

WOLKITE UNIVERSITY

COLLEGE OF NATURAL AND COMPUTATIONAL,

DEPARTMENT OF SPORT SCIENCE

The practice and benefits of regular physical exercises among adults living in Gunchire Town; A community based Cross-sectional study

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A research paper submitted to the department of sport science, college of Natural & Computational, Wolkite University in partial fulfillment of the requirements for the degree of Bachelor of Science in sport science.

July/2021

Wolkite, Ethiopia

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Acronyms

BMI: Body Mass Index

SNNPR: Southern Nation, Nationalities and People Region

SPSS: Statistical Package for Social Science

WHO: World Health Organization

Abstract

Background: Regular physical activity of moderate intensity – such as walking, cycling, or doing sports – has significant benefits for health. It improve muscular and cardiorespiratory fitness;improve bone and functional health;reduce the risk of hypertension, coronary heart disease, stroke, diabetes, various types of cancer, and depression;reduce the risk of falls as well as hip or vertebral fractures; andare fundamental to energy balance and weight control.Maintaining regular physical exercise is one of the Health interventions designed to prevent existing high burden of Non-communicable disease and a strategy designed to maintain physically fit and mentally capable healthy community. Therefore, assessing the practice of regular physical exercise and identifying its determinants is very important.

Objective: To assess the practice of regular physical exercise and its health benefit among adults living in Gunchire town, southern Ethiopia, 2020

Methods: A community based cross sectional study was employed in gunchire town from June – September, 2020. All adults that hosted in the town were the study population. The total sample size for the study was 230 and obtained by using single population proportion. Then using simple random method study participants were selected and interview by data collectors. Data will be collected by using structured questionnaire.

Results: of the expected 230 participants, 212 (92%) were responded to the interview.Based on this research, 25% of the study participants have regular physical exercise working with 3 hours of exercise per week. The main reason for regular exercise was for health benefit, for physical fitness (posture) and other related benefits. Most of the participants engage in physical exercise based on their own interest, while some other perform with medical orders.

Conclusion: the habit of physical exercise in this research is better than some of the researches conducted in different parts of the country.

CHAPTER ONE

1. THE PROBLEM AND ITS APPROACH

1.1.Introduction

World Health Organization (WHO) defines physical activity as any bodily movement produced by skeletal muscles that requires energy expenditure: including, activities undertaken while working, playing, carrying out household chores, travelling, and engaging in recreational pursuits. It is not synonymous with "exercise", which is a subcategory of physical activity that is planned, structured, repetitive, and aims to improve or maintain one or more components of physical fitness. Beyond exercise, any other physical activity that is done during leisure time, for transport to get to and from places, or as part of a person's work, has a health benefit. Further, both moderate- and vigorous-intensity physical activity improve health (Who 2010,USDP 2015).

The American Heart Association recommends 30–60 minutes of aerobic exercise three to four times per week. According to WHO, Adults aged 18–64 years, should do at least 150 minutes of moderate-intensity physical activity throughout the week, or do at least 75 minutes of vigorous-intensity physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity. For additional health benefits, adults should increase their moderate-intensity physical activity to 300 minutes per week, or equivalent.Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.Physical activity less than 600 metabolic equivalent tasks (MET) minutes per week is considered as not sufficient to produce health benefits (Who 2010, USDP 2015, Kohl 2012).

Regular physical activity of moderate intensity – such as walking, cycling, or doing sports – has significant benefits for health. It improve muscular and cardiorespiratory fitness;improve bone and functional health;reduce the risk of hypertension, coronary heart disease, stroke, diabetes, various types of cancer, and depression;reduce the risk of falls as well as hip or vertebral fractures; andare fundamental to energy balance and weight control. At all ages, the benefits of being physically active outweigh potential harm, for example through accidents. Some physical activity is better than doing none. By becoming more active throughout the day in relatively simple ways, people can quite easily achieve the recommended activity levels (USDP 2015, Kohl 2012,Lee 2012).

1.2.Historical background of the study

Even though, regular physical exercise have all these benefits large majority of the global community did not engage in regular physical exercise. Hence, the burden of non-communicable disease is increasing in the global community, particularly in developing countries (Kohl 2012,Lee 2012)..Globally, 81% of adolescents aged 11-17 years were insufficiently physically active in 2010. Adolescent girls were less active than adolescent boys, with 84% vs. 78% not meeting WHO recommendations. It differ by region, educational status, level of income, availability of physical fitness centers, population demography, socio-cultural factors and many other factors (USDP 2015, Kohl 2012,Lee 2012).

The Global Recommendations on Physical Activity for Health aim to provide guidance on the dose-response relationship between physical activity and health benefits (i.e. the frequency, duration, intensity, type and total amount of physical activity needed for health enhancement and prevention of NCDs). The primary prevention of NCDs through physical activity, at population level, is the focus of current health strategy ((USDP 2015, Kohl 2012, Lee 2012).).

1.3.Statement of the problem

Despite its tremendous advantages for protection of non-communicable diseases (NCD) like cardiovascular diseases, stroke, type 2 diabetes, and colon and breast cancer and maintaining optimal weight the level of physical activity is low and varies across the globe. It is reported to be 37.1% in Sub-Saharan countries, 34.5% in the Caribbean, 19.1% near East and Central Asia, 19.1% and 26.8% in South Asia and China 26.8% and 28.1% in Scotland. It is even lower than this rate in Ethiopia, where only 17.2% were physically active. The large proportion of population in the glob missed the advantage of regular physical exercise and remains physically inactive (Who 2012, EPHI 2016;Mohammed 2018;Miles 2007)

Globally, around 23% of adults aged 18 and over were not active enough in 2010 (men 20% and women 27%). In high-income countries, 26% of men and 35% of women were insufficiently physically active, as compared to 12% of men and 24% of women in low-income countries. A review by Guthold R et al. in 22 African countries reported that 20% of adults were physically inactive. In Ethiopia, the WHO STEPwise approach to Surveillance (STEPS) survey report for

Addis Ababa showed a slight increase in the proportion of physically inactive adults between 2006, and 2015, 26% versus 28.8% (Who 2012, EPHI 2016;Mohammed 2018;Miles 2007)
Being physically inactive is associated with multiplicity of Non-communicable diseases such as: coronary heart diseases, breast cancer, and colon cancer. Additionally, it accounts for 9% of the global premature mortality. In terms of the burden on the economy, deaths due to physical inactivity contribute to $13.7 billion in productivity losses. Additionally, regarding its impact on an individual's quality of life, physical inactivity accounts for 13.4 million disability-adjusted life years (DALYs) worldwide (Penpid 2015, Poobalam 2012, Ding 2016).

The benefit of physical activity is many folds higher than the cost it may take and being physically active has several benefits for health. The population attributable fraction (PAF) of physical inactivity for coronary heart disease, type 2 diabetes, breast cancer, colon cancer, and all-cause mortality was 5.8, 7.2, 10.1, 10.4, and 9.4%, respectively. A study by Huerta et al. reported that physical activity at workplaces and household chores were strongly associated with a reduced overall and cause-specific mortality and to lower cancer mortality (Penpid 2015, Poobalam 2012, Ding 2016).

One of the most important is a modifiable risk factor for NCD is physical exercise. There are strong pieces of evidence that physical activity increases cardiorespiratory and muscular fitness, healthier body mass and composition, improved bone health, increased functional health, and improved cognitive function. A meta-analysis, on the dose-response relationship of physical activity and mortality, reported that higher levels of total and domain-specific physical activities reduce all-cause mortality (Hureta 2016, WHO 2015).

Physical inactivity is associated with sedentary work and living environments, low economic status and disability. Different investigations globally identified factors affecting physical activity like age, sex, education, and cumulative family income level. Factors like interest, time, convenience, lack of awareness, family influence, poor social support, gender and culture, availability of facilities are qualitatively identified barriers of physical activity. On the contrary, improving fitness, wish to stay in shape, health, supportive environment, peer pressure and access to safe play area are facilitators of physical activity (Hureta 2016, WHO 2015).

Although, assessing adults level of physical exercise is important for decision making. The practice and determinants of regular physical exercise is not assessed in Ethiopia at large and Gunchire town specifically. Therefore, this study is aimed to assess the status of physical activity and associated factors among adults living in Gunchiretown.

1.4. Hypothesis testing

Maintaining regular physical exercise is one of the Health interventions designed to prevent existing high burden of Non-communicable disease and a strategy designed to maintain physically fit and mentally capable healthy community. Therefore,assessing the practice of regular physical exercise and identifying its determinants is very important predict the burden of non-communicable disease, to evaluate the existing system, design solution, to shows trend and to address other predictor which was not addressed before.

1.5. Objective of the study

The General objective is: To assess the practice of regular physical exercise and its determinants among adults living in Gunchire town, southern Ethiopia, 2020

Specific objectives

- To assess thepractice of regular physical exercise among adults living in Gunchire town, southern Ethiopia, 2020
- To identifydeterminants of regular physical exercise among adults living in Gunchire town, southern Ethiopia, 2020

1.6.Significance of the study

Studies conducted to assess the practice of regular physical exercise are very few. On the other hand the settings where the studies were conducted, the socio demographic character of the target population and the design for the research are different which will come up with different results.Moreover, the physical activity of adults in such small town and remote districts where

physical fitness facilities are absent, may be different from what is expected and reported from larger cities. Therefore by considering all these advantages this research focused to assess thepracticeof regular physical exercise and identify its determinants among adults living in Gunchire town, Gurage Zone.

1.7.Delimitation of the study

A lots of factors affect the practice of physical exercise. There are also many health benefits to it. However the study will address only part of it.

1.8.Limitation of the study

Some limitations have been faced during the conduct of this research. As the time was a COVID restriction time, getting the study participants was a problem.

1.9.Organization of the study

The study is organized in to five chapters each with different section of the research including introduction, literature review, methodology, data interpretation and analysis, and references.

1.10. Definition of operational terms

Practice is defined as aerobic exercise performed for 3 hours or more per week

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Magnitude of regular physical activity/inactivity

Accumulation of energy expenditure due to physical activity is what is important to achieving energy balance. Accumulation of physical activity can be obtained in short multiple bouts of at least 10 minutes, or one long bout to meet physical activity expenditure goals for weight maintenance. The evidence is less consistent for resistance training, in part, because of the compensatory increase in lean mass, and the smaller volumes of exercise. There is substantial inter-individual variability with physical activity and weight maintenance; more than 150 minutes of moderate-intensity activity per week may be needed to maintain weight ((Hureta 2016, WHO 2015).

Despite that physical activity has several benefits, the population around the world continue to suffer from the pandemic of physical inactivity. Attempts to respond to this pandemic has led countries including physical activity in their national policies, even though, this response is too slow and ineffective. Globally, 81% of adolescents are insufficiently physically active and this contributes to 3.2 million deaths each year. Non-communicable diseases claimed the life of 2.7 million and 3.1 million people in the year 2012 and 2015 respectively globally (Hureta 2016, WHO 2015).

2.2. Health effect of physical exercise

Physical exercise is important for maintaining physical fitness and can contribute to maintaining a healthy weight, regulating the digestive system, building and maintaining healthy bone density, muscle strength, and joint mobility, promoting physiological well-being, reducing surgical risks, and strengthening the immune system. Some studies indicate that exercise may increase life expectancy and the overall quality of life(Hureta 2016, WHO 2015).

People who participate in moderate to high levels of physical exercise have a lower mortality rate compared to individuals who by comparison are not physically active. Moderate levels of exercise have been correlated with preventing aging by reducing inflammatory potential. The

majority of the benefits from exercise are achieved with around 3500 metabolic equivalent (MET) minutes per week, with diminishing returns at higher levels of activity. For example, climbing stairs 10 minutes, vacuuming 15 minutes, gardening 20 minutes, running 20 minutes, and walking or bicycling for transportation 25 minutes on a daily basis would together achieve about 3000 MET minutes a week(Penpid 2015, Poobalam 2012, Ding 2016).

Physical inactivity remains the most important modifiable risk factor in preventing a variety of non-communicable diseases (NCDs). It has also been identified as a risk factor for obesity, heart disease and cancers. According to the World Health Organization (WHO), physical inactivity is estimated to be linked in about 10% cases of breast, colon and rectal cancers, 16% cases of diabetes mellitus and 22% cases of ischaemic heart disease. WHO reported that about 1.9 million deaths are attributed to physical inactivity annually

2.3. Factors associated to Regular exercise

Several studies in developed countries have reported that age, education, gender, contextual socioeconomic conditions and health status may have an influence on consuming a healthy diet and participating in regular exercise. For example, female gender, marriage, higher level of education, and high household income are positively associated with a healthy diet, whereas alcohol and tobacco use, oral and gastrointestinal diseases, physical disability and social isolation are negatively associated with a healthy diet (Penpid 2015, Poobalam 2012, Ding 2016)..

Young males with a high educational level have a higher probability of practicing regular physical exercise, whereas a negative association exists among individuals who suffer from a chronic condition and physical exercise. However, such assumptions are controversial. A recent systematic review did not find sufficient evidence to support the association between the determinants previously mentioned and regular physical exercise

Data from recent well-designed randomized control trials lasting up to 12 months indicate that aerobic physical activity performed to achieve a volume of at least 150 minutes per week is associated with approximately 1–3% weight loss, which is generally considered to represent weight maintenance

Research evidence reported correlates of physical activity at the individual, interpersonal, and environmental levels. For instance, Bauman et al. reported that male gender, level of education, self-efficacy, and social support were positive correlates of physical activity. Whereas, age, overweight, and perceived effort are inversely correlated.

The environmental correlates of total physical activity among adults include access to recreation facilities and locations, transportation environment, and aesthetics. A study examining physical inactivity in India reported that there was no statistically significant difference in the proportion of the physically inactive population, based on gender, or age groups. Despite several studies are conducted in high-income or upper-middle-income countries, on the correlates of physical activity, there was limited evidence in low-income countries to guide locally appropriate interventions (Penpid 2015, Poobalam 2012, Ding 2016)..

Physical inactivity is associated with sedentary work and living environments, low economic status and disability. Different quantitative investigations globally identified factors affecting physical activity like age, sex, education, maternal education, and cumulative family income level. Factors like interest, time, convenience, lack of awareness, family influence, poor social support, gender and culture, availability of facilities are qualitatively identified barriers of physical activity. On the contrary, improving fitness, wish to stay in shape, health, supportive environment, peer pressure and access to safe play area are facilitators of physical activity

CHAPTER THREE

3. METHODS

3.1. Study area and period

The study was conducted in Gunchire town Administration, which is located in the Gurage zone southern part of the country. It is located 200 Km from Addis Ababa, the capital city of Ethiopia, 42 km south of wolkite town. The town is found in enamor woreda having a total population of 24123, of these 12058 are males and 12065 are females. The town has 6kebeles. The town have one public district hospital, one public health centres, three health posts, six private clinics and one preparatory school. It have also several governmental institutes that are expected in the district administration levels.

The study was conducted from July-September, 2020

3.2. Study design

A community based cross sectional studywas conducted

3.3. Population

3.3.1. Source population

All adults age between 18 and above years, who are living in Gunchire town administration

3.3.2. Study population:

All adults age between 15-64 years, who are living in the selected kebeles of Gunchire town administration**.**

3.4. Eligibility criteria

3.4.1. Inclusion

All adults age between 15-64 years, who are living in the selected kebeles of Gunchire town administration and available during the time of data collection.

3.4.2. Exclusion

Those who are not permanent residents, not available during data collection and those who were unable to give interviews.

3.5. Sample size determination and procedure

The sample size was determined on the basis of previous study done in Ethiopia (7). Then using single population proportion formula; by taken prevalence of physical exercise as 17.2% (7); 5% marginal of error; 95% CI; the sample size is**219**. Then, by adding 5% for non-response rate the total calculated sample size become**230**.

Formula for sample size calculation.

$$n = \frac{(z\alpha/2)^2 p(1-p)}{d^2} = \frac{[(1.96)^2 * .172 * .828]/(.05)^2}{} = 219$$

Sampling technique and procedure: by using Simple random sampling technique the **230** adults were selected from the selected kebeles. To facilitate the sampling frame family folder (list of households in each kebele together with family profile)was used from health extension workers record.

3.6. Study variables

3.6.1. Dependent variables

- Practice of physical exercise and benefits of exercise

3.6.2. Independent variable

- Medical conditions: Diabeteus mellitus, high blood pressure, other chronic illness BMI, Physical disability, etc

Extraneous variables

- Socio demographic factors: (age, sex, working category, education, religion, ethnicity, marital status).
- Cognitive and Affection factors: (knowledge and perception of exercise).
- Behavioral factors: smoking, diet habits, alcohol, consumption, stress status and kchat chewing.
- Bio-medical factors: nutritional status, family history of hypertension, family history of diabetes mellitus, history of diabetes mellitus

3.7.Operational definition

- Regular physical exercise is defined as at least 3 h per week of any type of physical exercise during leisure time; e.g., brisk walking, jogging, swimming, dancing (physical exercise did not include housework or gardening).

3.8.Data collection methods and procedure

Data collection instruments

The source of data for the study is individual responses collected from the interviews. Data was collected by using structured interview administered questioner. The questioner was developed from related literatures, standard protocols and global recommendations. The questionersought information on: participant related data (age, sex, residence), anthropometric measurements (height, weight, BMI), Co-morbidities, medical conditions and other factors.

Data collection procedure: two data collectors and one supervisor who have data collection experience will be recruited for data collection. In addition data collectors were trained on the questioner in order to get common understanding and make aware of the context of each question in the checklist.

3.9. Data quality management

To keep data quality data collectors were oriented on how and what information they should collect from the selected participant. The prepared questionerwas pretested before actual date of data collection and any correction was made based on the finding. Proper categorization and coding of the data Completeness and consistency of the collected data was checked on daily bases during data collection by the principal investigator.

3.10. Data analysis

After data collection, each questionnaire was checked for completeness and consistency by the principal investigator. Data was cleaned and analyzed by SPSS version 20 for Windows. Frequency distributions of socio-demographic, behavioral and bio-medical variables was done done. The magnitude of physical exercise will be measured and potential benefits were identified.

3.11. Ethical Considerations

Ethical clearance was obtained from institutional review office of wolkite University. Permission to conduct the study was obtained from Gunchire town administration. Informed consent was obtained from each study participants. Each respondents were informed about the purpose of the study and also that all data obtained from them were kept confidential by using codes instead of any personal identifiers.

3.12. Dissemination of result

The final report of the study will be presented and submitted to Wolkite University department of sport science for the fulfilment of the requirement. It is also planned to communicate the result with gunchire town administration.

CHAPTER FOUR

4. RESULTS

4.1. socio-demographic characteristics

Among the 230samples, 212 were interviewed with a response rate of 92.2% and remained in the analysis.The mean age was 28 +/- 3.5 years and almost one third, 76 (35.8%) of them were in the age group 18-24 years. More than half,120(56.6%) of the participants were females and 102 (8%) were Muslims. About 106 (50%) of the participants were married and 102 (8.1%) have secondary level of education. More than half of then 108 (51%) were students by occupation. Large majority, 195(92%), of the participants came from urban areas **(Table 1).**

Table 1: Baseline socio demographic characteristics of the study participants in Gunchire Town, 2021.

Characteristics	**Number/frequency**	**Percent**
Age		
18-24	76	35.85
25-34	64	30.15
35-44	40	18.87
≥45	32	15
Mean age	28±3.5	
Sex		
Male	120	56.6
Female	92	43.4
Marital status		
Single	106	50
Married	88	41.5
Divorced or widowed	125	8.5
Religion		
Orthodox	96	45.3
Muslim	102	48

Others	14	6.7
Ethnicity		
Gurage	187	88.2
Amhara	13	6.1
Oromo	8	3.7
Others	4	2
Level of education		
No education	10	4.7
Primary	70	33
Secondary	102	48.1
Tertiary	30	14.1
Occupation		
Student	108	51
Government employee	30	14.2
Private employee	68	32
Others	6	2.8
Address		
Urban	195	92
Rural	17	8

4.2. Medical characteristics of the study participants

Among the 212 study participants interviewed in this research, 11 (5.2%) of individuals have a known diabetes mellitus. Similarly, 15(7%) of them have hypertension and another group of individuals, 6 (2.8%) have other diseases than hypertension and diabetes mellitus (**Table 2**).

Table 2: Medical characteristics of the study participants in Gunchire Town, 2021.

Characteristics	**Number/frequency**	**Percent**
History of diabetes		
Yes	11	5.2
No	201	94.8

History of hypertension		
Yes	15	7
No	197	93
History of any other disease		
Yes	6	2.8
No	206	97.2

4.3. Nutritional and behavioral characteristics

In regard to the nutritional and behavioral characteristics, 187 (88.2%) of individuals have normal range of BMI between 18.5 and 25 with average BMI of 23.5. Similarly, based on BMI and waist to hip circumference 187 (88.2%) of individuals have normal nutritional status and diet habit. On the other hand, significant proportion of the participants have habits of alcohol consumption, cigarate smoking and chat chewing. In the research, 45.3%, 40.5%, and 10.4% of the participants have experience of chat use, alcohol use and smoking habits **(Table 3).**

Table 3: Nutritional and behavioral characteristics of the study participants in Gunchire Town, 2021.

Characteristics	**Number/frequency**	**Percent**
BMI		
Below 18.5	6	2.8
18.5-25	187	88.2
25-30	17	8
≥30	2	1
Mean BMI	23.5	
Nutritional status		
Normal	187	88.2
Not normal	25	11.8
Diet habit		
Normal	187	88.2
Not normal	25	11.8

Alcohol consumption		
Yes	86	40.5
No	126	59.5
Cigarate smoking		
Yes	22	10.4
No	190	89.6
Khat/chat chewing		
Yes	96	45.3
No	116	54.7

4.4. Practice of regular exercise and health benefits

The research found that, 53 (25%) of the study participants have regular physical exercise defined as having more than 3 hours active exercise per week. In average the study participants practiced regular exercise for the last 3 years with a daily duration of at least 30 minutes in average. According to this research, 191 (90%) of the study participants engaged in regular exercise based on their interest while remaining 10% were engaged by physician order. Almost 90% of the participants perform aerobic exercise. Regarding the benefit of engaging in regular exercise, 84.9%, 51.9% and 28.3% of the participants assume it have health benefit, for physical benefit and other related benefits respectively **(Table 4).**

Table 4: Practice of regular exercise and health benefits of exercise among the study participants in Gunchire Town, 2021.

Characteristics	**Number/frequency**	**Percent**
Regular exercise		
Yes	53	25
No	159	75
How long been in exercise	3 year	
How long a day	30 minute	
Is that voluntary or ordered		
Yes	191	90

No	21	10
Which exercise do you practice		
Aerobic	191	90
Anaerobic	21	10
What benefit do you get?		
Health benefit	180	84.9
Physical benefit	110	51.9
Other benefits	60	28.3

4.5. Discussion

Among the 230samples, 212 were interviewed with a response rate of 92.2% and remained in the analysis. The mean age was 28 +/- 3.5 years and almost one third, 76 (35.8%) of them were in the age group 18-24 years. More than half,120(56.6%) of the participants were females and 102 (8%) were Muslims. About 106 (50%) of the participants were married and 102 (8.1%) have secondary level of education. More than half of then 108 (51%) were students by occupation. Large majority, 195(92%), of the participants came from urban areas**.**

This study tried to assess the practice and health benefits of regular exercise among adults in Gunchire town. Round 212 study participants were involved in the research with a mean age of 28 +/- 3.5 years and almost one third, 76 (35.8%) of them were in the age group 18-24 years. The status of regular physical activity among the study participants was 25%. This finding is higher that the study finding in Brazil which reported that the overall physical activity was 19.69%. This difference might be due to the differencein the socio-demographic status between the two populations. In the contrary, this result was lower compared with studies in Scotland which was 28.1. This discrepancy might be due to lack of access for playground, gymnasium and other sport and recreational areas. It is also lower compared with 23 low- and middle-income countries in the Sub-Sahara, which was 37.1%. The difference might be personal, behavioral and cultural differences along with availability and accessibility of facilities.

According to this research, 191 (90%) of the study participants engaged in regular exercise based on their interest while remaining 10% were engaged by physician order. Almost 90% of the participants perform aerobic exercise. Regarding the benefit of engaging in regular exercise, 84.9%, 51.9% and 28.3% of the participants assume it have health benefit, for physical benefit and other related benefits respectively. Similarly in another research, among the total participants, around 65.9% feel regular physical activity is very enjoyable, 99.1% feel regular physical activity is healthy and 94.8% feel sedentary behavior is not healthy. The study participants have some medical problems that uninitiated them to do exercise and some other individuals have some level of nutritional and substance use habits.

CHAPTER FIVE

5. CONCLUSSION AND RECOMMENDATION

5.1. CONCLUSION

- Based on this research, 25% of the study participants have regular physical exercise working with 3 hours of exercise per week.
- The main reason for regular exercise was for health benefit, for physical fitness (posture) and other related benefits.
- Most of the participants engage in physical exercise based on their own interest, while some other perform with medical orders.
- The habit of physical exercise in this research is better than some of the researches conducted in different parts of the country.

5.2. RECOMMENDATION

- Regular physical exercise should be encouraged
- Access to sport and recreational areas should be established
- The health benefit of physical exercise should be teached to the community

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Questioner

A questioner prepared for collection of data on the practice and benefits of regular physical exercises among adults living in Gunchire Town in 2020.

ID number: _____

SN.	Variables	Response	Remark
	Socio-demographic characteristics		
1	Sex	1. Male 2. Female	
2	Age of the participant	_____ years	
3	Occupation	1. Student	

		2. Government employer 3. Merchant 4. Others	
4	Residence	1. Urban 2. Rural	
5	Educational status	1. Unable to read and write 2. Primary 3. Secondary 4. Tertiary	
6	Ethnicity	1. Gurage 2. Amhara 3. Oromo 4. Others	
7	Religion	1. Christian 2. Muslim 3. Others	
8	Marital status	1. Single 2. Married 3. Divorced/widowed	
	Medical condition		
9	History of diabetes	1. Yes 2. No	
10	History of high blood pressure	3. Yes 4. No	
11	Do you have any chronic disease	1. Yes 2. No	
12	If yes, in no 11, please specify	_____	
	Nutritional status		
13	BMI	_____	

14	Nutritional status	1. Normal/well-nourished 2. Malnourished	
15	Diet habit	1. Altered 2. Normal	
16	Alcohol consumption	1. Yes 2. No	
17	Chat/khat use	1. Present 2. Absent	
18	Cigarate smoking	1. Yes 2. No	
19	Family history of chronic illness	1. Present 2. Absent	
	Exercise		
20	Do you regularly exercise	1. Yes 2. No	
21	How long you were in regular exercise	_____	
22	For how many hours you will exercise per day?	_____	
23	Is that voluntary or ordered by medical professionals	_____	
24	What benefits do you get from exercise	1. _____ 2. _____ 3. _____	
25	Which exercise do you practice	1. _____ 2. _____ 3. _____	