

# **AVOIDING HEALTH RISKS THROUGH PHYSICAL MOVEMENTS: SIGNIFICANCE AND ANALYSIS**

**Yasmeen Iqbal, Aslam Aziz Ghori,  
Aslam Pervez Memon and Umaid Ali Rind**

## **Abstract**

*The major objective of undertaking this alarming issue wide spread in our society has been physical inactiveness among its citizens that has endangered their lives of citizens. Our way of life is usually attacked with darkness and fortune reports warning us that communicable diseases in Pakistan are leading killers, followed closely by heart attacks and cancer. Further, there is a worldwide epidemic of diabetes and also warn about HIV, swine flu that creep around every corner to throw us into a deadly disease. But, real biggest threat to our health is physical inactivity, according to epidemiologist and researchers of health and physical education. They highlight it as the gravest public health problem of the 21<sup>st</sup> century in Pakistan is physical inactivity among its masses and poses the greatest risk of ill health to its citizens as they develop to set sedentary life style, instead of moving body in daily life and fear exercising can be deadly for them. Around the world, scores of people participate in some sort of exercise, sports, or physical activity, realizing numerous benefits that one can achieve from undertaking physical activity on a regular basis as exercise is important to keep both body and mind in shape by strengthening the bones, improving flexibility and toning up the muscles of the whole body.*

## **Procedure / Method**

The data was collected from available research material in books available in the seminar library of the Centre for Health & Physical Education and review of literature, Survey through questionnaire administered on 300 male and female respondents (50 = 25 male and 25 female from each city) were selected randomly from the cities of Pakistan namely Karachi, Hyderabad, Lahore, Faisalabad, Sargodha, and Peshawar, to examine the attitude of the people towards physical activity.

### **Introduction and Discussion**

Physical activity is defined as any bodily movement produced by skeletal muscles that require energy expenditure. Physical inactivity is an independent risk factor for chronic diseases, and overall threat is estimated to cause 1.9 million deaths globally. Regular physical activity such as walking, cycling, set of organized exercises or folk dance has significant benefits for health. For instance, it can reduce the risk of cardiovascular disease, diabetes and osteoporosis, help control weight, and promote psychological well-being. Everyone should engage in at least 30 minutes of moderate physical activity every day; more activity may be required for weight control.

Unfortunately, large number of people in mentioned cities of Pakistan, are living sedentary lives and expressing their physical inactivity in daily life, as found in survey as shown in Table-1, increased risk of health problems and early deaths. The study further revealed that over the past few decades, there is extensive need to motivate for physical activity in daily lives of most people in living in urban areas.

It is observed in the survey that around 25 to 35 percent of Pakistani adults are inactive. The majority of them work sedentary jobs, not engage themselves in regular physical activity programs, are generally inactive around their homes and most men don't even do their own house work, and such type of individuals are doubling their risk of developing numerous health issues compared with those who are even moderately active and fit, when we look at major public health problems in the locality.

Many life situations are conducive in producing tension and emotional stress, resulting in worry, anxiety, fear, frustration. It is not easy to figure out the factors involved are more difficult to measure, there is some indication that exercise under the proper

conditions can be helpful in improving emotional stability and mental fitness, just as it aids in developing physical fitness (Dale Mood, et al, 1999). In the early stages, the aim of all games lessons should be to develop the children's locomotor's skills, to help them to understand the terminology of games in a non-threatening medium and to provide enjoyable physical activities which will lay the foundations for healthy and social lifestyle patterns. (Pauline Wetton, 1997)

People just beginning a physical activity adequate program may be prepared for effective persistence. Those who have been regularly active for some time, sound preparation can help reduce risk of injury and make activity more enjoyable. It is hoped that a person equipped with good information about preparation will become involved and stay involved in physical activity for a lifetime. For long-term maintenance, physical activity must be something that is a part of a person's normal lifestyle. Some facts that will help prepare for and make physical activity parts of normal routine are presented in this concept. (Charles B. Corbin, et. al., 2003)

Dr. Blaire- professor of exercise science and epidemiology of USA, one of the world's leading experts on exercise and its health benefits, his enormous work involves the Aerobics Center Longitudinal Study (ACLS) that started in 1970, keeping record of the participants medical histories, measured the participants' body composition and body mass index (BMI) and every volunteer followed by a stress test. The study identified the fitness level of the research subjects has turned out to be a significant predictor of life spans. In a follow-up study of participants concluded a poor fitness level accounted for about 16 percent of all deaths in both men and women, and these were deaths that most likely would have been avoided if these people had simply spent about half an hour a day walking. This percentage of deaths was significantly higher than other risk factors were considered, including obesity, smoking,

high cholesterol and diabetes. It was also found that men who were only moderately fit lived six years longer than men who would qualify as sedentary persons.

The investigations further revealed that exercise can also help beat breast cancer, An examination of women patients who were very fit, averagely 55 percent of them less likely to die from breast cancer than women who were not active and in good shape. This huge reduction in breast cancer deaths was calculated after the researchers controlled for BMI, smoking, family history of breast cancer and other possible risk factors, also explained recent emerging evidence shows exercise is good for brain health and can delay the mind's decline. Where as in Pakistan no such exercise has under taken to get statistics of physical activity of the persons, keeping track of the participants medical histories, scientists periodically have measured the participants' body composition and body mass index (BMI) and a stress test.

The physiological, psychological, and social benefits of participation in physical activities have long been proclaimed by physicians, physical educators, and recreation directors, and it appears that their advice is receiving the public's attention. Most evidence suggests that the number of people engaging in regular physical activity is higher than in the past, although it is still considerably lower than the goals set by national health agencies. (Dale Mood, et. al., 1999)

We need numerous changes to promote more physical activity for all, including public policies, changes in the health care system, promoting activity in educational settings and worksites, and social and physical environmental changes where male and female feel comfortable walking, I believe physical educationists can help develop better lifestyle change to help people be more active by involving them sports and other physical exercises to be

carried out academic institutions, TV programs, Internet through other modern technological methods.

### **Exercise help cognitive function**

One of the most exciting areas of exercise is the investigation of cognitive function. The scientists have learned so far is that brain neurons, the special cells that help you think, move, perform all the bodily functions that keep you alive, and even help your memory, all increase in number after just a few days or weeks of regular activity. In a study where researchers used an MRI machine to measure the amount of brain tissue in adults 55 years of age and older, they found, consistent with other studies of aging and brain volume, that there were substantial declines in brain tissue density as a function of age in areas of the brain responsible for thinking and memory, but importantly, the losses in these areas were substantially reduced as a function of cardiovascular fitness. In other words, the fittest individuals had the most brain tissue.

In most of the Asian nations including Pakistan's activity ratio in urban area for physical activity is poor in older adults, the physically fit individuals have the highest scores on tasks like coordination, scheduling, planning, and memory. The reports on American adults older than 65, indicates that the incidence of dementia ( mental illness) in individuals who walked three or more times per week have 35% lower than those individuals who walked less than three days per week. But, the percentage of Pakistani people on the trait of physical activity is much below the American nation, and responsible persons in the government must take necessary measures to improve this alarming situation to protect them from these health issues.

### **Work out may improve mood**

The studies suggest that as many as 14% of males and 18% of females over age 55 are depressed. It has been documented that exercise can alleviate symptoms of depression in younger adults and even compete with the effects of anti-depressant medication or psychotherapy in terms of effectiveness, but unfortunately there is very little research on the effects of exercise and depression in older adults. It would be fair to say is that exercise has a vital impact on mood-elevating effect in most adults, whatever their age, even if it is not the cure for depression in the elderly people. If, talked to most anyone who exercises, no matter what their age, and they will report feel-good after exercise. It may be from getting the heart beating or the blood pumping, or invigorating brain cells, or simply getting out in the fresh air, a good dose of exercise typically improves mood, it is recommended virtually for everyone.

### **Aerobic exercise**

(Walking, jogging, folk-dancing, biking, swimming, etc.):

To promote and maintain health, older adults need moderate-intensity aerobic physical activity for a minimum of 30 minutes five days each week or vigorous intensity aerobic activity for a minimum of 20 minutes three days each week. The moderate intensity is when you feel warm and slightly out of breath, and vigorous is when you feel out of breath and sweaty.

Resistance exercise (weight lifting, calisthenics) promote and maintain health and physical independence, older adults will benefit from performing activities that maintain or increase muscular strength and endurance for a minimum of two days each week. It is recommended that 8 to 10 exercises be performed on two or more nonconsecutive days per week using the major muscle groups.

Flexibility exercise maintain the suppleness necessary for regular physical activity and daily life, older adults perform activities that maintain or increase flexibility at least two days each week for at least 10 minutes each day reduce risk of injury from falls, older adults with substantial risk of falls (for example, with frequent falls or mobility problems) should perform exercises that maintain or improve balance.

### **Extend Energy**

The exercise working out on a regular basis, your body becomes more efficient at burning calories. This gives you more energy throughout the day; Increased Metabolism increased physical activity through working out leads to more muscle mass, which in itself leads to a higher metabolism. As per some studies, every extra pound of muscle allows you to burn anywhere from 50-100 calories when at rest; Improved Muscle Tone Physical activity, especially weight training allows you to change the shape of your body.

The muscle is denser than fat, one can get bigger or smaller gaining more muscle mass; better health increased exercising leads to strengthen the immune system; it means that one is less likely to get sick, when exercising the right amount normal physical activities develop to become the system for increasing respiratory capacity to improve the digestive system, and also helping improve the nervous system. The importance of physical recreation particularly for children and adults recognized by the medical occupation that such healthful participation in physical recreation has beneficial effects upon physical condition and appearance of the individuals. (Deepak Jain, 2002)

### **Physical, Social and Emotional Benefits**

Physical walking also help intensively child's physical well-being and those who are actively involved in a sport are more

likely to describe themselves as being in good physical health than students who do not participate in sports. Preferably early morning walk is a rewarding experience as air is fresh and free of dust and smoke. It is the only time the roads are not crowded, while one walks worries and anxieties by and large fade away. The feet stride out in a joyful rhythm and the sheer delight of movement is enough to refresh us for the rest of the day. A walk in a big park or on the bank of a river is even more refreshing, enhance many folds as morning walk strengthen the body system. (Piko & Keresztes, 2006)

The individuals, who walk and moderately exercise regularly in the early morning, as observed, get immense incentive for longevity of life that crop up from balanced exercise and stride. Walkers have less incidence of cancer, heart disease, stroke, diabetes and other killer communicative diseases. They live longer and get mental and spiritual health, providing a road map of health benefits by walking regularly and reducing mentioned health risk, to great extent. It is a gentle, low-impact exercise that can ease you into a higher level of fitness and health, and is one of body's most natural forms of work out. It is safe, simple, doesn't require to performance, and the health benefits enormous. It is also necessary for body to maintain, repair and improves itself; strengthen bones; bring flexibility; tone up muscles; helps to excrete waste matter from body (Nonis, K., 2005). Physical fitness provide youth are undoubtedly important; the social benefits may bring the attention of children towards sports and other physical activities, social gatherings to spend time with friends outside of school, which may be more important to them than knowing they are physically active; as life experience through social interaction are tremendous. (Harrison & Naraya, 2003). Social interaction teaches youth to coordinate, resolve conflicts and communicate effectively with their peers.



Emotional growth is also important for youth. Sometimes, the emotional development of youth is hindered because of the physical and/or emotional absence of parents. Sports provide youth with opportunities to interact with a caring and supportive adult (Harrison & Naraya, 2003). Adult support outside the family is a major protective factor for high-risk youth. The interaction a child has with his or her coach helps to improve self-esteem as well as lower the chance of depression (Harrison & Naraya, 2003).

Sports team membership can also help increase a child's self-worth, especially when the emphasis is on group or team success, rather than individual achievement. Youth of all ages, including those in high school, are likely to receive an end-of-the-season trophy for participating in the team sport. Receiving a trophy with their teammates is intended to help youth feel a sense of accomplishment, teamwork, and recognition.

### **Results:**

Table 1 indicates the perceptions of female & male respondents towards Physical activity. Male respondents are more regular on daily exercise than female. However both have very strong opinion in favor of reducing depression through physical activity. As regards to safe environment in their surroundings, showed different opinions and reservations about safety, on parent's attitude the females are more reluctant than male respondent regarding participation in physical activity.

**Table -I**  
**Mean Demographic Data of Male & Female Respondents on**  
**Attitude Towards Physical Activity**

Traits	Karachi N=50		Hyderabad N=50		Lahore N=50		Faisalabad N=50		Sargodha N=50		Peshawar N=50	
	M-25	F-25	M-25	F-25	M-25	F-25	M-25	F-25	M-25	F-25	M-25	F-25
	%	%	%	%	%	%	%	%	%	%	%	%
Daily Leisure Time Spent by me	40	20	32	24	40	28	24	8	24	8	60	8
Habit of Daily Exercise	80	40	32	12	80	40	48	8	32	8	48	8
Available Exercise Partner	48	16	24	8	56	32	28	8	32	8	36	12
BMI Test	28	12	20	8	40	16	8	0	12	0	12	0
Available Physical Activity	68	48	60	28	80	68	32	8	36	8	72	20
Time spent on exercise (thrice a week)	56	28	44	20	84	64	40	24	11	24	32	12
Physical Activity reduce depression	84	40	80	32	84	56	68	32	52	40	80	56
Available Safe Environment in surroundings	36	12	44	48	36	16	28	24	32	16	20	8
Positive Societal attitude towards physical activity	40	16	28	12	56	20	48	12	36	16	24	4
Positive Parents Attitude towards physical activity	48	20	24	16	80	56	44	16	52	12	20	4

**Table -II**  
**COMPARATIVE ANALYSIS OF MALE & FEMALE**  
**RESPONDENTS OF VARIOUS CITIES OF PAKISTAN ON**  
**PHYSICAL ACTIVITY**

Traits	Female	Total %	Male	Total %
Daily Leisure Time Spent by me	24	16%	55	36.66%
Habit of Daily Exercise	29	19.33%	80	53.33%
Available Exercise Partner	21	14%	56	37.33%
BMI Test	9	6%	30	20%
Available Physical Activity	45	30%	87	58%
Time spent on exercise (thrice a week)	43	28.66%	75	50%
Physical Activity reduce depression	64	42.66%	102	68%
Available Safe Environment in surroundings	31	20.66%	64	42.66%
Positive Societal attitude towards physical activity	20	13.33%	58	38.66%
Positive Parents Attitude towards physical activity	31	20.66%	67	44.66%

Table-II indicates the cumulative percentage of 150 Male and 150 Female randomly selected respondents from various cities of Pakistan as mentioned in Table-I.

### Conclusion

Sports provide numerous opportunities for children and teenagers to grow socially, emotionally, and physically. Furthermore, they also allow youth to learn and practice in a competitive environment. While sports may increase children's positive social interaction with adults and one another, they can also create stressful environments for children. For example, adults may place unrealistic pressure on their children to perform. Parents and children must find a balance in regard to how many extracurricular activities children participate in. The moderate walking is necessary for body to maintain the strength of bones, bring flexibility and tone up the muscles and team sports participation can be a catalyst tool that helps children grow and succeed in their everyday lives and in the future.

## References

- Charles B. Corbin, et, al. (2003) Concept of Physical Fitness. New York, McGraw Hill, 11<sup>th</sup> Edition, p.36
- Dale Mood, Frank F. Musker and Judith E. Rink, (1999) Sports and Recreational Activities. McGraw-Hill, New York, 12<sup>th</sup> Edition, p. vii & p.02
- Deepak Jain, (2002) Physical Education and Recreational Activities. New Delhi, Khel Sahitya Kendra, p. 98
- Harrison, P., & Naraya, G. (2003). Differences in behavior, psychological factors, and environmental factors associated with participation in school sports and other activities in adolescence. *Journal of School Health*, p.113
- Nonis, K. (2005). Kindergarten teachers' views about the importance of preschoolers' participation in sports in Singapore, *Early Child Development & Care*, p. 175.
- Pauline Wetton, (1997) Physical Education in the early years. London, Routledge-p.39
- Piko, B., & Keresztes, N. (2006). Physical activity, psychosocial health, and life goals among youth, *Journal of Community Health*, pp 136-145