



Women and physical exercising in Zimbabwe's urban areas. A case study of Marondera

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Abstract

While communicable diseases are still a major problem for most developing countries; non-communicable diseases which were once considered diseases of the white and wealthy people, have also started to haunt developing countries thus adding to the existing burden of dealing with non-communicable diseases. Increased physical inactivity and a lack of physical exercising culture in most developing countries have worked to promote an increase in the occurrence of non-communicable diseases. This study sought to assess the barriers and enablers of physical exercising amongst formally employed women in Zimbabwe's urban areas. This case study was conducted in Marondera urban and it employed a mixed methodology approach. Data were collected from 50 working women and two key informants who were selected using a combination of purposive and simple random sampling techniques. To analyse the data, tabulation, descriptive statistics and thematic analysis were used. Questionnaires were used to gather data from the women participants and interviews were used to gather data from one gym owner and one medical doctor. The study obtained that working women in Marondera are not engaged in any meaningful exercising despite the fact that they are knowledgeable of its benefits. This study recommends that employers and workers' associations incorporate physical activity and exercise programmes into existing workplace safety and health policies and programmes.

Key words: communicable diseases, employed, non-communicable diseases, physical activity, physical exercise

Introduction

It was previously thought that as countries develop, non-communicable diseases (NCDs) replaced communicable diseases (CDs) as the main source of ill-health. Infectious diseases as well as malnutrition, poor maternal and child health are usually associated with poverty, while non-communicable diseases (NCDs) are traditionally considered to be diseases of affluence (Schneider et al, 2009). NCD cases are however on the increase globally and developing countries are faced with a burden of CDs, NCDs and socio-behavioural illness.

NCDs are a result of physical inactivity, smoking, unhealthy diet and excessive alcohol consumption (GIZ, 2011). In 2005, NCDs accounted for about 35million deaths and the deaths were projected to increase by 17% by 2015 (WHO, 2010). In addition, WHO (2010) also affirms that 80% of the 35million NCD deaths occurred in developing countries and also that by 2030, 8 out of the 10 leading causes of death will be linked to NCDs.

Lim et al (n.d.) also affirm that unhealthy diets and insufficient physical activity contribute to NCD deaths on a global scale. While levels of physical activity have been relatively high in Africa, they are decreasing and Naik and Kaneda (2015) highlight that there is a link between development

and increasingly sedentary lifestyles. Urbanisation was associated with decreases in population walking levels in Cameroon (Sobngwi, Gautier & Mbanya, 2003) and increasing car ownership was linked to weight gain in China (Bell, Ge & Popkin, 2002). Apart from urbanisation, changes in individual thinking about lifestyle and the social environment may lead to physical inactivity. The social environment may have a gendered influence on physical activity and exercise hence the focus of this study was put on women in Zimbabwe, a developing country in Africa.

The burden from NCDs for developing countries (especially Africa) is expected to rise by 60% by 2020 (World Economic Forum Report 2010 on Global Risks), yet the beneficial effects of physical activity are well known in developed countries and not in developing countries. Physical activity and exercise positively influences other chronic disease risk factors such as blood pressure and obesity. The authors in this paper therefore argue that though both women and men in developing countries are at risk of NCDs, women could be more vulnerable hence focus was put on women. This study thus sought to assess formally employed women's exercising patterns in Zimbabwe's Marondera town.

Statement of the Problem

Non-infectious diseases have been considered diseases of wealthy people and until recently in developing countries, communicable diseases received less attention from donors and governments. But while developing countries are still battling communicable diseases, non-communicable diseases have started to haunt them as well. Though not taken seriously in developing countries, physical activity and physical exercise are important to the combating of NCDs. With the adoption of Western lifestyles physical activity is on the decrease in developing countries. This study therefore, sought to assess exercising patterns for working women in Marondera Urban.

Research Objectives

1. Identify the factors that influence the physical exercising patterns of women in Marondera.
2. Describe the physical exercising patterns of formally employed women in Marondera.
3. Examine Marondera women's knowledge and perceptions on the importance of physical exercise

Research Questions

1. Which factors influence physical exercising patterns of women in Marondera Urban?
2. What are the physical exercising patterns for the working women in Marondera urban?
3. To what extent are women in Marondera knowledgeable of the importance of physical exercising

Scope of the Study

This study focused on Marondera urban and women who are engaged in formal and more sedentary employment including banking, education sector, medical field, and other government ministries. Due to the fact that there are many NCDs, the authors used the term in a more general way and reference was only made to a few NCDs where possible. This study did not delve much into other factors that also influence the occurrence of NCDs among individuals such as genetic factors, smoking, unhealthy diet and excessive alcohol consumption. Though physical activity and physical exercise are not synonymous in this article the terms are used interchangeably but to mean exercises or activities purposely done for the purposes of physical fitness and related benefits.

Review of Related Literature

Physical exercise and Physical activity

According to Caspersen, Powell, and Christenson (1985) the terms physical activity and physical exercise have been used interchangeably but Caspersen, Powell, and Christenson, (1985) also note that physical exercise is not the same with physical activity. Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure (Caspersen, Powell, and Christenson, 1985). Examples of physical activity include recreational or leisure-time physical

activity, walking or cycling, household chores, games, sports or planned exercise, in the context of daily, family, and community activities (WHO, 2010). Among other recommendations, WHO (2010:7) proposes that adults aged between 18-64 “should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate and vigorous-intensity activity”. According to Caspersen, Powell, and Christenson (1985), to sustain life every person is involved in some form of physical activity but the amount or level of physical activity is influenced by choice and therefore varies from one person to another. This therefore means that individual choices will also influence a person’s vulnerability to NCDs.

Physical exercise on the other hand, though not synonymous with physical activity, is a subcategory of physical activity. Exercise is physical activity that is planned, structured, repetitive, and purposive in the sense that improvement or maintenance of one or more components of physical fitness is an objective (Caspersen, Powell, and Christenson, 1985).

Despite the differences between physical exercising and physical activity there are also some similarities between the two. Both physical activity and exercise involve “bodily movement produced by skeletal muscles that expends energy, are measured by kilocalories ranging continuously from low to high, and are positively correlated with physical fitness as the intensity, duration, and frequency of movements increase (Caspersen, Powell, and Christenson, 1985:128).

Importance of Physical Exercise

According to Caspersen, Powell, and Christenson (1985) both physical activity and physical exercise lead to physical fitness. Increased levels of physical activity and or exercise can therefore assist in reducing NCDs such as Cardiovascular disease (CVD), cancers, chronic respiratory diseases and diabetes. In fact, according to NCD Alliance (n.d.) CVDs are the largest killer of women globally. According to Igwesi-Chidobe, Godfrey and Kengne, (2015) evidence-based clinical guidelines recommend exercise training and promotion of physical activity behaviour changes to control NCDs. Though physical activity and exercise are important in the fight against NCDs, there are three other factors that promote the development of NCDs which are smoking, unhealthy diet and excessive alcohol consumption (GIZ, 2011 and NCD Alliance, n.d.).

Though for some developing countries for example, Zimbabwe smoking and alcohol consumption is not socially and culturally acceptable for women, the NCD Alliance (n.d.) states that WHO estimates that the proportion of female smokers is expected to rise from 12% in 2010 to 20% by 2025 and that deaths due to tobacco use among women is also expected to rise from 1.5 million in 2004 to 2.5 million by 2030. More to that, exposure to second-hand smoking has also put women’s health at risk as the NCD Alliance (n.d.) argues that women in some countries and cultures lack the power to negotiate for smoke free spaces.

Apart from smoking and alcohol consumption, the NCD Alliance, (n.d.) notes that urbanisation has also led to a change in dietary patterns and increased consumption of unhealthy foods. This has fuelled levels of overweight and obesity and is impacting significantly on the health of girls and women, as urban living is also associated with low levels of physical activity than rural living (Naik and Kaneda, 2015). This increases the risks of NCDs (NCD Alliance, n.d.).

According to Mbewu and Mbanya (2006) risk factors such as tobacco use, refined foods and changes in lifestyle have been exported from the Western countries. It is however disturbing to note that though such risk factors have been exported from the developed countries, the issue of increasing physical activity or shifting to physical exercise remains unpopular to many people especially women in developing countries. Though the health benefits of physical exercise are known, the fight against NCDs will not only be addressed through physical activity and exercise but through a myriad of other strategies which consider healthy diets among others.

Factors Influencing Physical Exercising Patterns

The NCD Alliance (n.d.) indicates that disparities between the sexes in physical activity levels exist, during the school years globally. According to WHO (2010), due to cultural and social context of many developing countries, adolescent girls in those countries are less active and place less

value on participating in physical activity. It is true that girls are restrained from practicing regular physical activity, sport and exercise due to a variety of reasons, such as lack of safe and supportive environments, shortage of income and leisure time, negative cultural stereotypes of body image, social norms surrounding dress and mobility or due to the common perception that sport is 'unfeminine' (NCD Alliance, n.d.). Such restraining factors become even more pronounced for adult women especially married women who culturally are not generally expected to be involved in physical exercise and sporting activities particularly in public places. It is therefore, not surprising that the physical exercise industry in many developing countries is male dominated.

Apart from cultural and social norms, lack of knowledge on the importance of physical activity and exercise and the risks associated with unhealthy lifestyles also influences the choices that are made concerning physical exercise. According to the NCD Alliance (n.d.), despite the fact that CVD is one of the largest killer of women globally there is a long held misconception that CVD is a male disease. Such misconceptions therefore influence behaviour patterns and change in as far as lifestyle change is concerned.

More to that, with increasing rates of urbanisation in developing countries, and the commodification of space, very few green spaces are available for physical exercise and those that are available are poorly maintained. Thus many urban areas in developing countries lack safe places for physical exercise (Naik and Kaneda, 2015). Though Naik and Kaneda (2015) were focusing on safe places for children and young people, lack of safe places for exercising also affects adults especially women who already are not culturally expected to exercise in public places.

Lack of time is also another factor that may promote sedentary lifestyles. A study of people with chronic obstructive pulmonary disease (COPD) by Hartman, Nick, Hacken, Boezen, and de Greef (2013) showed that lack of intrinsic motivation as well as the weather and health problems were some of the reasons for low levels of physical activity. Since women are overburdened by multiple roles which include doing household chores, being care givers and their participation in formal employment, this may leave little time available for them to participate and develop a physical exercise routine.

Methodology

This study which employed a mixed paradigm approach was a case study which focused on the town of Marondera. A mixed paradigm or approach is "... the collection or analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of data at one or more stages in the process of research" (Creswell et al, 2003 in Gray, 2009: 204). The research design for this study was case study which enabled the researchers to have an in depth study and understanding of the exercising habits and patterns of formally employed women in Marondera Urban.

The mixed paradigm methodology allowed the researchers to use a questionnaire and semi-structured interviews. The population of the study consisted of all formally employed women in Marondera Urban as well as individuals involved in the health and physical fitness industry. A questionnaire was used to gather data from 50 formally employed women participants in Marondera. Semi-structured interviews were done with one gym owner and one medical doctor in Marondera. The research participants were selected using a combination of purposive and simple random sampling techniques.

For quantitative data (collected through the questionnaire), data was first organised and summarised through the tabulation. Data disaggregation and descriptive statistics (mean, mode and median) were also used to analyse the data. In analysing qualitative data in this study, several steps were followed namely organising the data, immersion in the data, generating categories and themes, coding the data as well as offering interpretations through analytic memos and writing the report.

Findings

Demographic Characteristics of the Respondents

Gender of the respondents. The demographic characteristics of the respondents are shown in Table 1 and Table 2. A greater percentage of the respondents (40%) were in the 31-40years age group

and 28% indicated that they belonged to the 40-50years age group. The results are shown in Table 1. 60% of the respondents also cited that they were married. Marriage for women in African societies may promote weight gain as some view weight gain as a sign that one is happily married. Moreover, in many African societies married couples are usually expected to have children after marriage and as such women may gain weight gain during and after pregnancy. Thus the fact that a significant percentage of the respondents were married also mean that the women may not be more involved in physical activity or exercise due to the social and cultural norms and also other factors imposed on them.

Table 1
Description of Demographic Variables

Age Group	Number of respondents	%
Below 20	2	4
20-30	8	16
31-40	20	40
41-50	14	28
50 and above	6	12
Total	50	100

Level of education of the respondents. All the respondents were highly educated holding some form of educational qualification as shown in Table2. Only 4% had no form of education apart from secondary education. The high levels of education provided may be a result of the fact that the researchers targeted formally employed women. The results also give an indication of Zimbabwe's generally high literacy level and also the Zimbabwean higher education systems which has seen more people being enrolled in institutions of higher learning despite the ailing economy.

Table 2
Level of education of the respondents

Level of education	Number of respondents	%
Secondary	2	4
Certificate	9	18
Diploma	17	34
Degree	12	24
Post graduate qualification	10	20
Total	50	100

Respondents' Physical Exercising Patterns

On being asked about their physical exercise pattern or routine 34% of the respondents indicated that they were involved in some form of physical exercising though there was no exercising pattern or routine at all. However, for physical exercise to yield results in terms of physical fitness WHO recommends that "adults aged 18–64 years should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity" (WHO, 2010: 8). WHO (2004:4) also suggests that "different types and amounts of physical activity are required for different health outcomes: at least 30 minutes of regular, moderate-intensity physical activity on most days reduces the risk of cardiovascular disease".

A greater percentage of the respondents (66%) indicated that they do not exercise at all. Levels of education, marital status and age did not have an influence on the exercising patterns of the respondents. Interviews however indicated that there was no disparity between men and women on gym use or visits though men were considered to be more consistent.

Reasons for Exercising

Those who indicated that they were involved in some form of physical exercise showed that they did it for two main reasons which are to enhance health (74%) and to lose weight (36%). These results show that though no exercise routine was being followed by the respondents they were aware of the purpose and benefits of physical exercise. A study by Hartman, Nick, Hacken, Boezen, and de Greef (2013) obtained that the most reported reason of being physically active was health benefits followed by enjoyment.

Respondents' Knowledge of the Dangers of not Exercising

Respondents were quite aware of the dangers or the unhealthy effects of not exercising as was shown by the responses they gave. A greater percentage of the respondents (96% and 94% respectively) indicated high blood pressure and diabetes as some of the dangers of not being involved in physical exercising. 34% of the respondents also showed that the other effect or danger of not being involved in physical exercise was obesity and being overweight. For respondents, obesity and being overweight were used interchangeably. The results show that the research participants are quite familiar with high blood pressure and diabetes and this is not surprising because high blood pressure and diabetes have become common especially in Zimbabwe. According to WHO (2013) cited in Mutowo et al (2016) type 2 diabetes and hypertension are two prevalent non-communicable diseases (NCDs) in Sub-Saharan Africa (SSA) and Zimbabwe has third highest total cost of diabetes care per year for persons aged 20–79 years, after South Africa and Kenya in SSA (Mutowo et al, 2016).

Respondents' Reasons for not Exercising

A greater percentage (88%) indicated that they lack time to exercise and 38% gave lack of safe environments as the main reasons for not being involved in physical exercising. Key informants however argued that culture was one of the reasons for lack of physical activity or exercise. A study of people with chronic obstructive pulmonary disease (COPD) by Hartman, Nick, Hacken, Boezen, and de Greef (2013) cited that lack of intrinsic motivation among other reasons for physical inactivity. Citing lack of time and proper environments by the respondents in this study are in indication of lack of intrinsic motivation to exercise. Culture and social norms that do not promote physical exercise may cause people who want to be engaged in physical exercise not only to lack the motivation but also to be ashamed of being seen exercising.

Conclusion

Basing on the findings of this study, the researchers made the following conclusions:

- Working women in Marondera Urban are knowledgeable of the health benefits of physical exercising and also the consequences of physical inactivity.
- Despite the knowledge, working women in Marondera are not involved in any meaningful physical exercising.
- The main reasons for not engaging in physical exercise were lack of time and safe places. Culture was also noted to be one of the major barrier to exercising and the researchers concluded that generally women did not have the motivation to take physical exercise seriously.

Recommendations

Based on the conclusions made above, the authors make the following recommendations:

- Physical inactivity is a modifiable factor and therefore employers should incorporate physical activity and physical exercise programmes into existing workplace safety and health policies and programmes.
- Marondera Town Council and also other municipalities in developing countries should consider including safe walking and cycling places during urban planning.
- The Ministry of Health and Child Welfare responsible for health should promote education and awareness on the importance of physical exercising and dangers of not being involved in any form of physical exercising. Such education and awareness programmes should also aim at demystifying the perceived link between driving and being rich.

- Further research on the prevalence of NCDs in rural areas of Zimbabwe is also needed.

References

- Caspersen, C.J., Powell, K. E. and Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public Health Reports*, 100(2), 126–131.
- Creswell, J.W., Plano, C. V., Gutmann, M. and Hanson, W. (2003). *Advances in Mixed Methods Design* in Gray, D. (2009). *Doing Research in Real World*. Sage Publications/London/California
- (GIZ, 2011). *Tackling Non- Communicable Diseases in African Businesses: A Practical Guide On Raising Awareness On Lifestyle- Related Diseases among Employees*. Retrieved from: http://health.bmz.de/what_we_do/Non-communicable-and-infectious-diseases/Good_practices_and_tools/Tackling_Non_Communicable_Diseases_in_African_Businesses/GIZ_Tackling_Non_Communicable_Diseases.pdf
- Igwesi-Chidobe, C.N, Godfrey, E.L. and Kengne, A.P. (2015). Effective components of exercise and physical activity-related behaviour-change interventions for chronic non-communicable diseases in Africa: protocol for a systematic mixed studies review with meta-analysis. *BMJ Open*. Vol 5 issue 8. doi:10.1136/bmjopen-2015-008036
- Jorine E Hartman; H Marike Boezen; Mathieu HG de Greef; Linda Bossenbroek; Nick HT ten Hacken (2010) Consequences of Physical Inactivity in Chronic Obstructive Pulmonary Disease Expert Review of Respiratory Medicine. 2010;4(6):735-745.
- Mbewu, A. and Mbanya, J. (2006). Cardiovascular Disease. In Jamison, D.T., Feachem, R.G., Makgoba, M.W., Bos, E.R., Baingana, F.K., Hofman, K.J. and Rogo, K.O. (2006). *Disease and Mortality in Sub-Saharan Africa*. Washington DC, World Bank
- Mutowo, P.M., Lorgelly, P.K., Laxy, M., Renzaho, A.M.N., Mangwiro, J.C. and Owen, A.J. (2016). The Hospitalization Costs of Diabetes and Hypertension Complications in Zimbabwe: Estimations and Correlations. *Journal of Diabetes Research*. Volume 2016, <http://dx.doi.org/10.1155/2016/9754230>
- Naik, R. and Kaneda T. (2015). Non communicable Diseases in Africa: Youth Are Key to Curbing the Epidemic and Achieving Sustainable Development, Policy Brief Population Reference Bureau. Retrieved from: <http://www.prb.org/pdf15/ncds-africa-policybrief.pdf>
- Schneider, M., Bradshaw, D., Steyn, K. Norman, R. and Laubscher, R. (2009) *Scandinavian Journal of Public Health*, 37: 176–186.
- Temmerman, M., Khosla, R. and Laski, L. (2015). Women's Health Priorities and Interventions. *BMJ*, volume 351. doi: <https://doi.org/10.1136/bmj.h4147>
- The NCD Alliance (n.d.). *Non-Communicable Diseases: A Priority for Women's Health and Development*. Available from http://www.who.int/pmnch/topics/maternal/2011_women_ncd_report.pdf.pdf (23/12/17)
- WHO (2004). *Global Strategy on Diet, Physical Activity and Health recommendation*. Geneva, WHO Press
- World Health Organization (2008). *Global Burden of Disease 2004 Update* Geneva
- World Health Organization (2009). *Women and Health: Today's Evidence, Tomorrow's Agenda*, Geneva
- WHO (2010). *Global Recommendations on Physical Activity for Health*. Geneva, WHO Press. Retrieved from: http://apps.who.int/iris/bitstream/10665/44399/1/9789241599979_eng.pdf (23/12/17)