work with departments of physical education, sport and health to develop, implement and promote quality PA curricula, materials, training and facilities in military institutions.
4. Initiate a public campaign on appropriate TV, radio, newspapers.
5. Encourage medical practice professionals to promote moderate, daily physical activity.
6. Initiate appropriate steps to increase access to public places, facilities and equipment, including consumer safety and monitoring of equipment and facilities to assure proper facilities for PA.
7. Formulate panels of experts and speakers to speak to the health benefits of PA.
8. Identify appropriate health objectives appropriate for the military.
(see Annex D).

At the local and community level:

1. Work with regional or city governments to identify those organisations and individuals to develop and implement planning for PA in communities where military personnel reside. Establish long-term partnerships between health departments, health professions.
2. Encourage transportation, parks and recreation and sports authorities to increase the number and quality of environments to practice sport.

3. Promote land-use policies such as car-free zones and bicycle paths within, between and outside of military installations that encourage self-propelled transportation to work. Mass transportation planning should include planning for bicycle storage and transportation
4. In cities obtain the use of public buildings and schools for PA programs after hours, particularly for families, women and children..
5. Organise events such as festivals and events that provide opportunities to learn about, experiment with and adopt PA.
6. Provide incentives for communities to promote PA facilities and participation, such as grants, media coverage and awards

Military installations as workplaces for civilian and military personnel

1. Identify facilities and programs that promote PA in the workplace
2. Develop an on-site physical activity program.

Policies for School education

1. Establish school standards for the appropriate quality and quantity of physical education classes and programs.
2. Establish education and training programs for youth and young adults on appropriate levels and types of PA necessary for optimal health.
3. Encourage extracurricular activities to increase PA in children and their families.
4. Encourage the use of schools and community centres for after-school PA.
5. Promote the importance of PA as a critical element of health in training programs for teachers, coaches, trainers, recreation workers and other appropriate groups.

Health Professionals serving Military families.

1. Develop graduate and post-graduate curricula on physical activity and health.
2. Educate health professionals on how to access and prescribe physical activity to patients.

E. INFORMATION GATHERING.

It is helpful to gather some information, either via survey or by informant groups about the physical activity levels of the population you wish to serve, their families, in order to better plan programs. Some useful questions can be found in Appendix A.

F. PROMOTION OF PHYSICAL ACTIVITY

1. Establish an Exercise for Health Commission (EFH) to advocate and co-ordinate efforts for PA and health, and establish a 5 year national plan for EFH.
 - a. Determine what sectors of the population are active and who are not.
 - b. Conduct research, perhaps with a local university, to determine the best ways to reach and motivate the target population.
 - c. Secure trusted public figures to act as credible ambassadors in media campaigns and participate in steering committees.
 - d. Plan a national EFH starting event with media coverage, events, activities.
 - e. Identify appropriate program elements, including television public service spots and programs, weekly or biweekly radio programs, interviews, newscasts, print media articles.
 - f. Determine appropriate events at the national, regional, local level, including games, recreation, sport or traditional games festivals, or, a national day (or week) of exercise.

- g. Determine how to reach those who are isolated by geographic, religious or other barriers.
- h. Set objectives and target populations and determine plan for evaluation.

G. OBSTACLES AND DIFFICULTIES

1. Individual level difficulties. Personal barriers to national efforts include: too few family or friends to serve as support, lack of role models, lack of motivation, fear of injury, lack of a supportive environment, boredom, lack of time, and inconvenience.
2. Conceptual difficulties, particularly across cultures: Promotion of a 'Western' concept of physical activity and sport is not appropriate in many countries. The idea of sport as requiring competition, training, and winning concentrates resources for physical activity into the hands of a few talented athletes and drain resources needed for sport for all programs. Thus, the term "Physical Activity" is used here when describing the health behaviour necessary for health. Physical Activity includes sport, exercise and fitness, as well as play, dance, walking and other non-sport activity.
3. Organisational Obstacles: Organisational obstacles are many. They include the lack of funding for programs or competition for scarce resources. In addition, disagreements at high levels regarding values, vision, goals or action required can be obstacles. The lack of appropriate knowledge or training in health, physical activity and sport is a serious problem, easy to remedy with appropriate training.

ANNEX G: FOCUS GROUP QUESTIONS

Topic	Questions
Lifestyle	<p>What are the lifestyles of the target audience?</p> <p>How active are they on the job, at home, at school?</p> <p>Do people have 'leisure, or 'leisure time'?</p> <p>What do people do for recreation (including religious, cultural activities)</p> <p>What clubs or groups do people participate in?</p>
Community	<p>What are the needs, concerns, priorities of the target audience?</p> <p>How can physical activity promotion address community concerns?</p> <p>What behaviour is acceptable or desirable this community?</p>
Culture and Religion	<p>What traditions, customs, religious beliefs support or detract from to promote physical activity and sport?</p> <p>What strategies can be used to overcome barriers while maintaining respect for the belief system?</p> <p>How can traditions be reinforced while promoting physical activity?</p>
History	<p>What health and sport programs have been tried before--have they worked, and why or why not?</p>
Awareness	<p>How aware are people aware of health and lifestyle issues?</p> <p>How aware are they of the health importance of physical activity?</p> <p>How would the population define physical activity, exercise or sport?</p> <p>What is the primary source of health or sport/physical activity information?</p> <p>Do media channels exist that can be used? (radio, TV, written texts)</p> <p>Whose advise to they now receive regarding health? How accurate is the information?</p> <p>Where do people move during the course of a day where they would be likely to see health promotion messages?</p>

Values	<p>What are the life priorities of the population?</p> <p>Do they value health? What do they value most?</p> <p>If they exercise or do sport, why do they do it (e.g., for health? to look good? essential for living? etc.)</p> <p>What is the value or meaning of the physical body?</p> <p>What motivates them to be physically active or sedentary?</p> <p>What would being physically active mean to them?</p> <p>What would motivate them to be more physically active (e.g., time with family, being with community, etc.)?</p> <p>What reasons do they have to NOT be active?</p> <p>What activities are most enjoyable or fun?</p>
Physical	<p>What other risk factors do they have (hypertension, high cholesterol, Health tobacco use, obesity, stress, advancing age?)</p> <p>What physical abilities or limitations do they have?</p>
Skills	<p>What skills would they need to be physically active?</p> <p>What do they need to know to be active?</p>
Social Networks	<p>What significant persons or groups exist in the lives of the target audience (friends, family, co-workers, peers)?</p> <p>How supportive are community elders, supervisors, workplaces. local government leaders to physical activity and sport?</p> <p>How supportive are parents, teachers, schools, clergy, health caregivers?</p> <p>What advice do they now get from health providers about physical activity and health?</p> <p>What other social pressures or peer pressures influence their actions?</p> <p>Who are their role models (who would be good ones for physical activity and health?)</p> <p>Who could give them convincing and believable information about physical activity and health?</p>
Environments	<p>What programs or efforts are currently underway to promote physical activity in the target population?</p> <p>What programs or recreational opportunities are available to the public at no cost or little cost and/or do not require equipment to participate? Who do they reach and how effective are they?</p> <p>Are recreational facilities maintained, safe, and attractive?</p> <p>What natural resources are available in the geographic area (lakes, seas, trails, mountains).</p> <p>What untapped or under-utilised resources might be available to the community (shopping malls, pedestrian restricted streets, school grounds, vacant land, etc.).</p>
reach	<p>What untapped financial resources exist from public or private sectors to help the target audience?</p>

PHYSICAL ACTIVITY AS A HEALTH OBJECTIVE

One approach is to provide a general recommended standard of activity level, necessary for health, that is achievable and is easily understandable and conveyed to all

World Health Organisation recommends the following standards:

Standard 1. Daily physical activity [or sport] is essential for health and well-being.

Based on the recommendations of WHO and FILMS (the International Federation of Sports Medicine), and in concurrence with recommendations from the US and Finland, the objectives of national policy and programs relating to physical activity and health should be based on the goal of increasing the average energy output (frequency, duration and intensity) of the habitual activity to a level appropriate to a person's capacities, needs and interests.

'Physical Activity' here refers to leisure sport or recreation activities, or discretionary activities such as walking or stair-climbing, or moderately housework such as washing windows or floors. As noted earlier, 'sport' per se may or may not be appropriate to use when discussing such a broad array of behaviours. Sport, in the sense of competitive, organised activities requiring equipment and special locations may be a limited way to promote physical activity in developing countries where resources for such formalised sport are few. Gain political support from the ministry of health for the standard of daily physical activity for health is essential to secure the resources needed to run national promotion efforts.

Realisation of this objective involves knowledge and acceptance of the importance of physical activity daily for healthy lifestyle on the part of citizens. Mass media campaigns, in conjunction with community programs and events, help to establish this standard nation wide.

Standard 2: Every citizen should accumulate 30 minutes of moderate physical activity on all, or most days.

There is clear support to the health benefit and very low health risk of habitual, daily activity at moderate levels, for CVD prevention. Based on the 'dose response' effect seen in large epidemiological studies, it is clear that from a population point of view, small changes among those most sedentary can have important implications for the health of citizens and for health services planning.

Communication of this standard requires careful definition of the behaviour that is necessary to achieve health.

30 minutes of accumulated activity is recommended by the US Public Health Service, WHO and the International Federation of Sports Medicine.

Moderate Physical Activity refers to large muscle movement that can occur during the course of a day, such as in transportation to and from work by foot, bicycle or rowing boat, or housework such as washing floors or wood gathering or chopping or in leisure time, such as walking, or in organised sports such as tennis, soccer or bowling. It may be appropriate in developing countries to identify traditional, religious or cultural behaviours such as games, play, dance that fall in the category of 'moderate activity'. For subpopulations that already meet this standard by virtue of the demands of daily life at work or home or community, special approaches should be developed that reinforce in children the importance of physical activity behaviour and health through the lifespan.

Standard 3. Every citizen should have an opportunity to obtain skills to be physically active appropriate to their age, sex, location and physical condition.

This standard refers to educational opportunities to develop skills and the access to equipment and environments that allow opportunities for participation and skill development, particularly among those who experience environmental, social, economic or personal barriers to participation.

RESOURCES FOR STATEMENTS, PROCLAMATIONS, REPORTS AND OBJECTIVES:

American College of Sports Medicine. Summary Statement: Workshop on Physical Activity and Public Health. Sports Medicine Bulletin 28(4):7, 1993

American Heart Association, Position Statement on Exercise: Benefits and Recommendations for Physical Activity Programs for All Americans. 1992.

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Annex B. References:

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 National Center for Chronic Disease Prevention and Health Promotion
 Centers for Disease Control and Prevention
 3447 Buford Highway
 Atlanta Georgia 30341-3742
 Phone (770) 488-5080 Fax 488-5969

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