

Physical Activity in Women and Health Problems

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Abstract—Physical activity is defined as any bodily movement produced by skeletal muscles that require energy. Regular physical activity can improve women's health and help prevent many diseases and conditions that lead to death and disability for women around the world. Many women suffer from diseases that are associated with inadequate participation in physical activity, like, Cardiovascular, Diabetes, Osteoporosis and Breast Cancer. Physical Activity improves psychological health by reducing levels of stress, anxiety and depression. Physical activity can contribute to building self-esteem and confidence and can provide a vehicle for social integration and equality for women. Women generally indulge in three types of physical activity – namely Sports and Active recreation, Active transport and Occupational Activity. Physical activity is a gendered issue because the context of women's lives can impact on their ability to participate in regular physical activity. Physical inactivity is more prevalent among girls and women than their male counterparts. Many factors hinder the participation of women in physical activity. The income of women is often lower than that of men and therefore the costs of access to physical activity facilities may be a barrier, Women often have a workload in the home and care-giving roles which may limit the time available for them to engage in physical activity, Women who have limited mobility may be unable to travel to health centres. Safety issues may be a constraint for women to indulge in physical activity. Cultural expectations and their perception of body image may restrict them in certain forms of physical activity. Although in principle women should be encouraged to increase their physical activity, it is important not to overlook the fact that often in rural and in low income urban areas women may be already physically exhausted by other forms of day-long "occupational" physical activities

1. INTRODUCTION

Everyone benefits from physical activity. People of all ages, from children to older adults, pregnant and postpartum women, people with disabilities and members of every racial and ethnic group. Physical Activity has also been associated with improved psychological health by reducing levels of stress, anxiety and depression. This is particularly important for women who demonstrate an incidence of depression that is reported to be almost double that of men in both developed and developing countries. It has also been suggested that physical activity can contribute to building self-esteem and confidence and can provide a vehicle for social integration and equality for women in society.

Physical activity is a gendered issue because the context of women's lives can impact on their ability to participate in regular physical activity. Women face numerous barriers to being physically active including caring responsibilities, body image and perceptions of safety.

Change needs to occur at the societal level to address current gender roles and how they can limit women's ability to be physically active and maintain health.

2. WHAT IS PHYSICAL ACTIVITY?

Physical activity is defined by the World Health Organisation as 'any bodily movement produced by skeletal muscles that require energy expenditure.

3. FORMS OF PHYSICAL ACTIVITY

Physical activity encompasses several types of activities including Sport and active recreation, Active transport and Occupational activity.

A substantial portion of Indian women participate in organised sport or active recreation, which includes 'non sports' such as bush walking and aerobics. The most popular forms of sport and active recreation for women are walking, aerobics/fitness, swimming, netball and tennis. The top three forms of physical activity for women are non-competitive in nature and this is an element valued by women.

Active transport involves expending energy to get from one place to another and includes walking, cycling or other incidental exercise. Active transport can be an alternative to car travel and increases daily physical activity and reduces greenhouse emissions. Other benefits include an increase in the sense of community and improved mental health.

For women in areas that are well serviced by public transport, active transport can be an effective way to increase daily physical activity levels. Active transport is often not viable for women residing in areas with poor public transport links and few services within walking distance. This is the situation for many women living in new outer suburban communities as the growth of these areas has not been matched by the provision of public transport infrastructure.

Occupational activity includes physical activity that occurs in the course of paid or unpaid work and is dependent on the type and nature of work. Occupational activity in paid work can contribute to increased levels of physical activity although it can also contribute to women's reduced ability to participate in more enjoyable physical activity due to tiredness. However, increasingly time spent in many workplace environments is sedentary. A study looking at workers in office, retail and call centre environments showed that sedentary time was significantly greater on workdays.

Unpaid work also factors heavily in women's lives with many women fulfilling multiple care-giving responsibilities, including for children and older relatives, and taking responsibility for meal preparation and cleaning. This can lead to women neglecting their own health and not having the energy or the time to participate in beneficial levels of physical activity.

4. BENEFITS OF PHYSICAL ACTIVITY FOR WOMEN

The physical health benefits of physical activity are clear. They include lower blood pressure and cholesterol and maintenance of a healthy weight. Some other examples of benefits include improved mental health and wellbeing, social engagements, enhanced sleep and reduced risk of fractures.

Regular physical activity plays a significant role in improving moods and subsequent mental health has been shown to relieve symptoms of depression. These benefits can be experienced by those with a diagnosed mental illness as well as the general population. The mental health benefits of physical activity frequently motivate those who are already physically active to maintain their routines. The benefits of physical activity on mental health can be achieved even in the absence of fitness gains. This may be due to factors including increased social engagement and increased exposure to sunlight.

Social engagement is another key benefit of physical activity, and for women this often motivates continued participation in physical activity. Regular group exercise is found to be a means of social support, especially for older women.

Improved quality of sleep is related to women's participation in physical activity and it is an important marker of quality of life. People, who are physically fit fall asleep faster, sleep better and are less tired during the day. Women who participate in regular physical activity sleep more and experience a better quality of sleep than women who are sedentary.

There are additional benefits for older women who remain physically active. Regular physical activity aids muscle strength, aerobic capacity, reduction of fracture risk and general wellbeing. Strength training can enable older women to maintain their independence and ability to do day-to-day tasks and leisure activities through reducing the risk of

developing osteoporosis. Physical activity is associated with maintaining independent function over time, irrespective of increasing age.

5. HEALTH IMPLICATIONS OF PHYSICAL INACTIVITY

Inadequate levels of physical activity in women and girls are linked to obesity which can contribute to a number of interrelated health issues. These include earlier onset of puberty, polycystic ovary syndrome (PCOS), gestational diabetes, type 2 diabetes, cardiovascular disease and osteoporosis.

Precocious puberty is one of the earliest expressions of poor health related to inadequate levels of physical activity and obesity. Young girls who are obese can develop precocious puberty, defined as puberty starting before age eight. This early sexual maturation is 10 times more common in girls and has physical, psychological and social implications. Girls with precocious puberty are at increased risk of developing polycystic ovary syndrome (PCOS) later on during puberty.

Women who are overweight are also more likely to develop polycystic ovary syndrome (PCOS), a hormonal disorder that affects up to 10 percent of all women. Women with PCOS may experience problems when trying to conceive and are far more likely to develop gestational diabetes when they are pregnant. There is also a strong association between PCOS and type 2 diabetes with 50-70 percent of women with PCOS experiencing high insulin levels caused when cells don't respond effectively to insulin. Women with PCOS experience worse symptoms when they are overweight. Physical activity has a role to play in both the prevention of PCOS and as an important aspect of managing the disorder.

Type 2 diabetes is now recognised as fastest growing chronic disease. Women who are inactive are at risk of developing type 2 diabetes as physical activity helps to reduce insulin resistance. For women who are overweight, losing weight is one of the most effective ways of reducing the risk of developing type 2 diabetes. Even a small amount of weight loss, for example five kilograms, improves the body's ability to use insulin.

Gestational diabetes is a temporary form of diabetes experienced by 3-8 percent of pregnant women, and women who have had this condition are at increased risk of later developing type 2 diabetes. Most cases of gestational diabetes can be treated with changes to diet and physical activity alone, however some cases require insulin treatment. As gestational diabetes disappears after childbirth, many women do not make any long term changes to their physical activity or diet. This suggests that information and support given to women during and after pregnancy regarding the role of physical activity in preventing and managing gestational diabetes is vital. Regular exercise before and during pregnancy reduces the odds of giving birth to newborns with excessive birth weight,

which is linked with complications for both the mother and the infant. Many women do not receive adequate information from health professionals about how physical activity can be safely incorporated during pregnancy. Physical changes during pregnancy may be perceived as additional barriers to regular physical activity.

Physical activity is essential for building and maintaining healthy bones and therefore vital in the prevention of osteoporosis. Osteoporosis results in reduced bone density and strength, leading to increased risk of fracture from an event where a healthy bone would not be expected to break. This chronic disease is far more common among women (85 percent) than men (15 percent) and mostly occurs in those aged 55 years and over. Osteoporosis is likely to be under-recognised as it has no symptoms and its effects are mainly seen through fractures which are a major cause of morbidity among older women. The impacts of a fracture are wide ranging and can include pain, loss of function, emotional distress and loss of independence.

Cardiovascular disease (CVD) is the leading cause of death, and women make up 55 percent of these deaths. Of women who have been diagnosed with heart disease, 66 percent are overweight or obese. People who are not physically active are almost twice as likely to die from coronary heart diseases as those who are. A significant amount of CVD is preventable through reducing risk factors such as being overweight or obese, physical inactivity, smoking, poor nutrition, high blood pressure and high cholesterol. Physical activity also has a role in the prevention of cancer. There is evidence that physical activity reduces the risk of developing bowel (colorectal) and breast cancer, the two most common cancers in women. Most medical bodies' recommends up to hour of moderate activity daily or 30 minutes of vigorous activity to reduce the risk of cancer. However, this level of physical activity may be difficult to achieve, especially when time constraints are a barrier to regular physical activity for many women. Across all the above health issues related to physical inactivity, women experience earlier repercussions of their health behaviours. Typically, the onset of poor health and chronic disease is at an earlier age for women compared to men. Physical activity has a key role to play in delaying or preventing the development of chronic disease and improving women's quality of life as they age.

Participation in physical activity at levels that provide health benefits will not prevent all women from developing health conditions but can be an important aspect in the management of chronic conditions.

6. BARRIERS TO PHYSICAL INACTIVITY

Regular physical activity is vital for both women and men, however there are differences in the barriers to participating in physical activity. Social, cultural, economic and political factors impact on women's health and their ability to be physically active.

Women experience many and varied barriers to participating in physical activity. These include time, caring demands, lower socioeconomic status, body image, safety and urban planning and existing health conditions. Often the barriers are connected, as is the case with caring demands and lack of time. Some women experience more than one difficulty when aiming to be physically active. Women's multiple roles both in and out of the paid workforce can be the cause of some of these barriers as women may put others' needs before their own.

7. LACK OF TIME

Women often cite a lack of time as a barrier to their participation in physical activity. Work and study commitments contribute to a lack of time for physical activity for many women. In addition to these commitments, women commonly have responsibility for organising a household and others within it. The support of others within their household to facilitate women's participation in physical activity is a significant enabler as women are often more time poor than men.

8. PARENTING/ CARING DEMANDS

The social construct of gender can mean that women do not reach adequate levels of physical activity due to their roles in paid and unpaid work. This extends to family commitments which are a barrier to physical activity for women more often than they are for men. Many women attribute insufficient time due to family commitments as their main reason for not participating in sports or physical recreation. People with at least one child at home were 20 percent less likely to be 'sufficiently' active than those without, and as women are more commonly the primary carers of children, they are more likely to be physically inactive.

9. LOWER SOCIOECONOMIC STATUS

People with lower socioeconomic status (SES) are less likely to be physically active than those with a higher SES. The circumstance surrounding women of varying SES influences their participation in physical activity. For women of low SES, physical activity can be a necessity rather than a choice. Physical activity is required in their transport and within their paid work. Women of low SES often do not experience the same benefits of physical activity such as social interaction and are more likely to have negative perceptions of physical activity. Women from high SES groups have more opportunity to choose the form of physical activity they are involved in and this is often structured and occurs during their leisure time.

Women with a lower SES may encounter a number of barriers to participation in physical activity. Areas of lower SES are often at a greater distance from metropolitan regions with less access to public transport and other services. Specific

approaches would be required within preventative activities to engage this group of women to enable them to increase their physical activity. These approaches could include increasing perceptions of safety within areas of low SES and increasing access to facilities that enable women to be active

10. BODY IMAGE

There are many different factors which influence women's body image including expectations of, and pressure from, family, peer groups, media and society. Both women and men experience social pressure to achieve an idealised physical form. While men in Western culture aim for a larger, more muscular build which increases their need to be physically active, this is not the case for women. The ideal form for women in Indian culture is a thin build. This focus on thinness reinforces the notion that women are ideally fragile and weak and does not encourage physical activity to be healthy and able. Although body image impacts on the health and wellbeing of women throughout their lifecycle, young women aged 15-22 years have more severe body dissatisfaction. While positive body image promotes physical and mental health, when body image is negative, it can become a barrier to participation in physical activity. Body image dissatisfaction has been associated with decreased healthy behaviour, including physical activity. Women may feel too self-conscious of their bodies to participate in physical activity such as swimming or group sport. Some women report feeling 'too fat' to exercise as well as too shy and too embarrassed. Overweight women also experience prejudice and discrimination that are further barriers to participation in physical activity. This discrimination impacts on body image and can lead to total withdrawal from being physically active

11. EXISTING HEALTH CONDITIONS

Existing health conditions can also be barriers to women to becoming involved in physical activity. As population ages, more people will develop a chronic condition and a substantial number will develop more than one. Women with existing health conditions are advised to consult a health professional prior to becoming involved in regular physical activity, potentially an additional barrier. Women's existing health conditions may also limit the range of choices of physical activity that they are able to participate in.

12. SAFETY AND URBAN PLANNING

The ability to move in and out of a community as well as the design of movement within a community can impact on the health of residents. Appropriate urban design ensures residents have easy access to amenities and recreation facilities, and can help foster a sense of community and connectedness. Facilities such as seating along walking paths, well lit paths and clean public toilets can increase women's use of public spaces for physical activity. Today's environments do not often encourage active lifestyles, instead

reinforcing sedentary behaviour and car dependence. Careful design and people-friendly environments can promote active lifestyles by encouraging walking, cycling, public transport and active recreation. Fear of victimisation and crime is widespread among women and these influences the travel patterns of women who use public transport. Design elements that consider safety enable women to be more physically active and participate fully in their communities. Some design elements to improve women's safety include locating bus stops in centres of activity rather than more isolated locations, ensuring adequate lighting on train platforms, bus stops and streets, and ensuring that waiting areas are visible to those in the surrounding area rather than blocked by advertising. Perceptions of safety influence the nature and the extent to which people use their local environment. Design that aims to reduce crime, through better lighting can enhance the physical, mental and social wellbeing in a community. Women's concerns about personal safety, higher levels of traffic and crime have a great influence on their participation in walking. Communities with footpaths in well lit areas are more conducive to women walking within their neighbourhoods. Fear for personal safety leads women to use precautionary measures, for example, completely avoiding walking, bicycling and particular transit environments. Safety concerns have greater impact on women from lower socioeconomic groups who tend to live in higher crime neighbourhoods, work at odd hours and typically have less transport options.

13. APPROPRIATE PHYSICAL ACTIVITY FOR WOMEN

Although in principle women should be encouraged to increase their participation in physical activity, it is important not to overlook the fact that often in rural and in low income urban areas women may be already physically exhausted by other forms of day-long "occupational" physical activities. Women in these areas may need a better balanced set of support actions such as adequate nutrition, income generation initiatives, advice on physical activities most relevant to their specific conditions and adapted leisure pursuits. Physical activity need not be strenuous to achieve health benefits. Women of all ages benefit from a moderate amount of physical activity, preferably daily. The same moderate amount of activity can be obtained in longer sessions of moderately intense activities (such as 30 minutes of brisk walking) as in shorter sessions of more strenuous activities (such as 10 minutes of jogging). Additional health benefits can be gained through greater amounts of physical activity. Women who can maintain a regular routine of physical activity that is of longer duration or of greater intensity are likely to derive greater benefit. However, excessive amounts of activity should be avoided, because risk of injury increases with greater amounts of activity, as does the risk of menstrual abnormalities and bone weakening. Previously sedentary women who begin physical activity programs should start with short intervals (5-10 minutes) of physical activity and gradually build up to the

desired level of activity. Women with chronic health problems, such as heart disease, diabetes, or obesity, or who are at high risk for these conditions should first consult a physician before beginning a new program of physical activity. Women over age 50 who plan to begin a new program of vigorous physical activity should first consult a physician to be sure they do not have heart disease or other health problems.

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