



ST. PAUL'S HOSPITAL MILLENNIUM MEDICAL COLLEGE

DEPARTMENT OF PUBLIC HEALTH

ASSESSMENT OF LEVEL OF KNOWLEDGE, ATTITUDE AND PRACTICE
OF PHYSICAL ACTIVITY AND ASSOCIATED FACTORS WITH PRACTICE
OF PHYSICAL ACTIVITY AMONG MEDICAL STUDENTS OF SPHMMC,
ADDIS ABABA, ETHIOPIA

RESEARCH PROPOSAL

By: -

Dr. Bacha Mirkena(Intern)

Advisors: -

Dr. Mamo W (MD, PhD, MPH, Ass.Prof)

Dr. Esubalew W (MD, Ass.Prof, Cardio. Fellow)

A STUDENT RESEARCH PROPOSAL TO BE SUBMITTED TO THE
DEPARMENT OF PUBLIC HEALTH, SPHMMC, IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF MEDICINE

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TABLE OF CONTENTS

1.AKNOWLEDGEMENT.....	i
2.ACRONYM.....	ii
3.LIST OF FIGURES AND TABLES	iii
4.ABSTRACT	iv
5. INTRODUCTION	1
5.1. BACK GROUND	1
5.2. STATEMENT OF THE PROBLEM	1
5.3. JUSTIFICATION OF THE STUDY	2
6. LITERATURE REVIEW	2
6.1. CONCEPTUAL FRAME WORK	4
7.OBJECTIVES.....	5
7.1. GENERAL OBJECTIVE.....	5
7.2. SPECIFIC OBJECTIVES.....	5
8. METHODS.....	5
8.1. STUDY DESIGN	5
8.2. STUDY AREA	5
8.3. SOURCE POPULATION.....	5
8.4. STUDY UNITS AND PERIOD	5
8.5. SAMPLE SIZE DETERMINATION	5
8.6. SAMPLING TECHNIQUE	6
8.7. DATA COLLECTION INSTRUMENTS.....	6
8.8. QUESTIONNAIRE DEVELOPMENT AND DATA COLLECTION	7
8.9. STUDY VARIABLES.....	7
8.9.1. DEPENDENT VARIABLES.....	7
8.9.2. INDEPENDENT VARIABLES.....	7
8.10. DATA MANAGEMENT AND ANALYSIS	7
8.11. DATA QUALITY ASSURANCE	7
8.12. OPERATIONAL DEFINITIONS.....	7
8.13. COMMUNICATION OF THE RESULT	8
8.14. ETHICAL CLEARANCE	9
9. INCLUSION & EXCLUSION CRITERIA.....	9
9.1. INCLUSION CRITERIA.....	9
9.2. EXCLUSION CRETERIA	9
10. WORK PLAN.....	9
TABLE 1: TIME SCHEDULE.....	9
11. BUDGET PROPOSAL.....	10
TABLE 2: PERSONNEL COSTS BREAK DOWN	10
TABLE 3 : COST OF SUPPLIES (STATIONNAIRE).....	11
TABLE 4: PROJECT COST SUMMARY	11
12.REFERENCES	12
13. ANNEXES	13
ANNEX1: INFORMATION SHEET AND INFORMED VOLUNTARY CONSENT FORM FOR HEAD OF SPHMMC	13
ANNEX 2: QUESTIONNAIRE	15
ANNEX 2.1: QUESTIONNAIRES RELATED TO SOCIODEMOGRAFIC, KNOWLEDGE AND ATTITUDE.....	15
ANNEX 2.2: QUESTIONNAIRES RELATED TO PRACTICE OF PHYSICAL ACTIVITY PER GLOBAL PHYSICAL ACTIVITY QUESTIONNAIRE (GPAQ).....	17
ANNEX 2.3: LEISURE TIME RELATED QUESTIONNAIRES	18
ANNEX 2.4: SHORT LAST 7 DAYS INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRES/IPAQ	19

1.AKNOWLEDGEMENT

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2.ACRONYM

- ❖ BMI.....Body Mass Index
- ❖ CVD.....Cardiovascular Disease
- ❖ EPI info..... Epidemiological Information (A word processing, data base and statistics program for public health)
- ❖ GPAQ.....Global Physical Activity Questionnaires
- ❖ HIFA Org.....Health Information For All Organization
- ❖ HPs..... Healthcare Professions
- ❖ IPAQ..... International Physical Activity Questionnaires
- ❖ IQR..... Interquartile Range
- ❖ KAP..... Knowledge, Attitude and Practice
- ❖ LTPA.....Leisure Time Physical Activity
- ❖ MetS..... Metabolic Syndromes
- ❖ MPH.....Masters of Public Health
- ❖ NCDs..... Non-Communicable Diseases
- ❖ PA.....Physical Activity
- ❖ PI..... Physical Inactivity
- ❖ SPHMMC..... St. Paul’s Hospital Millennium Medical College
- ❖ SPSS.....Statistical Program for Social Sciences
- ❖ ST..... Sedentary Time
- ❖ WHO.....World Health Organizations

3.LIST OF FIGURES AND TABLES

FIGURE1:-CONCEPTUAL FRAME WORK.....	4
TABLE 1: -TIME SCHEDULE.....	9
TABLE 2: -PERSONNEL COSTS BREAK DOWN.....	10
TABLE 3: -COST OF SUPPLIES (STATIONNAIRE).....	11
TABLE 4: -PROJECT COST SUMMARY.....	11

4.ABSTRACT

Physical inactivity is becoming a global epidemic and lead to many diseases. This cross -sectional study tried to investigate knowledge, attitude and practice (KAP) regarding Physical activity(PA) among Medical students of SPHMMC who has enormous contact with the patients coming to the Hospital. Exercise includes a wide range of activities like running, jumping, swimming, dancing, push up, lifting weight, gardening, car washing or walking around with a pet in the neighborhood and exercise can also be done at home. But some people have a wrong idea that exercise can only be done in gymnasium, recreational park, or a stadium, etc. As long as physical activity causes sweating it is considered as exercise. The public health education on the need for people to undertake physical activity (PA) as a primary way of preventing chronic health problems such as diabetes mellitus, obesity and cardiovascular diseases can be sustained through intensive counseling of patients/clients by health care providers who are vast in the practice of PA. Furthermore, this study tries to look for factors associated with regularity of exercise and to find association between knowledge and attitude on practice of exercise. A total of **276** participants will be selected to answer self-administered questionnaire. Likert scale was used for participants to answer the questionnaire on KAP and the total score for each knowledge, attitude and practice was computed to find the associations using EPI info version 6.0 and SPSS 21

5. INTRODUCTION

5.1. BACK GROUND

PA is a broad term used to describe all forms of large muscle movements including sports, dance, game, work, lifestyle activities and exercise for fitness. It has also been described as movement of the body that is carried out by skeletal muscles which result in energy expenditure (1). In most parts of the world, non-communicable diseases (NCD) have become a major health challenge which is partially as a result of rapid change in lifestyles leading to reduced physical activity, Increased sedentary time(ST), changing diets, and increased tobacco use. These NCDs are the new pandemics of the 21st century that became the threaten to take millions of lives and drain the meager health care resources of many countries (10). This trend is present in all societies, rich and poor, developed and developing (2). There has been a projection that NCD will account for 73% of deaths and 60% of the global disease burden by 2020 (2). PA and (ST) appear potentially modifiable health behaviors that can be changed to reduce risks for morbidity and premature mortality resulting from various chronic diseases (3). PA plays a major role in the prevention of these non-communicable diseases. Low levels of PA and increased ST is one of the strongest risk factors for many chronic diseases and conditions, including coronary heart disease, hypertension, diabetes mellitus type 2, obesity, osteoporosis, colon cancer, depression and anxiety.

Very little is known about physical activity on a population basis. With few exceptions, physical inactivity as a risk factor for NCDs has not been adequately evaluated (11). The US Surgeon General has declared that sedentary lifestyle is “hazardous to your health”, and estimated sedentary living to be as dangerous to one’s health as smoking a pack of cigarettes a day (18). CVD, which includes heart attack and stroke, accounts for 16.7 million deaths globally each year, it is the leading cause of death in the UK and nearly half of all deaths in Europe are caused by CVD. The morbidity and mortality burden attributable to NCDs such as CVDs, cancer and diabetes is on the increase. In 1990, morbidity attributed to NCDs was 41% of the overall disease burden worldwide, and is projected to be 60% by the year 2020 (18). PA has been found to reduce the risk of developing cardio vascular diseases by 50%. International health organizations (WHO) agree that 150 minutes of moderate intensity PA or 75 minutes of vigorous activity per week are recommended to achieve health benefits (3). Regular PA is also highly beneficial in communities and for economies in terms of reduced healthcare costs, increased productivity, better performance in schools, lower worker absenteeism and turnover, increased productivity and increased participation in sports and recreational activities (2)

5.2. STATEMENT OF THE PROBLEM

The assessment of KAP of PA among the SPHMMC medical students who have an enormous contact with patients coming from different corners of Ethiopia has a worthwhile advantage in decreasing and preventing NCD. Even though researches have been done in other countries like Nigeria, Malaysia and etc., there were quite rare studies in Ethiopia in this regard and there was no even a single study conducted in SPHMMC with this particular subject matter. Physical inactivity is becoming a major health problem not only in developed countries but also in developing countries like Ethiopia in which sedentary life style is alarmingly increasing and this

in turn is one of the strongest risk factors for many chronic diseases and conditions, including coronary heart disease, hypertension, diabetes mellitus type 2, obesity, osteoporosis, chronic kidney disease, Alzheimer disease, depression, anxiety, Substance abuses and some cancers.

Developing countries are experiencing dramatic changes in the health needs of their populations. This trend will continue and by the year 2020, NCDs are expected to account for seven out of every ten deaths in the developing countries, compared with less than half today (14). The change is partly due to success in the control of infectious diseases and demographic changes, but is also a consequence of change in lifestyle that leads to increased risk of NCDs (15,16).

Despite the widespread prevalence of physical inactivity, its associated health risks, and the potential of increasing physical activity to improve health outcomes, clinicians do not routinely screen patients for physical inactivity or provide adequate counseling. In developed countries, only 13 to 34 percent of primary care patients reported receiving advice on physical activity from their primary care physician (4) and the extent of this problem is not well known in developing country like Ethiopia due to few or no researches done in this regard. So this paper will give us a strong insight about the subject matter and will be the first paper in doing so.

5.3. JUSTIFICATION OF THE STUDY

Physical activity benefits people of all ages and may decrease all-cause morbidity and increase lifespan. In the United States, there is some public awareness of the physical activity guidelines recommending 30 minutes of aerobic exercise on five or more days of the week. However, it is not widely recognized by either the public or clinicians that this guideline is considered a minimum recommendation. Additional health benefits are gained by engaging in physical activity beyond the suggested 30 minutes and by avoiding inactivity. So this paper of mine which be done on the future doctors of us will bring changes not only on the subject of the study but also indirectly on many patients with whom they interact daily. Healthcare providers (HPs) play a unique and important role in motivating and assisting patients' healthy behavior changes, including PA promotion. HPs are less likely to counsel patients on improved PA if their own health habits are poor and thus assessing the KAP and factors affecting PA among these young future health providers is quiet high yield.

6. LITERATURE REVIEW

As PA is a crucial instrument in preventing NCDs and promoting health conditions different researches were done both in developed counties and developing countries, like Nigeria and Ethiopia even it is quite rare publications in our case.

In the United States, there is some public awareness of the physical activity guidelines recommending 30 minutes of aerobic exercise on five or more days of the week. However, it is not widely recognized by either the public or clinicians that this guideline is considered a minimum recommendation. Additional health benefits are gained by engaging in physical activity beyond the suggested 30 minutes and by avoiding inactivity (4). Although about 80% of USA adults are said to be Physically inactive with attributing factors being ST and Obesity being the major public health problems, there are some publications which state that in western countries, the proportion

of people over age 60 years is increasing faster than any other age group. This is attributed to longer life expectancies, decreasing fertility rates, and aging of the baby boomer population. By the year 2050 over 80 million people in the United States will be over age 65. Numbers of adults over age 85 will also reach unprecedented levels. Individuals who are regularly physically active report better overall health, lower health care expenditures, and fewer mobility limitations than their sedentary counterparts (4).

In Malaysia, research was done on Knowledge, attitude and practice regarding exercise among 108 people exercising in gymnasium and recreational parks around Kuantan, Malaysia and it was found that The majority (83.5%, 86) of participants have an understanding that exercise causes significant injury. Half of the participants (50.5%, 52) disagreed that exercise increases chance of stroke and other circulation problem, remaining 37.9% (39), and 11.7% (12) and either agree or disagree respectively. Furthermore, 75.7% (78), 19.4% (20), 21.4% (22), and 15.5% (16) participants thought that exercise cause people to be exhausted, experience vitamin, iron loss, and thought it as stressful activity respectively. The majority (88.3%, 91) of the participants choose jogging as their exercise, followed by cycling and walking (45.6%, 47), weightlifting (33%, 34), swimming (14.6%, 15), others (5.8%, 6), gardening (4.9%, 5) and yoga (1.9%, 2)

53.4% (55), 90.3% (93), 88.3% (91), 50.5% (52), 48.5% (50), 87.4% (90), 41.7% (43) of the study participants stated that they do exercise for fun, improving health, increasing fitness level, looking good, socializing with others, controlling weight, and motivation from others respectively as the major reason to exercise (5)

In 1990, NCDs and injuries accounted for 28% of morbidity and 35% of mortality in Sub-Saharan Africa (17). If communicable diseases control programs attain their goals, these figures will rise to 60% and 65%, respectively by 2020. If those goals are not achieved and communicable diseases persist, almost 50% of morbidity and mortality will be attributed to NCDs.

In Nigeria, there was also publication on same topic which was done and there were One hundred and three (103) health professionals (HP) working at the FMC, among whom 24.3%, 22.3% and 19.4% are Medical/Dental Practitioners, Medical Laboratory Scientists, and Nurses respectively participated in the study and it was found that 78(75.73%) respondents were found to have awareness of the health benefits of PA, 93 (90.29%) believed they were physically fit, 67(65.05%) were able to adequately define physical fitness. while 79(76.70%) professionals have counseled patients/clients about the health benefits of physical exercises. However, only 25 (24.27%) know the true parameters for assessing physical fitness (6).

In Ethiopia, there was one ground breaking cross-sectional study included regular employees of public schools and the Commercial Bank of Ethiopia in Addis Ababa. The study was conducted during the months of December 2009 and January 2010 with topic being **Physical Activity and Metabolic Syndrome among Ethiopian Adults** with about 1,843 individuals (1,117 men and 726 women) were being involved in the study. To the best of my knowledge, this is the first study to evaluate physical activity and MetS among Ethiopian adults (7). The results of this study confirm and expand the limited body of epidemiologic evidence among sub-Saharan Africans. Overall, higher levels of physical activity were inversely associated with MetS among Ethiopian men. In

HIFA Org, an Ethiopian graduate of MPH and Bachelor of Physiotherapy Chalchisa Abdeta who is a proficient PA professional passionately advocates and works hard to prioritize the PA in Ethiopia since 2015 and currently he is doing research on Physical Inactivity and Sedentary behaviors among all age groups (8).

In Ethiopia, there is also one more cross-sectional study that aimed at assessing “**Healthcare professionals’ habits of physical activity and their confidence to prescribe physical activity for chronic NCDs in hospital setting from December 2015 to April 2016**”. In this study Seven sample hospitals were selected randomly based on the inclusion and exclusion criteria from 12 hospitals in Addis Ababa and there were **442 study subjects** with the study result showed that above half of healthcare professionals were had moderate confidence to counsel/prescribe physical activity and most of healthcare professionals were physically active. But the practice of healthcare professionals to prescribe/counsel physical activity was low.

6.1. CONCEPTUAL FRAME WORK

The Conceptual framework of the study is developed after reviewing previous similar or nearly similar studies and other relevant literatures to conceptualize the whole research process and act as a guide for tool development and analysis. The most important factors are classified based on Haddon Matrix. So this conceptual frame work is adopted from previous work (9).

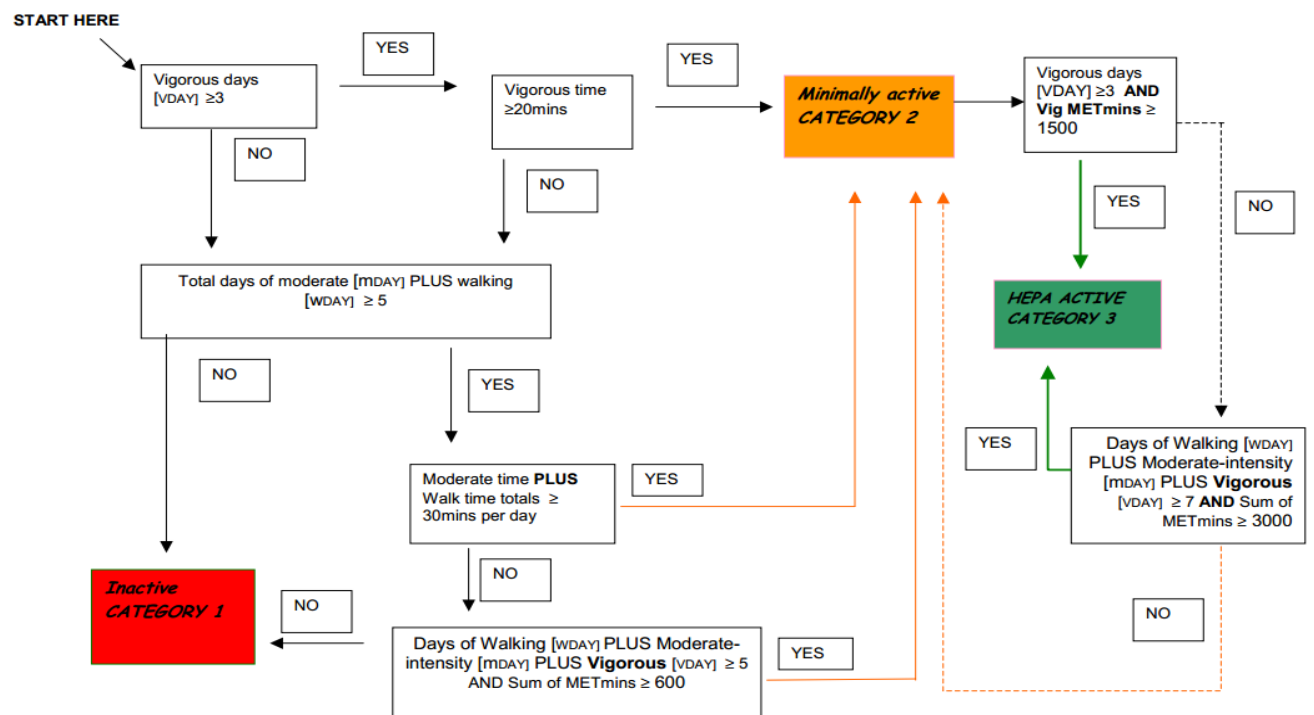


FIG. 1 CONCEPTUAL FRAME WORK (9)

7.OBJECTIVES

7.1. GENERAL OBJECTIVE

- ❖ Assessment of level of Knowledge, Attitude and Practice of PA and Associated Factors with Practice of PA among Medical Students of SPHMMC

7.2. SPECIFIC OBJECTIVES

- ❖ To assess the level of knowledge PA of SPHMMC Medicals Students
- ❖ To assess the level of attitude of SPHMMC Medicals Students toward PA
- ❖ To assess the level of practice of PA among SPHMMC Medicals Students.
- ❖ To identify associated factors with Practice of PA among Medical Students of SPHMMC

8. METHODS

8.1. STUDY DESIGN

Institutional based, cross sectional study will be conducted to carry out this research

8.2. STUDY AREA

The study will be conducted in SPHMMC. St. Paul's hospital millennium medical college is the second largest hospital in Ethiopia which is located in Addis Ababa, Gullele sub city. The hospital was established with the willingness and support of Emperor Haile Sillassie II and has been giving medical service for more than fifty years by giving due concern for the people with low level of income. A medical school, the millennium medical college was opened in 2007G.C. to commemorate the new millennium era of Ethiopian calendar. The school was established by the Ethiopian FMOH with Professor Gordon Williams of the department of urology at London University. Currently there are around 800 medical students and much more medical staffs including physicians, nurses and other health care professionals (radiographers, laboratory technicians, etc.)

8.3. SOURCE POPULATION

All Medical Students of SPHMMC.

8.4. STUDY UNITS AND PERIOD

All medical students (from first year to Internships) of SPHMMC who selected by stratified sampling technique proportionally from each year.

8.5. SAMPLE SIZE DETERMINATION

According to data from SPHMMC Registrar office the number of medical students in 2017/18 was found to be 799 (498 males,301 females). The study will be carried out per schedule (from Nov 22,2017 to Jul 30,2018 G.C). To calculate the sample size a single population proportion formula, $n_o = [(Z\alpha/2)^2 P (1-p)]/ d^2$

Where:

N=total number of SPHMMC medical students

n_o = required sample size

P= the prevalence of PA (Since there is no P value in previous studies, P-values assumed to be 50%=0.5),

d= precision (the marginal error) 5%.

$Z_{\alpha/2}$ = critical value of standard normal deviation at 95% confidence interval (1.96).

$$\text{Therefore, } n_o = \frac{(1.96)^2 (0.5 * 0.5)}{(0.05)^2} = 381.46 = 382$$

Adding non response rate (10%), the calculated sample size will be **420** and because the above sample was to be taken from a finite population, I used the reduction formula as follow

$$n = \frac{n_o}{[1 + n_o / N]} = \frac{420}{[1 + 420 / 799]} = 276$$

8.6. SAMPLING TECHNIQUE

Stratified sampling technique will be used to select 276 medical students who fulfill inclusion criteria during the study period and systemic randomized sampling technique will be used for each batch using K^{th} interval. The first medical student will be selected by lottery method from each batch and followed by every K^{th} . So each batch will have its own K^{th} interval which will be determined later on.

Source of data: -The total number of medical students was retrieved from SPHMMC Registrar Office.

Type of data: -A full list of SPHMMC medical students has been opted from the Registrar. These lists will be used to calculate the number sample of each category of students in each year.

Categorization to be used are: -First year, Second year, Third year, fourth year, fifth year sixth year (internship), male and female medical students

The number of each person to be selected from each category will be proportional to the size of the category. Within each category, the number of respondents to be surveyed in each year will be determined by Probability proportional to size. From a particular year, respondents will be selected both by simple random sampling method (lottery method) and stratified techniques.

8.7. DATA COLLECTION INSTRUMENTS

Self-administered and pre tested questionnaire will be used for data collection. The questionnaire will be pretested on one of the group of clinical year students and it will be done with an aim to check sequence of question, comprehension of the questions among the participants and duration

8.8. QUESTIONNAIRE DEVELOPMENT AND DATA COLLECTION

The format for questionnaire will consists of Likert style and ranking format. Likert type approach involves providing people with a statement and asking them to indicate how strongly they agree or disagree (having a scale of range 1 strongly disagree to 5 strongly agree). In ranking format, a lists of alternatives will be given and they are asked to rank their preference. The questionnaires were taken from IPAQ and will be modified in the context of our country and the questionnaires will be attached to the finalized proposal later on

8.9. STUDY VARIABLES

8.9.1. DEPENDENT VARIABLES

Dependent variables include Physical activity(Yes/No).

8.9.2. INDEPENDENT VARIABLES

Independent variables were place of birth, gender, age, religion, marital status, etc.

8.10. DATA MANAGEMENT AND ANALYSIS

The completed questionnaire will be checked for completeness and consistency by the principal investigator. Code will be given to the completed questionnaire. The coded questionnaire will be categorized according to GPAQ. The principal investigator with an experienced data clerk will enter the data using EPI info version 6.0 and SPSS 21 statistical packages. Data cleanup will be performed to check for, accuracy, consistencies, & values. Any error will then be identified and corrected. Central tendency & dispersion will be used, analyzed and described in the form of frequency tables & depicted graphically. Internal comparison will be made.

8.11. DATA QUALITY ASSURANCE

Standard questionnaire will be adopted and applied. Prior to the actual data collection, pre-testing will be done on 5% of the study populations. After the pretest the questionnaire will be checked for its clarity, understandability, completeness, reliability, consistency, sensitivity, time and pattern of response. Then correction will be made accordingly

8.12. OPERATIONAL DEFINITIONS

- ❖ **Physical Activity:** - is defined as bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above the basal level.
- ❖ **Physical Exercise:** - is a form of physical activity that is planned, structured, repetitive, and purposeful with a main objective of improvement or maintenance of one or more components of physical fitness

- ❖ **Physical Fitness:** - is can be described as the ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure time pursuits and meet unforeseen emergencies.
- ❖ **Physical inactivity:** -also called sedentary life and it includes time spent at work, at home, while doing course work, and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television.
- ❖ **Vigorous/Intense Physical activities:** -refers to vigorous activities such as, heavy lifting, running, jumping rope, football playing, volley ball playing, basketball playing, push up or dancing for at least 10 minutes at a time.
- ❖ **Moderate intense Physical activities:** -refers to activities like brisk walking, swimming or jogging or at least 10 minutes at a time
- ❖ **Knowledge of PA:** - Individuals who has at least two positive responses to questions asked to determine knowledge of PA.
- ❖ **Knowledgeable:** -individuals those knowledge of PA is above the mean as will be determined later on
- ❖ **Favorable Attitude:** - individuals who has equal or more than 50% positive responses to questions about level of attitude of PA.
- ❖ **Unfavorable Attitude:** - individuals who has less than 50% positive responses to questions about level of attitude of PA.
- ❖ **Good Practice:** -individuals those involved in moderate to intense PA
- ❖ **Bad Practice:** -individuals with PI

8.13. COMMUNICATION OF THE RESULT

Since the report from this study is expected to be useful for all concerned bodies who want to develop policies, and implementation of effective PA the result of the study will be communicated to hospital administrators so as to improve quality of patient care and to enhance the overall PA of the health care professionals. The result will also be disseminated to any organization or institution or individuals who have direct or indirect input to the project. All attempts will be made to present the results of the study on local and/or international Journals

8.14. ETHICAL CLEARANCE

Letter of ethical clearance will be obtained from SPHMMC. Letter for cooperation from each level is expected, informed consent will be obtained from each participant in the research, and confidentiality will be maintained.

9. INCLUSION & EXCLUSION CRITERIA

9.1. INCLUSION CRITERIA

- ❖ All Medical students of SPHMMC

9.2. EXCLUSION CRITERIA

- ❖ Students in serious medical condition at the time of survey
- ❖ Students with gross physical disability like lack of leg(s) or arm(s)

10. WORK PLAN

The various components of this research proposal and the time it will take are summarized in the following table.

TABLE 1: TIME SCHEDULE

No.	Activities	2018 G.C.					
		Jan	Feb	Mar	May	Jun	Jul
1	Proposal development and submission						
2	Approval of proposal ethical clearance						
3	Pretest						
4	Data collection, analysis and report write up						
5	First draft report submission						
6	Review and research report finalization						
7	Final research report submission						

8	Research report evaluation by the examiners						
9	Defense						
10	Final report/ thesis submission after defense						

11. BUDGET PROPOSAL

TABLE 2: PERSONNEL COSTS BREAK DOWN

Personnel	Activity	Quality	No	Working days	Per-day	Total
Data collectors	Training+ Data collection	C-II students	2	15	100	1500
supervisor	Coordinating		1	15	150	2250
Principal investigator	While organization		1	15	100	1500
Data clerk	Data entry & clearance	IT qualified	1	contract	600	600
Total						5850

TABLE 3 : COST OF SUPPLIES (STATIONNAIRE)

Description	Unit	Quantity	Unit price in Birr	Total in Birr
Duplicating paper	pack	5	125	625
Duplicating ink	Tube	2	60	120
CD/R	Single	5	30	150
Pens	Each	12	5	60
Pencils	Each	12	1	12
Photo copy	Each	227	1birr per page and 7 birr per questionnaire	1652
Notebook	Each	5	10	50
Calculator	Each	1	80	80
Marker	Set	1	50	50
Total	----	-----	-----	2772

TABLE 4: PROJECT COST SUMMARY

Number	Descriptive cost	Total
1	Personnel	5850
2	Supplies	2772
3	Total	8622
4	Contingency (15%)	1293.3
5	Grand total	9915.3

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13. ANNEXES

ANNEX1: INFORMATION SHEET AND INFORMED VOLUNTARY CONSENT FORM FOR HEAD OF SPHMMC.

- ❖ **Preamble:** My name is Dr. Bacha Mirkena, an Intern at SPHMMC and I want to conduct a study in our College. The study is mean to Assessment of Knowledge, Attitude and Practice of PA and Factor Associated with Practice of PA among Medical Students of SPHMMC. So, I kindly request your permission to undergo this study.
- ❖ **Study/project title:** - Assessment of Knowledge, Attitude and Practice of PA and Factor Associated with Practice of PA among Medical Students of SPHMMC
- ❖ **Objective** – The objective of this study is to assess Knowledge, Attitude and Practice of PA and Factor Associated with Practice of PA among Medical Students of SPHMMC
- ❖ **Benefit:** Participants may not get any direct benefit from participation in the study. But the information generated from the study will help the government officials to work toward physical inactivity/PI and to minimize the burden Non-Communicable Diseases/NCDs. In addition, it will be used as a base line data for further investigations on the subject matter and would also help the researcher to write up his thesis for partial fulfillment of Medical Doctoral Degree.
- ❖ **Harm:** The study will have no harm to the College and to the participants. There will be no harm inflicted on the respondents by participating or for not participating in the study, except taking few minutes of his/her time.
- ❖ **Procedures and duration:** The study will be conducted from Feb 30 to March 2018 on Assessment of Knowledge, Attitude and Practice of PA and Factor Associated with Practice of PA among Medical Students of SPHMMC. A full list of SPHMMC medical students will be obtained from the Registrar. These lists will be used to calculate the number sample of each category of students in each year. Written informed consent will be taken from each study participants and self-administered questionnaire will be issued and eventually the data will be collected by data collectors.
- ❖ **Confidentiality:** The information gathered from participants will be completely confidential. The finding of this study will generally be used for research and will not reflect anything particular of individuals. The questionnaire will be coded and exclude

showing names. No reference will be made in oral or written reports that could link participants to the research.

- ❖ **Rights:** Participation in this study is fully on voluntary basis. Considering the importance of the research to our college, the participants are free to decide on it. If any violation of rules and conduct is seen throughout the study, the college has full right to withdraw from the study at any time. If there are any questions or enquires any time about the study or the procedures, please contact

- ❖ **Principal investigator**

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Sign_____

- ❖ **SPHMMC**

Head of the College: _____

Tel: _____

E-mail:_____

Sign: _____

ANNEX 2: QUESTIONNAIRE

SPHMMC, DEPARTMENT OF PUBLIC HEALTH

Preamble

Dear respondent! The purpose of this questionnaire is to collect data important for assessment of Knowledge, Attitude and Practice of PA and Factor Associated with Practice of PA among Medical Students of our college. Questions included in this questionnaire enable the researcher to get more information on the subject matter that can be used to design appropriate interventions so as to address the rising problem i.e. Physical inactivity/PI and Non-Communicable Diseases/NCDs. Information you give will serve only this stated academic purpose and your name will not be written on this form and no individual response will be reported to anybody. Hence, your answers are completely confidential. You do not have to answer any question that you don't want to answer and you may refuse to answer all of the questions.

Therefore, **your honest and genuine participation** by responding to the questions is highly appreciated and helpful to attain the objective of the study. Please, if you cooperate by responding to the questions it means that you have your own contribution to the success of this study.

Would you be willing to participate in the study, please?

If yes, proceed to the next page

If no, please stop here.

General instruction:

For close ended questions choose the appropriate response that reflect you and write the number of your choice in the corresponding provided box.

For open ended question, specify your answers and write on space provided.

Questionnaire ID Number.....

ANNEX 2.1: QUESTIONNAIRES RELATED TO SOCIODEMOGRAPHIC, KNOWLEDGE AND ATTITUDE

Part I: Demographic and Socio-economic issues

1. How old are you? Ans—In year
2. Sex
 - A. Male
 - B. Female

3. Academic year

A. 1st year B. 2nd year C. 3rd year D. 4th year E. 5th year F. 6th year

4. Marital Status

A. Married B. Single C. In relationship

5. What is your Ethnicity? Ans———

6. What is your Religion? Ans ———

7. What is your other occupation beside to being medical student/Intern? Ans———

8. How much money do you get per month from your family/friend/guardian? Ans———

9. What is your most recent weight and height, please? Ans——kg and —— m respectively

Part II: Knowledge on Physical activity

1. Have you ever heard about physical activity?

A. Yes B. No

2. If yes to question no 1 what was your source of information?

A. Family B. Friends C. Books D. mass media E. Other (Specify....)

3. List some of physical activities you know.....

4. Do you think you are doing physical activities?

5. If yes to Qu No 4, list all of physical activities you are performing.....

6. How frequent do you perform these physical activities?

A. Always B. often C. Sometimes D. rarely E. no at all

7. If no to Qu No 4, what is the reason?

A. No time B. Not aware C. No money D. No food E. No Place.

F. No materials G. other (Specify, please!)

Part III: Attitude

1. Do you agree that some diseases can be prevented with regular Physical activity?

- A. Strongly agree
 - B. Disagree
 - C. Agree
 - D. Strongly disagree
2. Which physical activities do you think are more effective?
 - A. Aerobics. B. Anaerobic
 3. Have you planned to do regular physical activity in the future?
 - A. Yes B. No C. I never thought about it D. I'm already on it
 4. How frequent do you advice your patients to perform physical activity? (for clinical year students only)
 - A. Always B. Often C. Sometimes D. rarely E. no at all
 5. How frequent do you advice your family/friends to do physical activity?
 - A. Always B. Often C. Sometimes D. rarely E. no at all
 6. Do you think you are physically fit? A. Yes B. No

ANNEX 2.2: QUESTIONNAIRES RELATED TO PRACTICE OF PHYSICAL ACTIVITY PER GLOBAL PHYSICAL ACTIVITY QUESTIONNAIRE (GPAQ)

Next I am going to ask you about the time you spend doing different types of physical activity by using Global Physical Activity Questionnaire (GPAQ). Please answer these questions even if you do not consider yourself to be an active person.

1. Does your work involve mostly sitting or standing, with walking for no more than 10 minutes at a time? A. yes B. no
2. Does your physical activity involve vigorous activity, like [heavy lifting, running, jumping rope, football, volley ball, basketball, push up or dancing] for at least 10 minutes at a time? A. yes B. no
3. If yes to Qu 2, in a typical week, on how many days do you do vigorous activities as part of your physical activity? (Ans in days in a week)
4. If yes to Qu 2, on a typical day on which you do vigorous activity, how much time do you spend doing such activity? (Ans in Hour and minutes or just in minutes)
5. Does your physical activity involve moderate-intensity activity, like [brisk walking, swimming or jogging] for at least 10 minutes at a time? A. Yes B. No

6. If yes to Qu 5, in a typical week, on how many days do you do moderate-intensity activities as part of your physical activity? (Ans in days in a week)
7. If yes to Qu 5, on a typical day on which you did moderate-intensity activities, how much time do you spend doing such activity? (Ans in Hour and minutes or just in minutes)
8. How long is your typical work day? (Number of hours)
9. Do you walk or use a car/bicycle for at least 10 minutes continuously to get to and from places? A. Walk B. Use transportation
10. In a typical week, on how many days do you walk or use transportation for at least 10 minutes to get to and from places? (Ans in days in a week)
11. How much time would you spend walking or use transportation for travel on a typical day? (Ans in Hour and minutes or just in minutes)

ANNEX 2.3: LEISURE TIME RELATED QUESTIONNAIRES

The next questions ask about activities you do in your leisure time. Think about activities you do for recreation, fitness or sports. Do not include the physical activities you do at work or for travel mentioned already.

1. Does your [recreation, sport or leisure time] involve mostly sitting, reclining, or standing, with no physical activity lasting more than 10 minutes at a time (If your answer is No to this Qu, please go to Qu 7!)
A. Yes B. No
2. In your leisure time, do you do any vigorous activities like [running or strenuous sports, weight lifting] for at least 10 minutes at a time?
A. Yes B. No
3. If Yes to Qu2, in a typical week, on how many days do you do vigorous activities as part of your leisure time? (Ans in days a week)
4. How much time do you spend doing these vigorous activities as part of your leisure time on a typical day? (Ans in Hour and minutes or just in minutes)

- A. Yes B. No

Dear participants, now I am going to ask you about the time you spent being physically active in the last 7 days. Please answer each question even if you do not consider yourself to be an active person. Think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport. So, now think about all the vigorous activities which take hard physical effort that you did in the last 7 days. Vigorous activities make you breathe much harder than normal and may include heavy lifting, running, digging, aerobics, or fast bicycling. Think only about those physical activities that you did for at least 10 minutes at a time.

1. During the last 7 days, on how many days did you do vigorous physical activities? (Ans in days per week)
2. How much time did you usually spend doing vigorous physical activities on one of those days? (Ans in Hour and minutes or just in minutes)

Now think about activities which take moderate physical effort that you did in the last 7 days. Moderate physical activities make you breathe somewhat harder than normal and may include jogging, swimming, carrying light loads, bicycling at a regular pace, or doubles tennis. Don't include walking and think about only those physical activities that you did for at least 10 minutes at a time

3. During the last 7 days, on how many days did you do moderate physical activities?
(Ans in days per week)
4. How much time did you usually spend doing moderate physical activities on one of those days? (Ans in Hour and minutes or just in minutes)

Now think about the time you spent walking in the last 7 days. This includes at work and at home, walking to travel from place to place, and any other walking that you might do solely for recreation, sport, exercise, or leisure.

5. During the last 7 days, on how many days did you walk for at least 10 minutes at a time? (Ans in days per week)
6. How much time did you usually spend walking on one of those days? (Ans in Hour and minutes or just in minutes)

Now think about the time you spent sitting on week days during the last 7 days. Include time spent at work, at home, while doing course work, and during leisure time. This may include time spent sitting at a desk, visiting friends, reading or sitting or lying down to watch television.

7. During the last 7 days, how much time did you usually spend sitting on a week day? (Ans in Hour and minutes or just in minutes)

**YOU COME TO THE END
AND MY SINCERE THANK
GOES TO YOU!**

