

**KNOWLEDGE, PERCEPTION AND ATTITUDE TOWARDS
PERIODIC MEDICAL CHECK-UP AMONG MASTER OF PUBLIC
HEALTH STUDENTS OF THE UNIVERSITY OF IBADAN,
IBADAN, NIGERIA**

BY

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ABSTRACT

Disease prevention is recognised as a key strategy to reduce the morbidity and mortality of different types of diseases. Periodic Medical Checkup (PMC) is one of the tools for disease prevention, which enables certain risk factors or diseases to be detected at an early stage for timely interventions. There has been an increase in the number of people who die without any apparent cause in Nigeria or report so late to the hospital when little or nothing could be done to save their lives. Even though these sudden deaths resulting from lack of early medical attention are not only treatable, but they are highly preventable. Graduate Students of Public Health are important potential health change agents for maintaining a healthy lifestyle. This study was designed to investigate the knowledge, perception and attitude of periodic medical checkup among Master of Public Health students of the University of Ibadan.

This study was a descriptive cross-sectional survey involving the use of two-stage sampling technique to randomly select two hundred and sixty-five Master of Public Health students. Data were collected using validated semi-structured self-administered questionnaire. An 18-point Knowledge scores: 0 – 9, > 9 – 14, >14 were categorised as poor, fair and good, respectively. A 22-point Perception scale with score < 15 and ≥ 15 were categorised as poor and good perception, respectively. A 30-point Attitudinal score: < 22 and ≥ 22 were considered to be poor and good attitude. Also, 16-point scale was used to measure practice and practice score < 12 and ≥ 12 were categorised as poor and good practice towards periodic medical check-up. Data were analysed using descriptive and inferential statistics and $p < 0.05$ as the level of significance.

Age of the respondents was 26.9 ± 4.7 years, 35.5% were male while 64.5% were female and 12.8% were married and 87.2% were single. A few of all the respondents (3.8%) had good knowledge scores and 63.4% had fair knowledge. The majority, (96.6%) of the respondents had good perception scores, most (87.0%) had good attitude and some (43.4%) of the respondents scored high on the practice scale. There was a significant difference between gender and practice of periodic medical check-up while there was no significant difference between age and practice of periodic medical check-up.

Knowledge of the respondents was fair, perception and attitude were good but the practice was poor. It is therefore recommended that screening centre be made available at the faculty where students can access for periodic medical check-up.

Keywords: Periodic medical check-up, Preventive health, Masters of Public Health students

Word count: 410

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DEDICATION

This work is dedicated to the Glory of the Almighty God, the creator of the universe, the Alpha and the Omega, the beginning and the end, the first and the last, the Father of our Lord Jesus Christ. The All Sufficient God without whom I am nothing.

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The success of this work is entirely the work of grace and mercy. I am grateful to God for the completion of the work despite the challenges, trial, temptation, persecution, affliction during the journey of the programme. The Lord is merciful and gracious, slow to anger and plenteous to mercy. Truly, "It is not of him that willeth, nor of him that runneth but it is of the Lord that showeth mercy.

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CERTIFICATION

I certify that this study was carried out by Oluwole Emmanuel YELOTAN under my supervision in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria.

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LIST OF ABBREVIATIONS

APHA	American Public Health Association
CDC	Centres for disease control
HBM	Health Belief Model
KABP	Knowledge, Attitude, Belief and Practice
MPH	Master of Public Health
NCDs	Non Communicable diseases
PMC	Periodic Medical Check-Up
PHE	Periodic Health Examination
SCT	Social Cognitive Theory
SLT	Social Learning Theory
SPSS	Statistical Package for Social Sciences
UNWP	United Nations World Population
WHO	World Health Organization

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OPERATIONAL DEFINITION OF TERMS

Periodic medical check-up: This is a form of preventive medical practice involving thorough history, physical examination and screening of asymptomatic persons by physicians on a regular basis as part of a routine health care process.

Knowledge: This is the fact of knowing about something; general understanding or familiarity with a subject, place and situation.

Perception: This is the organization, identification, and interpretation of sensory information.

Attitude: This is the predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation.

Practice: To perform an activity or exercise a skill repeatedly or regularly in order to acquire, improve or maintain proficiency in it.

MPH Students: These are the students who are currently registered for Master of Public Health

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Life expectancy and prosperity have risen in developed and developing countries over the past 50 years and are expected to continue to rise. The average life expectancy at birth in Nigeria rose from 46 years in 1990 to 53 years in 2011 with a paradigm shift from curative medicine to preventive medical practice (United Nations World Population, 2012).

Disease prevention is recognised as a superior strategy to decrease the morbidity and mortality of different types of diseases which is a cost-effective way to improve the population health. Periodic medical checkups is one of the tools for disease prevention, which enables certain diseases or risk factors to be detected at an early stage for introducing timely interventions, in order to improve individual health outcome (Centre for Health Protection, 2008). It is an aspect of preventive medicine involving thorough history, physical examination and screening of asymptomatic persons by physicians on a regular basis as part of a routine health care process (World Health Organization, 2010). It can be used interchangeably with periodic medical examination, routine medical check-up, preventive health examination, periodic health evaluation, general medical examination, periodic health examination, periodic health check-up, comprehensive medical examination, annual physical examination, general check-up among others (Si, Moss, Sullivan, Newton and Stocks, 2014). It typically involves a medical history, which is a brief or complete physical examination and sometimes laboratory tests.

Periodic health check-ups and screenings are keys to maximizing the chance of living a longer and healthier life. Not only can they help prevent health problems before they start, but regular check-ups also help to discover health problems early enough to increase the chances of successful treatment and recovery (Johns Hopkins, 2011). According to the Centres for Disease Control and Prevention (CDC) (2017) regular health examinations and tests can help find problems before they start. It can also help find problems early, when the chances for treatment and cure are better. Through the right health services, screenings, and treatments, it helps increase the chances of living a longer and healthier life.

It is also considered effective in preventing illness, promoting health and reducing morbidity and mortality (Damiani, Federico and Basso, 2012). It includes things such as questions about personal and family medical history, height and weight measurements, blood pressure check, cholesterol level check, blood sugar test, dental check, throat check, ear check, eye check, urine test, breast examination, pulse rate, temperature check, HIV retroviral screening, kidney function test, liver function test, lipid profile, heart function, electrocardiogram (for those at a higher risk of heart disease), chest X-ray (for heavy smokers). It also constitutes routine blood investigation like complete blood cell count, renal function test, thyroid function test, serum electrolytes, Vitamin B12 and Vitamin D levels, serum calcium levels. Attending regular medical checkups is one of the tools for disease prevention, which enables certain diseases or risk factors to be detected at an early stage for introducing timely interventions in order to improve individual health outcome.

Healthy environment, good knowledge, attitude, practice and approachable availability of health services for all individuals are essential for prevention of diseases. It is progressively more recognised that health is preserved and enriched not only through the development and application of health advancements but also through the efforts adopted for intelligent lifestyle choices by individuals and community. Staying physically active and conscious about health can help prevent or delay certain diseases, including the non-communicable diseases (Williams, Hayman, Daniels, Robinson, Steinberger, and Paridon 2002).

Health check up should start even while the baby is in the womb for early detection of any abnormally and congenital diseases and at the time of birth to identify and correct many diseases. It should also be monitored during childhood and adolescence (Webner, 2003). During periodic or routine medical checkup, some of the non-communicable diseases such as cancer (breast, prostate, cervical), hypertension, diabetes mellitus, among others, can be detected and any deviation from good health is noticed and managed in the form of preventive or curative services thereby reducing the mortality associated with them (Moser, Patnick and Beral 2009).

Thorough medical examination is necessary and its frequency increases if there is a health problem that requires continuing care. Factors that are non-modifiable like age and family history of certain diseases determine the check-up or screening that one requires. Likewise the presence of modifiable

risk factors like smoking, consumption of alcohol, unhealthy lifestyle including sedentary lifestyle and diet, are all paramount in determining the frequency of check-up (WHO, 2002).

1.2 Statement of the problem

Most individuals in Nigeria pay little attention to health issues and accord little or no priority to medical check-up. The uptake of periodic medical check-up or preventive screening services has been shown to be poor in many developing countries despite its importance and potential benefits including Nigeria (Dalton, Bottle, Okoro, Majeed and Millett 2011). In developing countries where the practice of periodic medical check-up is poor despite the steady increase of the burden of the non-communicable/chronic disease, very few studies have been conducted on periodic medical check-ups especially in Nigeria. Annually, between 68 and 157 million new cases of occupational diseases arise as a consequence of various types of work-related exposures (WHO, 1994). Furthermore, in 2008, 36.1 million deaths occurred due to chronic or Non Communicable Diseases (NCDs); majorly cardiovascular diseases, cancers, diabetes, and chronic respiratory diseases. Of all the NCD deaths, 80% occurred in low- and middle-income countries with Africa having the overall highest mortality rate of 779/100,000 population (WHO, 2010).

Also, it was stated that there has been increase in the number of people who die suddenly or who die without any apparent cause in Nigeria or who report so late to the hospital that little or nothing could be done to save their lives (Eze, 2008). Even though these sudden deaths resulting from lack of early medical attention are not only treatable, but they are high preventable.

According to the research conducted among medical and non-medical students about the practice of periodic medical examination (Sadiq, Asim, and Aziz 2017), it was reported that awareness is present among medical and non-medical students, however the practices are low and there is no major difference between medical and non-medical students in terms of their knowledge and practice.

1.3 Justification of the study

Higher institutions (university, polytechnics and monotechnics) students are important group of the society and health related students especially public health professionals, who would be change agents, role models and promoters of healthy lifestyles are very important in the society. It is very essential that they are aware of the importance of periodic medical check-up to ensure disease prevention and control and other certain diseases to be detected at an early stage to provide good health services to the public. There is need therefore for regular medical check-up as this have been empirically established to prevent onset of disease or the worsening of an existing disease, detect disease early and thus early treatment and reduction in morbidity and mortality. Also some of the non-communicable diseases can be detected and any deviation from good health is noticed and managed in the form of preventive or curative services thereby reducing the mortality associated with them (Moser *et al.*, 2009). It is therefore essential to have periodic medical examination since these chronic diseases have a heavy socioeconomic burden on individuals and account for more than 60% of the overall global burden of diseases (Si-qing, 2009). The master of Public health as health personnel are important health promoters, role models and change agents for maintaining a healthy lifestyle for the general population.

According to American Public Health Association (APHA) (2006), public health professionals play an active role in communicating public health information to nonscientific audiences, such as the general population or the mass media. Public health officials have an important responsibility to promote the practice of public health since one of the goals of public health is to communicate health information in such a way that it can be interpreted appropriately by individuals, group, and society at large as good knowledge and understanding of the prevailing health knowledge, attitude and preventive health behavior is essential for creating population-specific health programs. It is biologically plausible that chronic disease could be prevented or at least delayed via early detection and management of biomedical and lifestyle risk factors, and there is some evidence that periodic medical check-up can improve the delivery of some recommended preventive services (Boulware, Marinopoulos and Phillips 2007).

It is therefore important to assess the Public health professionals as they are change agent of the population who are expected to be a role model of healthy living to other members of the society; thereby achieving healthy living for all.

1.4 Research questions

The study will answer the following questions:

1. What is the level of knowledge of respondents on periodic medical checkup?
2. What is the perception of respondents towards periodic medical checkup?
3. What is the attitude of the respondents towards periodic medical checkup?
4. What are the factors influencing periodic medical checkup among the respondents?

1.5 Objective of the study

1.5.1 Broad objective

The broad objective of this study is to investigate the knowledge, perception and attitude towards periodic medical checkup among Master of Public Health students of the University of Ibadan, Ibadan, Nigeria

1.5.2 Specific objectives of the study

The specific objectives guiding the study include to:

1. assess the knowledge of periodic medical checkup among Master of Public Health students of University of Ibadan.
2. determine the perception of periodic medical checkup among Master of Public Health students of University of Ibadan.
3. examine the attitude of periodic medical checkup among Master of Public Health students of University of Ibadan.
4. identify the factors towards the practice of periodic medical checkup among Master of Public Health students of University of Ibadan.

1.6 Research hypotheses

The null hypotheses for this study are:

- H01** There is no significant association between sex of the respondents and practice of periodic medical checkup.
- H02** There is no significant association between marital status of respondents and periodic medical checkup.
- H03** There is no significant association between age of respondents and periodic medical checkup.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Concept of Periodic Medical Check-Up

The roots of the periodic medical examination are not entirely clear. They seem to have been advocated since the 1920s (Emerson, 1923). Some authors point to pleaded from the 19th and early 20th century for the early detection of diseases like tuberculosis, and periodic school health examinations (Han, 1997). Studies conducted in the 1960s focused solely on detection; few considered subsequent interventions and most used mortality, morbidity, and medical service use as primary outcomes. In the 1970s, studies started to consider how to manage detected risk factors. From the 1980s onwards, the focus shifted from screening to screening plus intervention. As medicine has adopted the principles of prevention, screening for preventable disease has become more common (Department of Health, 2010).

Periodic medical check-up is a form of preventive medicine involving thorough history, physical examination and screening of asymptomatic persons by physicians on a regular basis as part of a routine health care process (WHO, 2010). It is a part of preventive service which is associated with reduced morbidity and mortality and its appropriate use may result in early diagnosis of illness and reduced health care cost. It is a common form of preventive medicine involving visits to a general practitioner more or less frequently (Akande and Salaudeen, 2004). It refers to a comprehensive assessment to detect and manage risk factors and chronic disease. It is biologically plausible that chronic disease could be prevented or at least delayed via early detection and management of biomedical and lifestyle risk factors, and there is some evidence that periodic health evaluations can improve the delivery of some recommended preventive services (Boulware *et al.*, 2007).

It involves a medical history, a brief or complete physical examination and laboratory tests. It is considered effective in preventing illness and promoting health and reducing morbidity and mortality (Damiani *et al.*, 2012). It is also considered important and effective measure in the prevention of illness and promotion of health (Culica, Rohrer, Hilsenrath and Pomrehn 2002 and Lai and Kalyniak 2005). It also provide baseline data and helps protect the community (and not just the sick in factories and industries), improve patients' lives as in prescriptive screening, and finally influence the acceptance of life insurance (Sackett, 1975).

It can be used interchangeably with periodic medical examination, routine medical check-up, preventive health examination, periodic health evaluation, general medical examination, periodic health examination, periodic health check-up, comprehensive medical examination, annual physical examination, general check-up among others (Si, Moss, Sullivan, Newton and Stocks, 2014). Moreover, it provides an opportunity for health status evaluation, preventive health consultation, and physician-patient relationship promotion (Prochazka, Lundahl, Pearson, Oboler, Anderson 2005).

Periodic health examinations (PHEs) are objective assessments of the health of employees in relation to their specific jobs, to ensure they can do the job and will not be a hazard to themselves or others (Guidotti, Cowell, Jamieson, Engelberg 1989). This is to ensure that the work people are fit for employment and that they remain in that state of fitness throughout their period of employment (Akande and Salaudeen 2004). It is considered an important and effective measure in the prevention of illness and promotion of health (Culica *et al.*, 2002 and Lai *et al.*, 2005). Moreover, it provides an opportunity for health status evaluation, preventive health consultation, and physician-patient relationship promotion (Prochazka, Lundahl, Pearson, Oboler and Anderson 2005)

According to adult preventive health care guidelines (2018), it consists of one or more visits with a health care provider to assess patients' overall health and risk factors for preventable disease, and it is distinguished from the annual physical examination by its incorporation of tailored clinical preventive services and laboratory testing as part of health risk assessment.

People around the world pay varying levels of attention to health issues and give differing levels of priority regarding medical check-up. During periodic or routine medical checkup some of the non-communicable diseases such as breast cancer, prostate cancer, cervical cancer, hypertension, diabetes mellitus, among others, can be detected and any deviation from good health is noticed and managed in the form of preventive or curative services thereby reducing the mortality associated with them (Moser, Patnick, Beral 2009). Krogsbøll and colleagues (2012) concluded that general health checks failed to improve total and disease-specific mortality; and there was no strong evidence suggesting these checks would reduce either morbidity or subsequent medical service use. The impact of a health check could be improved and be more sustainable if provided in conjunction with the patient's routine health care (General college of general practitioners 1981 and Meland, Laerum, and Maeland 1996).

According to Shinsho (2001), health check up should start even while the baby is in the womb to find out congenital diseases and at the time of birth to identify and correct many diseases. Health should be monitored during childhood and adolescence. Regular checkups are necessary to detect problems like heart diseases, cancers, diabetes and other. It is essential to have periodic medical examination since these chronic diseases have a heavy socioeconomic burden on individuals and account for more than 60% of the overall global burden of diseases (Si-qing, 2009). Periodic health check-ups and screenings help in maximizing the chance of living a longer and healthier life. Not only can they help prevent health problems before they start, but regular check-ups may also help discover health problem early enough to increase the chances of successful treatment and recovery (Johns Hopkins, 2011). Regular health exams and test can help find problems before they start and can also can help find problems early, when the chances for treatment and cure are better.

Apart from the benefit to the individual in early diagnosis and treatment of ailments, it provides data for evaluation and interpretation to characterize trends and identify new pattern or clusters of disease or injury (Wallace, 1986). Healthcare providers who have ongoing relationships with patients may be in a better position to deliver preventive health services, as they tend to have a strong influence on patient's health perceptions and be better able to encourage compliance (Devroey, Coigniez and Vandevoorde 2003). Apart from the benefit of medical check-up in reducing the morbidity and mortality resulting from hazards in the workplace, it also helps to promote, maintain and restore the health of the employee. Various forms of medical examination minimize the cost of management of disease arising from the workplace (Asogwa, 2000). Through the right health services, screenings and treatments, chances of living longer and healthier life is very high (CDC, 2017).

2.1.1 Types of Periodic Medical Check-Up

A typical periodic medical check-up/medical examination/consultation include; general medical check-up, blood pressure check, visual check, dental check, blood sugar test, eye check, urine test, kidney function test, liver function test, lipid profile, heart function test, blood sugar, breast examination, pulse rate, temperature check, HIV retroviral screening, height check, weight check, cholesterol level check, throat check, ear check, electrocardiogram, chest X-ray, prostate check, colon and rectum exam, pap smear and urinalysis.

2.2 Knowledge of Periodic Medical Check-Up

The awareness and knowledge of periodic medical check-up has been shown to be different among different people. According to the Knowledge, Attitude, Belief, and Practice (KABP) Model, health knowledge is the foundation of healthy attitudes, beliefs, and practices. People who have more health knowledge are more likely to behave healthily.

In a study conducted among female undergraduate students in the University of Buea on breast self-examination, nearly three-quarter (73.5%) of the respondents had heard about it before, 37.3% of the respondents were aware that it should be performed monthly. Very few (9.0%) of the respondents actually knew how to perform it and only a few (13.9%) knew what to look for while performing it. Majority, (88.6%) of the respondents perceived it as an important technique in the early detection of breast cancer. Overall, just a few (9.6%) of the respondents were substantially aware of breast self-examination, 53% were partially aware, and 37.4% had never heard of it before. The main sources of information reported by the respondents were television (19.9%), friends (19.3%) and doctors (17.5%).

Also, in a study conducted by Eke, Eke, Joe-Ikechebelu and Okoye, (2012), (74.9%) of the respondents was aware of periodic medical check-up (all the females and 67.9% of the males). Majority (61.2%) of all respondents received information about periodic medical check -up from friends and 18.2% from mass media. Various sources of information reported about medical check-up were friends, family, mass media and school. The commonest known type of medical check-up reported is general examination (60.7%), then blood pressure check (55.4%) and (2.5%) knew no type of medical check-up.

A comparative analysis of the awareness and practice of periodic health examination among public and private establishments revealed that there was no statistically significant difference between workers in the private and public establishments. Most of the respondents in both establishments were aware of PHE. This could be possibly due to the fact that a significant number of the respondents had tertiary education, indicating that they were literate and this could have resulted to the high awareness of PHE. The proportion of respondents who were aware of PHE was (93%) in the private and (83.9%) in the public establishment respectively. The most common source of information indicated by respondents was the media, (34.9%), in the private establishment and (40.0%), in the public establishment. On the definition, (35.6%) respondents in the private

establishment revealed that it was medical examination to assess fitness to work, while (38.7%) of respondents in the public establishment said that it was medical examination done periodically while at work. Majority of respondents said that periodic medical check-up should be done once in a year, (80.2%) in the private and (86.2%) in the public establishments.

Another study in Nigeria by Ilesanmi, Omotoso, Alele and Amenkhienan (2015), reported that knowledge of medical check-up among respondents who have heard about it shows that among those who have heard of medical check-up, 47.2% felt it should be done when one is healthy while 52.8% felt it should be done during illness. Half (50%) of those who responded to questions on types of medical check-up knew general examination as a form of medical check-up, 32.2% knew blood pressure check, 6.9% knew visual check, 6.2% knew dental check and only 4.6% knew blood sugar could be done as a form of routine check-up. Concerning the frequency of medical check-up, 67.6% felt every 6 months medical check-up is ideal, 9.6% felt yearly, 8.1% felt it should be done every two years and 14.7% don't know the ideal period to do medical check-up.

Overall, 79.2% of those who were aware of periodic medical check-up had ever had it routine medical check-up done while the remaining 20.8% have never done it. The reason for not having routine medical check-up was reported by 30 respondents, only 25 gave a reason for not having periodic medical examination. Among them, 6 said they were not sick, 5 had no money, 3 were not aware that they should have routine medical check-up done while 1 respondent was busy. The respondents in this study only had adequate knowledge in some areas, but lack such in other key areas and therefore do not possess sufficient knowledge. Almost half felt medical check-up should be done during sickness. The commonest known type of medical check-up was general examination, followed by blood pressure. This showed that only the knowledge of general physical examination and hypertension was good among the respondents. Other types of medical check-ups were not popular. Their lack of sufficient periodic medical check-up relating to knowledge in all key areas could lead to refusal to go for periodic medical check-up when one is healthy thereby leading to preventable health challenges.

Furthermore, study conducted among traders in South East Nigeria on the perception and practice of periodic medical checkup reported that (74.9%) of the respondents were aware of periodic medical check-up; all the females and (67.9%) of the males. Majority (61.2%) of all respondents received information about periodic medical check-up from friends, (18.2%) from mass media,

(16.1%) from family and (4.5%) from school. The commonest known type of medical check-up reported are general examination (60.7%), blood pressure check (55.4%), eye check (28.5%), dental check (27.3%) and 2.5% knew no type of medical check-up. The interval periods to conduct medical check-up by respondents were monthly (59.9%), every six weeks (19.4%), annually/yearly (6.2%), every two years (2.1%) and (12.4%) don't know the interval to conduct medical check-up.

In a comparison of medical and non-medical students on the awareness and practice of Periodic Medical Examination (2017) shows that they both had awareness about the knowledge. Among medical students (68%) and (61%) non-medical students had knowledge about periodic medical examination of which no major difference was found in knowledge among medical versus non-medical students but still medical students are more knowledgeable than non-medical students. This difference could be because of their study fields. Although the medical students should be more aware of health behavior and risk awareness, as conclusion in other studies which shows that curriculum of all profession is lacking in providing knowledge on periodic medical check-up. It was concluded that periodic medical examination serves a purpose of screening for diseases and the awareness and practice of proven beneficial components of such examinations be increased among students.

2.3 Perception of Periodic Medical Check-Up

In a study conducted among traders in South East Nigeria on perception and practice of periodic medical check-up, (63.6%) of the respondent felt everybody needs medical checkup while 36.4% felt it is for the sick only. Most (85.5%) of those who knew about periodic medical checkup felt it could improve their work efficiency; (87.7%) of the males and (80.3%) of the females. Also, (5.0%) of the respondent felt only males needs medical checkup, (18.6%) feet it is for female only, (68.2%) felt both gender need medical checkup while (8.2%) don't know among the gender. A study designed to determine the knowledge, attitude and practice of periodic medical check-up among residents of Osun, Ondo and Ekiti States of Nigeria. (85.6%) Ondo, (84.0%) Ekiti and (87%) Osun of the respondents felt everybody need medical checkup. (23.3%), (17.8%) and (16.3%) of respondents in Ondo, Ekiti and Osun respectively felt males need medical checkup more than female while (35.6%) Osun, (40.6%) Ekiti and (41.2%) Osun felt Females need medical checkup more than male. Among the respondents, (86.5%), (81.3%) and (85.4%) of respondents in Ondo, Ekiti and Osun respectively felt Periodic medical check-up will improve health. One-fifth (21.6%)

Ondo, (25.5%) Ekiti and (24.6%) Osun felt periodic medical checkup is covered by health insurance plan while (17.4%) Ondo, (23.8%) Ekiti and (21.9%) Osun felt health insurance plan cover periodic medical check-up.

2.4 Attitude of Periodic Medical Check-Up

The study conducted among market women in Zaria, Nigeria shows poor attitude (19.6%) towards cervical cancer screening. Some, (32.7%) of the women had never heard of cervical cancer screening before, but 32.7% others had been screened for cervical cancer. Of those who had been screened, 80.6% did so voluntarily, 68.2% had advised a friend/relation in the past to take up cervical cancer screening. Respondents identified fear of outcome of screening, lack of information and public awareness, lack of health worker request, high cost of screening and lack of personnel at the screening centres as the reasons why people do not patronize cervical screening. Their knowledge of risk factors for cervical cancer was generally is poor; although 62.5% of them were aware that sexually transmitted infection ware a risk factor. Although their knowledge of symptoms of cervical cancer was fair, their attitude towards cervical cancer screening was poor (19.6%). Some patients would go to seek care after noticing symptoms in hospitals (72.1%), traditional healers (10.5%), religious healers (7.4%), while 10.1% would not go anywhere. Better facilities, provision of more female staff at screening centres and offering service at cheaper cost would enhance utilisation of cervical cancer screening.

2.5 Frequency of Periodic Medical Check-Up

According to Xiong, Iosif, Bermudes, McCarron and Hales (2010), men are less likely to use preventive health services than women. Green and Pope (1999) mention two views to explain why women use preventive health services more frequently. Some believe it is because women have higher morbidity rates, while others argue that it is because they are more sensitive to symptoms and care more about their health. It is generally believed that females suffer from more diseases and are more sensitive to their health status. Some studies have also shown that people who undergo regular medical examinations have decreased the rates of invasive cancers and mortality respectively.

The frequency of medical check-up in a community in south west Nigeria shows that (67.6%) felt every 6 monthly medical check-up is ideal and only (48.2%) had it frequently. Also the association

between socio-demographic characteristics and frequency among the respondents was recorded that (54.8%) of the respondents who were 60 years and above had frequent medical check-up compared to (23.1%) of respondents who were less than or equal to 40 years. This shows that a statistically significant proportion of respondents who were 60 years and above (54.8%) had frequent medical check-up compared to 23.1% of respondents who were less than or equal to 40 years.

A 2016 study on the Periodic medical check-up among residents of three Nigerian Southwestern States reported that a vast majority of respondents know that there is need to have a periodic medical checkup, but vary in terms of frequency. In Ondo State, (30.7%) of the respondents think it should be done monthly, (42.4%) think once in three month is adequate, (11.9%) preferred twice in a year while 63 (5.3%) said it should be done annually. In Ekiti State, (30.2%) of the respondents think periodic medical check-up should be done monthly, (38.2%) think once in three month is adequate, (13.4%) preferred twice in a month while (7.5%) said it should be done annually. In Osun State, (32.0%) of the respondents think periodic medical check-up should be done monthly, (29.9%) think it should be done once in three month, (16.6%) preferred twice in a month while (6.4%) said it should be done annually.

2.6 Practice of Periodic Medical Check-Up

Periodic medical check-up dates as far back as 1347, making it an ancient practice (D'Souza and Bennett, 1978). The preventive health examination has been part of medical practice since at least the mid-19th century (1920s). Traditionally, it has included a medical history and general examination which in modern practice may be accompanied by screening, counseling or immunizations (Fenton, Cai, Weiss, Elmore *et al.*, 2007). General practice-based health checks refer to those conducted in general practice or its equivalent and managed by either practice staff or trained personnel. Communication between healthcare providers and patients may also affect the practice of health services.

In a study conducted among traders in south east Nigeria, the study shows that the actual level of practice is very low among the respondents. Only 29.4% of males and 39.4% of females practice periodic medical check-up. The predominant age bracket that practiced periodic medical check-up was 40-49 years (42.9%), followed by 30-39 years (34.1%). No respondent under 20 years of age practices periodic medical check-up. Traders with secondary school education had the highest level of practice of periodic medical check-up (32.5%), followed by those with primary school education

(32.1%). One (25%) of those with post secondary school education practised such. Seventy (68.6%) of respondents who practised periodic medical check-up did so monthly while 28.4% attended every 6 months and 3.0%, yearly. Sixty-one (59.8%) of those who practised periodic medical check-up had done that within the last month while 39.2% had done so 1-6months earlier. The commonest medical check-up attended was general examination (61.8%); 66.2% of males and 50% of females, while 32.3% of the respondents, predominantly females (46.4%) had gone for check up to measure their blood pressure. Six (5.9%) respondents, 5 being males, had gone for eye check up. Age, gender and educational status were not found to affect the practice of periodic medical check-up significantly.

A comparative analysis of the awareness and practice of periodic health examination among workers of public and private establishments in Zaria, Northwestern Nigeria. There was no statistically significant difference in the practice of PHE between public and private establishments. In the private establishment, (42.0%) have had PHE while (44.3%) in the public establishment have had PHE. Of the respondents that have ever undergone PHE in the private establishment, (44.7%) have undergone PHE once, while of the respondents in the public establishment, (45.2%) have undergone PHE just once. Majority of the respondents had their last PHE 1 year ago, (64.4%) in private and (42.6%) in public establishments. Concerning feedback, (77.3%) in the private establishment got feedback on PHE while (88.5%) in the public establishment got feedback. In all, (74.5%) reported improvement in lifestyle as a result of PHE in the private establishment and (63.9%) in the public establishment. Among all of the variables used to assess practice, there was no statistically significant difference between the private and the public establishments.

2.7 Factors influencing Periodic Medical Check-Up

Many studies have explored factors that affect the use of preventive health services, such as educational level, income, and self-rated living status (Chun and Kim 2007). According to Nelson, Chapko, Reiber, Boyko (2015), people who have high income and private insurance are able to access preventive health services more easily.

The high rate of periodic medical check-up awareness reported among respondents in both sectors did not correspond with the level of practice. This implies that beyond awareness, other factors could come into play in the actual of it's practice such as cost, willingness, and belief in the value

of medical check-up as highlighted in some other studies (Cherrington, Corbie-Smith and Donald 2007).

According to Wall and Teeland (2004), the factors put forward by non-attenders of preventive health screening services included no perceived need for health checks or absence of symptoms, lack of time or hindrances at work and having recent contact with the health service.

Ilesanmi *et al.*, (2006) also reported that the reason for not having routine medical check-up reported by the participants include no time, not aware, no money and that they are not sick. Among them (64%) said they were not sick (20%) had no money, (12%) were not aware that they should have routine medical check-up done while (4%) respondent was busy.

It was also reported by Raphael (2017) on the study periodic health examination among women of childbearing age (15–45 Years) in a Federal Teaching Hospital, Abakaliki that the major factors hindering the practice of periodic health examination are time constraints (26.32%) and financial constraints money (21.92%).

The Periodic medical check-up conducted among residents of three Nigerian Southwestern States also reported that those that have not deliberately undertaken any form of periodic medical check-up across the three states was due to reasons ranging from financial challenge, busy work schedule and steady health condition. It was concluded that the majority of the respondents probably don't practice it because their health insurance plan does not cover the medical checkup or due to individual/organizational financial constraints (Usman, Edet-Utan, Suleiman, Isola, Ojogbede, Akintayo-Usman, Fatunmbi, and Adu 2016).

2.8 The Theoretical framework (HBM)

Theories are used to facilitate the conduct of research as it helps to predict human behavior and how it can be modified under certain conditions.

Health Believe Model (HBM) developed in 1950s draws on Kurt Lewin's force theory (reinforcing and restraining factors), value expectancies inherent in benefits and constraint analysis. It was one of the first theories of health behavior, and remains one of the most widely recognized in the field.

Health Belief Model is useful when thinking about information needed to be collected about a target population before the program is developed. It argued that people were ready to act if they applied the six (6) tenets of the model (construct of health belief model).

Tenets of the Model

Perceived susceptibility: This refers to the subjective beliefs about the chances of getting a condition. It define what populations(s) are at risk and their levels of risk, tailor risk information based on an individual's characteristics or behaviors and help the individual develop an accurate perception of his or her own risk

Perceived severity: This refers to person subjective beliefs about the seriousness of a condition and its consequences specify the consequences of a condition and recommended action.

Perceived benefits: It refers to the belief in the effectiveness of taking action to reduce risk or seriousness. It explain how, where, and when to take action and what the potential positive results will be.

Perceived barriers: It deals with the material and psychological costs of taking action, offer reassurance, incentives, and assistance; correct misinformation

Cues to action: This refers to the precipitating forces that make a person feel need to the action. It include factors that activate "readiness to change", provide "how to" information, promote awareness, and employ reminder systems.

Self-efficacy: This is the confidence in one's ability to take action, provide training and guidance in performing action, use progressive goal setting, give verbal reinforcement and demonstrate desired behaviors

Theoretical Framework: Health Belief Model

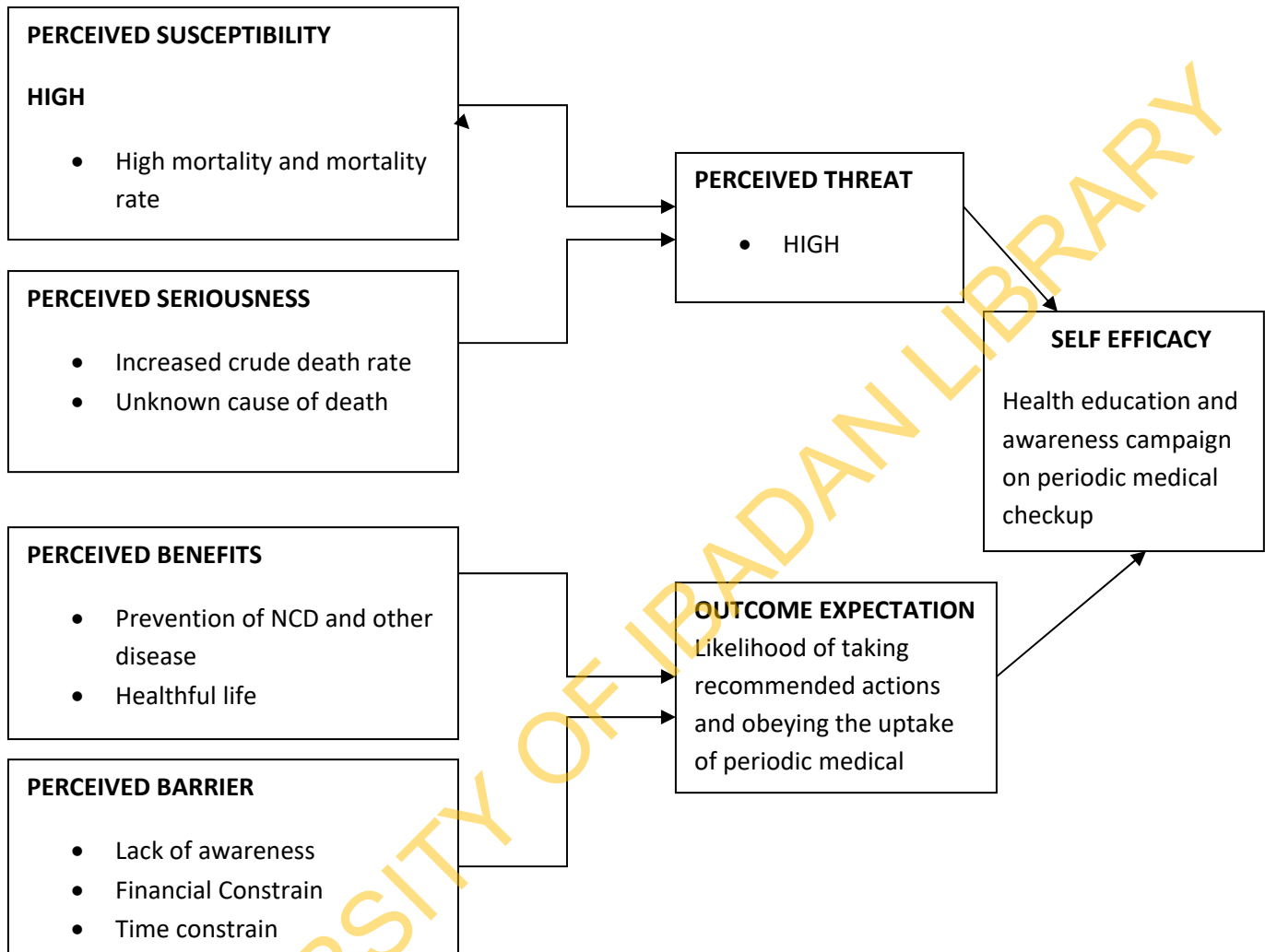


Figure 2.1: Application of Health Belief Model

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Study design

A descriptive cross-sectional study design was adopted to investigate the knowledge, perception and attitude of periodic medical checkup among Masters of Public Health students of the University of Ibadan, Ibadan, Nigeria using semi-structured self-administered questionnaire.

3.2 Study location

The study was carried out among the students in the Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, the state capital of Oyo State in Southwestern Nigeria. The University of Ibadan, UI was established in 1948 as it is fondly referred to as the first University in Nigeria. Until 1962 when it became a full-fledged independent University, it was a College of the University of London in a special relationship scheme. The University which took off with academic programmes in Arts, Science and Medicine, is now a comprehensive citadel of learning with academic programmes in sixteen Faculties namely, Arts, Science, Basic Medical Sciences, Clinical Sciences, Agriculture, the Social Sciences, Education, Veterinary Medicine, Pharmacy, Technology, Law, Public Health, Dentistry, Economics, Renewable Natural Resources and Environmental Design and Management. The Faculties of the Basic Medical Sciences, Clinical Sciences, Public Health and Dentistry are organised as a College of Medicine. The University has other academic units among which are: Institute of Child Health, Institute of Education, Institute of African Studies, Centre for Child Adolescent and Mental Health, Centre for Educational Media Resource Studies, African Regional Centre for Information Science (ARCIS), Centre for Peace and Conflict Studies (CEPACS), Centre for Petroleum, Energy, Economics and Law (CPEEL), Centre for Sustainable Development (CESDEV), and Centre for Entrepreneurship and Innovation (CEI), Institute for Advanced Medical Research and Training (IAMRAT), Centre for Drug Discovery, Development & Production (CDDDP), Centre for Control & Prevention of Zoonosis (CCPZ). There are twelve Halls of Residence which provide accommodation for about 30% of the population of students in the regular studies mode and also has 1212 housing units, out of which 609 units are occupied by senior

staff and 603 units by junior staff. About 50% of the entire student enrolments are postgraduate students which produces an average of 3,000 Masters & 250 Ph.Ds every year.

The Faculty of Public Health where the study took place was founded in 2002 as the first Faculty of Public Health in Nigeria. The Department of Preventive and Social Medicine of the then Faculty of Clinical sciences metamorphosed into Faculty of Public Health. The Faculty currently has six departments and one Institute.

The Faculty building where all the departments are located (except Human Nutrition and Institute of Child Health) was named after late Professor Oladele Ajose inside the University College Hospital, Ibadan. The Institute of Child Health is also located in University College Hospital but outside the Faculty building and Human Nutrition department is located at the University main campus. This study location is considered suitable for the conduct of the research work because the Master of Public Health students are located here since that is where their faculty is located.

3.3 Study population

The study population consists of 265 both male and female of Master of Public Health students in the University of Ibadan, Ibadan, Nigeria. Currently, there are six departments and one institute in the faculty namely; Environmental Health Sciences, Epidemiology and Medical Statistics, Health Policy and Management, Health Promotion and Education, Community Medicine, Human Nutrition and Dietetics and Institute of Child Health. Public health professionals are generally health promoters of healthy behaviours in the population irrespective of their religions or tribes. Conducting this study among this population will enable us to know the level of their practice when compared to their knowledge.

3.4 Inclusion Criterium

The inclusion criteria for the study were first and second year master students of all the departments in the Faculty of Public Health, College of Medicine, University of Ibadan who consented to participate in the study.

3.5 Exclusion Criteria

The exclusion criteria were all other students from other Faculties, Faculty of Public Health students who did not fall within first and second year of MPH students and students of faculty of public health who did not consent (those who gave informed dissent) were excluded from the study.

3.6 Sample size determination

Sample size for this study was estimated from the Leslie kish formula of

$$N = \frac{Z^2 pq}{d^2}$$

Where;

N = Minimum sample size

Z = Standard normal deviation set at 1.96 normal deviation

p = Prevalence rate of 77.9% (Olayinka *et al.*, 2015)

d = degree of precision at 5% (0.05)

q = 1-p (1- 0.779)

$$\text{Therefore, } N = \frac{(1.96^2 \times 0.779 \times 0.221)}{(0.05)^2} = 264.5$$

A non-response rate of 10 % (26.45) will be considered

- Therefore, 26.45 will be added to the sample size calculated to make the sample size 291

3.7 Sampling technique

A two-stage sampling technique was used for the study;

Stage 1: A list of the total number of MPH students from each Department in the Faculty of Public Health was collected and a proportionate method was used to know the number of students to be selected from each department due to the variation in the population.

Stage 2: A simple random sampling (balloting) method was then used to select the study participants from each department based on the total number of MPH students in the Department.

The total number of the students in all departments of the faculty as gathered through the various class representatives and departmental offices is presented in the table 3.1.

Table 3.1: Number of Registered MPH students in the Faculty of Public Health

S/N	Departments	2016/2017		2017/2018		Total
		Male	Female	Male	Female	
1.	Health Promotion and Education	10	42	14	38	104
2.	Epidemiology and Medical Statistics	32	45	23	42	142
3.	Health Policy and Management	15	20	11	22	68
4.	Environmental Health Sciences	31	29	36	21	117
5.	Community Medicine	12	16	14	18	60
6.	Human Nutrition and Dietetics	12	49	17	40	118
7.	Institute of Child Health	22	29	21	34	106
	TOTAL	134	230	136	215	715

Sources: Departmental offices record

Table 3.2: Number of MPH students selected in the Faculty of Public Health

S/N	Departments	2016/2017		2017/2018		Total
		Male	Female	Male	Female	
1.	Health Promotion and Education	8	14	9	26	57
2.	Epidemiology and Medical Statistics	7	5	11	9	32
3.	Health Policy and Management	4	8	5	11	28
4.	Environmental Health Sciences	3	7	14	5	29
5.	Community Medicine	3	8	6	12	29
6.	Human Nutrition and Dietetics	4	11	9	32	56
7.	Institute of Child Health	2	7	9	16	34
	TOTAL	31	60	63	111	265

3.8 Instrument for Data Collection

Quantitative instrument was used for data collection. This involved the use of semi-structured self-administered questionnaire. The questionnaire was developed using information obtained from literature on periodic medical check-up. The instrument for the study had five (5) sections: the first section was designed to bring out data on socio-demographics characteristics of the respondents. The second section was designed to assess the level of knowledge of respondents relating to periodic medical checkup while the third section was meant to collect information on the perception of periodic medical checkup among Master of Public Health students. The fourth section focused on the attitude of periodic medical checkup among Master of Public Health students and fifth section was meant to collect information on the practices of periodic medical check-up among Master of Public Health students of the University of Ibadan.

3.9 Validity of Instrument for Data Collection

For the validity of instrument for data collection, content validity was ensured by ensuring the theme from the specific objectives form the sub-headings in the section of the instrument apart from section 1 which focused on the socio-demographic characteristics of the respondents. Construct validity was assured by making sure variables in the theoretical framework are represented in the instrument for this study.

Face validity was also considered and ensured double barrel questions or any ambiguous questions were not included in the instrument.

Extensive literature reviews were done with simple language and clarity of questions was ensured. The drafted copy of the proposed instrument undergoes independent review from peers and experts in the field of Public Health and the medical profession. Supervisor's review was used in fine-tuning the instrument.

3.10 Reliability of Instrument

The reliability of the instrument was determined by pre-testing 10% (26.45) among Master of Public Health students of the Obafemi Awolowo University, Ile-Ife, Osun State. Copies of the instrument were administered to thirty (30) respondents. The information gathered was check for errors and completeness. Each of the questionnaires was given serial number for easy recall and a coding guide was developed to facilitate entry of the data collected into the computer software. The data was then subjected to descriptive statistics which was basically for the frequencies and charts. The overall reliability coefficient which is also called Cronbach Alpha statistical test was also calculated to be 0.755 and was accepted to be reliable as this is close to 1. From the responses of the respondents, the instrument was reviewed and ambiguous questions were removed. Also, questions considered by the respondents not to be clear were revised.

3.11 Data collection procedure

The data were collected by the researcher with the assistance of the class representatives of each of the departments who had been trained prior to the administration of the instrument as research assistants. The students were met in their various lecture rooms and the researcher together with the assistants provides correct and understandable information to them about the research. This was considered to be essential in order to obtain informed consent from the participant. The informed consent forms were distributed among the research participants after they are fully about the study. After the questionnaires had been filled by the respondents, the researcher checked for completeness and errors before leaving the location of the data collection.

3.12 Data management and analysis

The questionnaires were given serial number for easy entry and recall. A coding and scoring guide were developed along with the data collection tool in order to facilitate its analysis. Statistical Package for Social Sciences (IBM/SPSS) version 21 was used to analyze the data obtained from the questionnaire. Using the scoring and coding guide, the data collected were carefully entered into the statistical software and analyzed using descriptive statistics such as frequency, percent, mean, standard deviation, charts and inferential statistics such as Chi-square test to measure significant difference between sex, marital status, age and practices towards periodic medical check-up among the study population. The results obtained from the SPSS analysis were summarized and presented in tables, figures and charts.

A 8-items and 18-point knowledge scale was used to assess the knowledge of respondents towards periodic medical check-up and knowledge scores: 0 – 9, > 9 – 14, >14 were categorised as poor, fair, and good, respectively. A 11-items and 22-point perception scale with score < 15 and ≥ 15 were categorised as poor and good perception, respectively. A 15-items and 30-point attitudinal score < 22 and ≥ 22 were considered to be poor and good attitude. Also, 16-point scale was used to measure practice and practice score < 12 and ≥ 12 were categorised as poor and good practice towards periodic medical check-up. A 8-items and 16-point practice scale was used to examine the practices of respondents towards periodic medical check-up. A practice score < 12 represent poor practice

while a score ≥ 12 represent a good practice score towards periodic medical check-up among Masters of Public Health Students.

Chi square test statistic was conducted to determine the relationship between gender, marital status, age and practices towards periodic medical check-up.

3.13 Ethical considerations

Ethics approval was obtained from the University of Ibadan/University College Hospital (UI/UCH) Ethics Review Committee to ensure the study meets all the principles and national guidelines in research involving human participants.

Informed Consent: A valid Informed consent was obtained from the study participants through appended signature on the informed consent form after adequate provision of information.

Confidentiality: All identifiers were removed from the questionnaire and confidentiality was ensured through protection of data collected from participants.

Voluntariness: Participants was accorded the right to or not to participate in the study without any consequence. It was made clear to participants that they are under no obligation to participate in the study.

Beneficence: The study among this population will therefore serve to inform the necessary stakeholders on how to better equip students with adequate information on periodic medical check-up and also serve as role models for people in the society.

Non-maleficence: The study did not involve any risk as it does not involve utilization of any invasive material. No harm came to respondents who chose to participate in the study. Only the time needed to respond to the questionnaires was required of the participants.

Dissemination of Findings: To ensure study participants are informed about the information gathered, the result of the findings will be sent to each department in the Faculty of Public Health to be pasted on the notice board of each department and the study will also published in a notable journal.

Translation of protocol to the local language: Participants are Masters Students of the Faculty of Public Health, University of Ibadan and they are literate in English language. The research instrument was not translated into any local language.

3.14 Study limitations

Students in their year two (MPH II) in the Faculty of Public Health were scattered and not readily available during the research work on the field as they have completed their course work. This was a limitation for this study as they were difficult to reach during the time of the study. A snowballing was however used by keeping in touch with the class representatives in all the departments and other available members of the class through whom other were reached.

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CHAPTER FOUR

4.0

RESULTS

4.1 Socio-demographic characteristics of the respondents

A total number of 265 Master of Public Health Students of University of Ibadan took part in the study. The mean age of the respondents was 26.9 ± 4.7 years with a minimum and maximum age of 21.0 and 54.0, respectively. Of all the respondents, 21.5% were from Department of Health Promotion and Education, 21.1% from Human Nutrition and Dietetics, 12.9% from Institute of Child Health, 12.1% from Epidemiology and Medical Statistics, 10.9% from Environmental Health Science, (10.9%) from Community Medicine and (10.6%) from Health Policy and Management. Majority, (77.0%) was MPH I while (23.0%) was MPH II. Also, (23.0%) of the respondents had their first degree from Basic Medical Sciences, (30.2%) from Sciences, (24.5%) from Public Health, (10.6%) from Education, (6.4%) from Clinical Sciences, (3.8%) from Social Sciences and (1.5%) from Agriculture. Only (14.0%) of the respondents had other qualifications after the first degree while (86.0%) had no other qualification. Of all the respondents, (35.5%) were male while (64.5%) were female. Majority, (85.2%) were of the Christian faith, some, (14.0%) were of the Islamic faith and (0.8%) practice other religion. Most of the respondents, (72.8%) were of the Yoruba ethnic group and 10.6% were Igbo. Except for the few, (12.8%) who reported to be married, most (87.2%) were single. In total, 87.2% of the respondent were of Nuclear family structure, (4.9%) were of Extended, (7.5%) were polygamous and (0.4%) were of other family structure (See Table 4.1).

Table 4.1a: Socio-demographic information of the respondents

N= 265

Socio-demographic Variables	Responses	%
Sex	Male	35.5
	Female	64.5
Age (In years)	21-25	45.7
	26-30	41.4
	31-35	6.0
	36-40	5.3
	Above 40yrs	1.6
Religion*	Christianity	85.2
	Islam	14.0
Ethnic group*	Yoruba	72.8
	Hausa	1.9
	Igbo	10.6
Departments	Health Promotion and Education	21.5
	Health Policy and Management	10.6
	Environmental Health Science	10.9
	Epidemiology and Medical Statistics	12.1
	Community Medicine	10.9
	Institute of Child Health	12.9
	Human Nutrition and Dietetics	21.1
Level of study	MPH I	77.0
	MPH II	23.0
Background (First degree)	Basic Medical Sciences	23.0
	Education	10.6
	Public Health	24.5
	Science	30.2
	Social Science	3.8
	Clinical Science	6.4
	Agriculture	1.5

Table 4.1b: Socio-demographic information of the respondents**N= 265**

Socio-demographic Variables	Responses	%
Other qualification after first degree	Yes	14.0
	No	86.0
Marital Status	Single	87.2
	Married	12.8
Monthly allowance/Income in (₦)	< or = ₦20,000	51.0
	₦20,001- ₦40,000	26.0
	₦40,001- ₦60,000	10.6
	₦60,001 - ₦80,000	2.6
	> ₦80,000	9.8
Family Structure*	Nuclear	87.2
	Extended	4.9
	Polygamous	7.5

*Others were excluded

4.2 Respondents' Knowledge of Periodic Medical Check-up

Table 4.2 presents information on the knowledge of periodic medical check-up among the respondents. Of all the respondents, (3.8%) had good knowledge scores, (63.4%) had fair knowledge and the rest (32.8%) had poor knowledge.

However, the mean Knowledge Score (KS) was 10.3 ± 3.2 with minimum and maximum score of 1.0 and 18.0, respectively.

Definition of Periodic Medical Check-Up by the Respondents

On the definition of periodic medical check-up, (37.3%) of the respondents defined periodic medical check-up as medical examination of one's health in a consistent basis, (15.5%) defined it as the routine check -up of health status, (4.1%) defined it as to ascertain the medical status of an individual. Others definition offered were; act of going for health screening to ensure good health, (0.4%), medical screening done regularly within a particular period (0.4%). Other responses were going for check-up due to illness (15.8%), body organ and vital signs checks (8.4%), medical check-up done periodically (13.9%). Overall, (57.7%) of the respondents gave correct answer (according to Mosby's Medical; 1990, WHO; 2010) to the definition of periodic medical check-up, (38.1%) gave other answers while (4.2%) gave no response.

Health Benefits of Medical Check-up

About the benefits of medical check-up, (6.5%) of the responses was to ascertain medical fitness, (13.2%) of the responses was for timely diagnosis of the body, (16.4%) responses was for early discovery of disease, (15.1%) responses was to know health status, (8.7%) responses was for prevention of ailment, (13.3%) responses was to prevent sickness, (4.2%) responses was to improve work efficiency, (7.3%) responses was to ensure healthy living and (9.2%) was to prevent untimely death. Other responses include; knowing blood group and genotype (1.5%), for assurance of marriage partner (0.4). Overall, (93.9%) of the respondents gave correct answer, (1.9%) of the respondents gave wrong answer and (4.2%) gave no response.

Implications of not going for Medical Check-up

Considering the implications of not going for medical check-up, (6.7%) responses were Health deterioration, (16.7%) disease, (11.2%) prolong disease condition, (23.5%) premature death, (3.3%) breakdown of the body system, (10.1%) ill health, (6.6%) short life span, (11.2%) detection of disease at late hour and (6.7%) respondents reported danger of the health.

Sources of Information on Medical Check-up available for MPH students

With regards to the sources of information on Medical check-up, (15.3%) responses were social media, (12.6) reported mass media, (10.5%) stated family, (9.2%) reported hospital, (8.2%) indicated lecturer, (7.4%) responses were medical personnel and (6.7%) reported peer group. Other responses on sources of information on medical check-up include print media (2.2%), Medical laboratory (2.1%), Health posters (4.1%), Journals (3.3%), Articles (1.4%) and Books (3.0%).

Types of Medical Check-up

For the types of medical check-up known by respondents, (12.6%) of the responses was blood sugar, (24.7%) was blood pressure was (6.4%) was HIV/AIDS screening. Other responses on the types of medical check-up include urine test (3.7%), kidney function test (2.5%), liver function test (1.1%), lipid profile (1.3%), temperature check (3.3%), weight check (3.4%), cholesterol check (0.5%), ENT check (3.7%), breast examination (0.9%), dental check (3.9%), throat check (0.2%), chest x-ray (3.6%), prostate check (0.3%), pap smear (0.2%), electrocardiogram (3.4), hepatitis (0.3%), blood count (1.6), malaria (2.5%), ear check (0.1%) and radiological test (0.2%).

Age Medical Check-up should Start

The respondents gave different ages on when medical check-up should start. About half (44.5%) of the responses was at birth, (9.8%) was at 6months, (8.3%) responses was 1year, (14.3%) responses was 18years. Other responses on when medical check-up should start include 3 years (1.9%), 5 years (3.4%), 10 years (2.6%), 25 years (1.1%), 35 years (1.9%), 40 years (2.3%) and 60 years (4.2%). Overall, (44.5%) of the respondents stated that periodic medical-check should start at birth while (49.8%) of the respondents gave other responses and (5.7%) gave no response.

Interval to Conduct Medical Check-up

Considering the respondents interval period to conduct medical check-up, (13.6%) responses was monthly, (23.8%) quarterly, (11.3%) once a year, (38.1%) twice a year, (0.4%) every two years, (1.5%) responded that to be conducted based on medical condition and (11.3%) reported that no specified interval. Overall, (38.1%) responded that periodic medical check-up should be done twice a year while others (61.9%) gave different responses.

Places to Conduct Medical check-up

The places to conduct medical check-up reported include; government hospital (37.7%), federal medical centre (16.6%), (25.3%) reported clinic, and (10.2%) gave private hospital as the place to conduct medical screening. Other places reported by respondents include medical laboratory (5.3%), patent medicine vendor (1.9%) and (3.0%) gave no response.

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Table 4.2a: Respondents' Knowledge of Periodic Medical Check-up

		N= 265
Knowledge Variables	Responses	%
What Periodic Medical Check-up entails*	Medical examination of one's health	37.3
	Routine check-up of health status	15.5
	Going for check-up due to illness	15.8
	Medical check-up done periodically	13.9
	Body organ and vital signs checks	8.4
	To ascertain the medical status	4.1
	Act of going for health screening	0.4
	Medical screening done regularly	0.4
Health benefits of Periodic Medical Check-up*	Early discovery of disease	16.4
	To know health status	15.1
	To prevent sickness	13.3
	Timely diagnosis of the body	13.2
	Prevent untimely death	9.2
	Prevention of ailment	8.7
	To ensure healthy living	7.3
	To ascertain medical fitness	6.5
	To improve work efficiency	4.2
	To know blood group and genotype	1.5
For assurance of marriage partner	0.4	
Implication of not going for Medical Check-up*	Premature death	23.5
	Disease	16.7
	Prolong disease condition	11.2
	Late detection of disease	11.2
	Ill health	10.1
	Danger of the health	6.7
	Health deterioration	6.7
	Short life span	6.6
	Breakdown of the body system	3.3
	Others	1.4

*Non-responses were excluded

Table 4.2b: Respondents' Knowledge of Periodic Medical Check-up

		N= 265
Knowledge Variables	Responses	%
Sources of information on Medical Check-up*	Others	19.9
	Social media	15.3
	Mass media	12.6
	Family	10.5
	Hospital	9.2
	Lecturer	8.2
	Medical personnel	7.4
	Peer group	6.7
Types of Medical Check-up*	Others	44.9
	Blood pressure	24.7
	Blood sugar	12.6
	HIV/AIDs screening	6.4
Age Medical Check-up should start*	Birth	44.5
	Others	17.4
	18years	14.3
	6 months	9.8
	1year	8.3
Interval period to conduct Medical Check-up by young adult	Twice a year	38.1
	Quarterly	23.8
	Monthly	13.6
	Annually	11.3
	No specified interval.	11.3
	Based on medical condition	1.5
	Every two years	0.4
One place to conduct Medical Check-Up*	Government hospital	37.7
	Clinic	25.3
	Federal medical centre	16.6
	Private hospital	10.2
	Medical laboratories	5.3
	Patent Medicine Vendor	1.9

*Non-responses were excluded

Average Knowledge Score (KS) = 10.4 ± 3.2

Minimum score = 1.0; Maximum score = 18.0

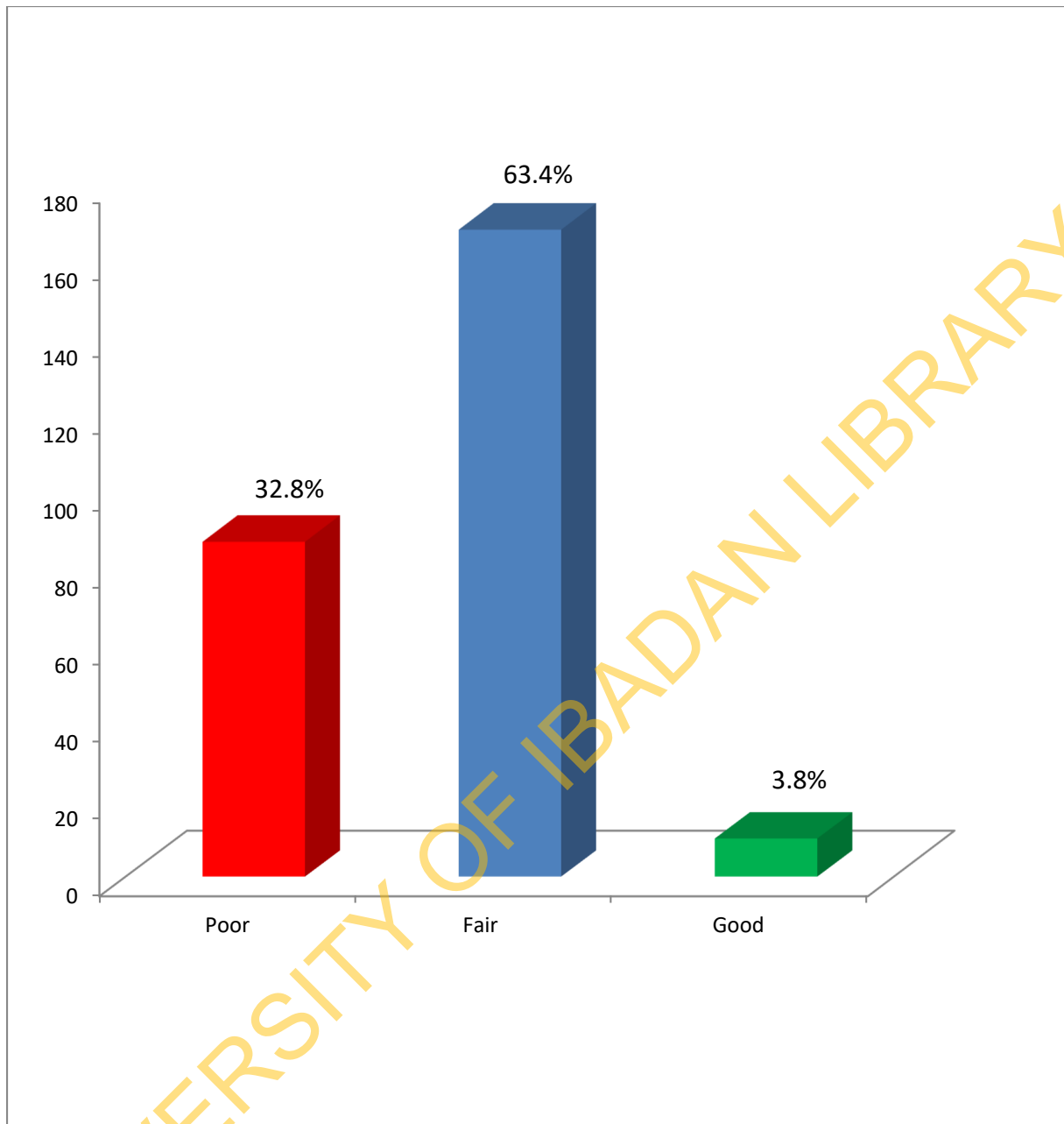


Figure 4.2: Respondents' general knowledge on periodic medical check-up

4.3 Perception relating to periodic medical check-up among the respondents

The respondents' perceptions relating to periodic medical check-up were presented in the Table 4.3. Most, (96.6%) of the respondents had good perception scores and (3.4%) had poor perception score. However, the mean perception score (PS) was 18.7 ± 2.5 with minimum and maximum score of 2.0 and 22.0, respectively.

Of all the respondents, (1.1%) agreed that only the sick individual should go for medical check-up while (98.1%) disagreed and (0.8%) gave no response. Among the respondents, (0.8%) agreed that only the aged should go for medical check-up, (98.4%) disagreed and (0.8%) gave no response. Only the children should go for medical check-up was supported by (1.1%), (97.8%) disagreed and (1.1%) gave no response. Most, (97.8%) reported that everybody needs medical check-up, (1.1%) disagreed and (1.1%) gave no response. Among the respondents, (2.6%) agreed that male students need medical check-up more than female and (11.7%) agreed that female students need medical check-up more than male students. Most, (92.1%) indicated that medical check-up will prevent ill-health, (6.8%) disagreed and (1.1%) gave no response. Medical check-up is for the rich students who can make payment for the service, (9.1%), (89.8%) disagreed and (1.1%) gave no response. Few of the respondents (18.1%) accepted that medical registration in the school has covered all the medical check-up, (81.1%) disagreed and 2(0.8%) gave no response. Just few, (5.3%) preferred going to church/mosque/traditional healers for prevention from illness, (93.6%) disagreed and (1.1%) gave no response. All, except (3.8%) agreed that medical check-up can improve ability to work better, and (1.1%) gave no response.

Table 4.3: Respondents' perception towards periodic medical check-up

Perception Statement	N= 265	
	Responses	%
Only the sick individual should go for medical check-up*	Agreed	1.1
	Disagreed	98.1
Only the aged should go for medical check-up*	Agreed	0.8
	Disagreed	98.4
Only the children should go for medical check-up*	Agreed	1.1
	Disagreed	97.8
Everybody needs medical check-up*	Agreed	97.8
	Disagreed	1.1
Male students need medical check-up more than Female students*	Agreed	2.6
	Disagreed	96.3
Female students need medical check-up more than Male students*	Agreed	11.7
	Disagreed	87.2
Medical check-up will prevent ill-health	Agreed	92.1
	Disagreed	6.8
Medical check-up is for the rich students who can make payment for the service	Agreed	9.1
	Disagreed	89.8
Medical registration in the school has covered all my medical check-up	Agreed	18.1
	Disagreed	81.1
I prefer going to religious places for prevention from illness	Agreed	5.3
	Disagreed	93.6
Medical check-up can improve ability to work better	Agreed	95.1
	Disagreed	3.8

*Non-responses were excluded

Total perception score

Majority, (96.6%) of the respondents scored high on a 22-point perception scale while (3.4%) had poor perception relating to periodic medical check-up (see table below). The mean perception score was 18.7 ± 2.5 while the lowest and highest perception score were 2.0 and 22.0, respectively. See table below.

Table 4.3.1: Total perception score

Perception score (PS)	N (%)
Poor perception (PS < 15)	9 (3.4)
Good perception (PS \geq 15)	256 (96.6)
Total	265 (100)

Average perception score = 18.7 ± 2.5
Minimum perception score = 2.0
Maximum perception score = 22.0

4.4 Attitude towards periodic medical check-up among the respondents

Table 4.4 shows the respondents' attitude towards periodic medical check-up. Almost all, (87.0%) of the respondents had good attitudinal scores and (13.0%) had poor attitudinal score. However, the mean attitudinal score (AS) was 25.8 ± 5.0 with minimum and maximum score of 2.0 and 30.0 respectively.

All the respondents except (10.2%) were comfortable going for medical check-up and (1.5%) gave no response. Some, (47.2%) of the respondents don't go for medical check-up because of the financial implication, (51.3%) disagreed and (1.5%) gave no response. Most, (95.1%) of the respondents can encourage anybody to go for medical check-up. Majority of the respondents, (67.2%), had time to go for medical check-up and 31.7% didn't have the time. Majority, (73.2%) didn't go for medical check-up due to attitude of health workers, (25.7%) disagreed and (1.1%) gave no response. About, (42.3%) of the respondents didn't go for medical check-up because they don't feel sick, (56.6%) disagreed and (1.1%) gave no response. Only few, (21.2%) of the respondents prefer self medication to medical check-up while (77.7%) don't prefer it. About one-third, (33.6%) didn't go for medical check-up because of the stress involved while 65.3% disagreed. Only just (13.2%) of the respondents didn't go for medical check-up because of the fear of the result while 85.7% disagreed.

Majority, (80.8) of the respondents agreed to go for medical check in the future, (18.1%) disagreed and (1.1%) gave no response. Only (8.3%) don't go for medical check-up because of the odour of the screening centre, (90.6%) disagreed and 1.1% gave no response. Of all the respondents, (1.5%) didn't go for medical check-up because of their religion, (97.3) do go for check-up and (1.1%) gave no response. About one-tenth, (6.8%) of the respondents didn't go for medical check-up because of lack of personnel at the screening centre of which (92.1%) disagreed and (1.1%) gave no response. Only few, (15.1%) of the respondents didn't go for medical check-up because the health centre is far away, (83.8%) disagreed and (1.1%) gave no response. All, except (1.9%) of the respondents didn't go for medical check-up because of their cultural practices and (0.8) gave no response.

Table 4.4a: Respondents' attitude towards periodic medical check-up

		N=265	
Attitude Statement		Responses	%
I am comfortable going for medical check-up*	Agreed		88.3
	Disagreed		10.2
I don't go for medical check-up because of the financial implication*	Agreed		47.2
	Disagreed		51.3
I cannot encourage anybody to go for medical check-up*	Agreed		3.8
	Disagreed		95.1
I don't have time to go for medical check-up*	Agreed		31.7
	Disagreed		67.2
I don't go for medical check-up due to attitude of the health workers*	Agreed		73.2
	Disagreed		25.7
I prefer self-medication to medical check-up*	Agreed		21.2
	Disagreed		77.7
I don't go for medical check-up because I don't feel sick*	Agreed		42.3
	Disagreed		56.6
I don't go for medical check-up because of the stress involved*	Agreed		33.6
	Disagreed		65.3
I don't go for medical check-up because of the fear of the result*	Agreed		13.2
	Disagreed		85.7
I will go for medical check-up in the future*	Agreed		80.8
	Disagreed		18.1

*Non-responses were excluded

Table 4.4b: Respondents' attitude towards periodic medical check-up

Attitude Statement	Responses	N=265 %
I don't go for medical check-up because of the odour of the screening centre*	Agreed	8.3
	Disagreed	90.6
I don't go for medical check-up because of my religion*	Agreed	1.5
	Disagreed	97.4
I don't go for medical check-up for lack of personnel at the screening centre*	Agreed	6.8
	Disagreed	92.1
I don't go for medical check-up because the health centre is far away*	Agreed	15.1
	Disagreed	83.8
I don't go for medical check-up because of my cultural practices*	Agreed	1.9
	Disagreed	97.3

*Non-responses were excluded

Total attitudinal score

Almost all, (87.0%) of the respondents scored high on a 30.0 point attitudinal scale while (13.0%) had poor attitude towards periodic medical check-up (see table below). The mean attitude score was 25.8 ± 5.0 while the lowest and highest attitudinal score were 2.0 and 30.0 respectively. See table below.

Table 4.4.1: Total attitudinal score

Attitudinal score (AS)	N (%)
Poor attitude (AS < 22)	35 (13%)
Good attitude (AS \geq 22)	230 (87%)
Total	265 (100%)

Average attitudinal score = 25.8 ± 5.0
Minimum attitudinal score = 2.0
Maximum attitudinal score = 30.0

4.5 Respondents' practices relating to periodic medical check-up

The respondents' practices relating to periodic medical check-up were represented in table 4.5. Majority of the respondents, (73.6%) had conducted medical check-up before without being sick. Almost all, (87.2%) of the respondents intended to go for medical check-up. Less than half, (43.4%) had gone for medical check-up this year (2018), (23%) went last year (2017), (10.6%) went last two years (2016), (13.6%) had gone in less than two years (< 2016) and (9.4%) of the respondents had never gone for medical check-up before. About one-third, (31.3%) had gone for medical check-up to check their health status, (28.7%) went due to illness, (20.8%) went for medical check-up as part of the school admission requirements, and (6.8%) went because the service was free.

Other reasons why respondents went for medical check-up were employment purpose (3%), being encouraged by parents and family (1.1%), travelling requirement (0.4%), part of NYSC requirements (3.4%) and (4.5%) of the respondents have no reason. Only few of the respondents, (12.8%) went for medical check-up more than twice a year, (15.9%) went for medical check-up twice a year, (41.9%) went less than twice a year and (29.4%) of the respondents have never gone for medical check-up in a year. Few, (31.7%) of the respondents could check their blood pressure, (11.5%) could check their blood sugar, (8.9%) could check their BMI, (8.5%) could went for eye test, (6.1%) could went for breast examination, (5.4%) could went for dental check. Others medical check-up that could be done by respondents include; temperature check (3.2%), HIV/AIDS (4.6%), Malaria (2.2%), X-ray (3.7%), ECG (4.8%), lipid profile (2.1%), urine test (3.4%), blood count (2.2%) and prostrate check. (0.2%).

Of all the respondents, (59.6%) of the respondents did their last medical check-up in a government hospital, (26.8%) did their last medical check-up in a private hospital, (8.3%) did their last medical check-up in a medical laboratory, (3.0%) did their medical check-up with patent medicine vendor and (2.3%) of the respondents did their last medical check-up in other places. Only, (2.2%) were motivated by Physicians to go for medical check, (25.6%) were due to sickness, (15.8) go to check their health status, (13.1%) were motivated by free screening, (1.9%) were through friends, nothing motivated (4.0%) of the respondents, (22.7%) were mandatory as school admission requirements, (2.4%) were motivated by family, (4.0%) were due to marriage requirements, (3.1%) were made compulsory for employment purpose, (1.6%) were as a part of travelling requirement and (3.6%) were motivated as part of NYSC requirements.

Table 4.5a: Respondents practices relating to periodic medical check-up

		N= 265
Practice Statement	Responses	%
Have you ever conducted any medical check-up before without being sick?	Yes	73.6
	No	26.4
Do you intend to go for medical check-up?	Yes	87.2
	No	12.8
When last did you go for medical check-up?	This year (2018)	43.4
	Last year (2017)	23.0
	Last two years (2016)	10.6
	Less than 2016	13.6
	Never	9.4
Why did you go for medical check-up?	To check health status	31.3
	Sickness	28.7
	School Admission requirement	20.8
	Free medical service	6.8
	NYSC requirement	3.4
	Employment purpose	3.0
	Encouraged by Parent and Family	1.1
	Travelling requirement	0.4
	No reason	4.5
How many times do you go for medical-check in a year?	> Twice	12.8
	Twice	15.9
	< Twice	41.9
	Never	29.4
List four medical check-up you can go for?	Blood pressure	31.7
	Blood sugar	11.5
	BMI check	8.9
	Eye test	8.5
	Breast examination	6.1
	Dental check	5.4
	Electrocardiogram	4.8
	HIV/AIDS	4.6
	Malaria	3.7
	X-ray	3.7
	Temperature	3.2
	Urine test	3.4
	Blood count	2.2
	Lipid profile	2.1
	Prostrate check	0.2

Table 4.5b: Respondents practices relating to periodic medical check-up

		N= 265
Practice Statement	Responses	%
Where did you do your last medical check-up?	Government hospital	59.6
	Private hospital	26.8
	Medical laboratory	8.3
	Patent medicine vendor	3.0
	Others	2.3
What motivated you to go for medical check-up?	Sickness	25.6
	Admission requirement	22.7
	To know health status	15.8
	Free screening	13.1
	Marriage requirement	4.0
	No reason	4.0
	NYSC requirement	3.6
	Employment purpose	3.1
	Family	2.4
	Friend influence	1.9
	Travelling requirement	1.6

Total Practice score

Some, (43.4%) of the respondents scored high on a 16.0 point practice scale while (56.6%) had poor score practice towards periodic medical check-up. The mean practice score was 10.2 ± 4.3 while the lowest and highest practice score were 2.0 and 16.0 respectively. See table below.

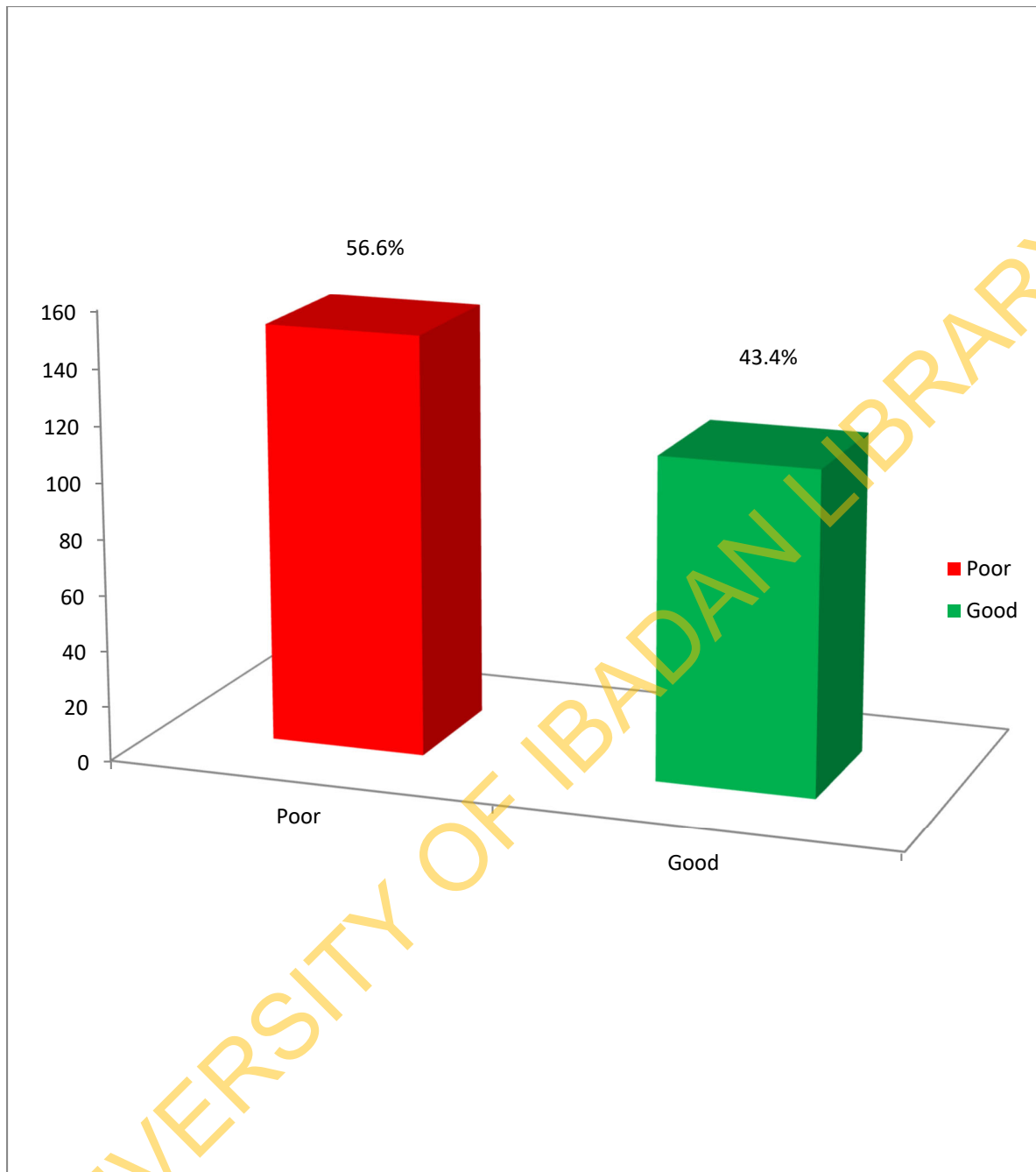


Figure 4.5: Respondents' practices relating to periodic medical check-up

4.6 Statistical tests of hypotheses

Hypothesis 1: There is no statistically significant difference between respondents' sex and practice towards periodic medical check-up

Table 4.6.1 presents the results of the cross tabulations between respondents sex and practice towards periodic medical check-up.

Chi square analysis was used to test for the association between these two variables and this revealed that there was statistically significant difference ($p = 0.044$; $df = 1$; $X^2 = 4.075$) between them. Thus the null hypothesis that there is no statistically significant difference between respondents' sex and practices towards medical check-up was rejected.

Table 4.6.1: Chi-square test statistic to determine the significant difference between respondents' sex and practice towards periodic medical check-up

Sex	Practices towards periodic medical check-up		Total	df	X ²	p-value
	Poor No (%)	Good No (%)				
Male	61 (64.9)	33 (35.1)	94 (100)	1	4.075	0.044
Female	89 (52)	82 (48)	171 (100)			
Total	150 (56.6)	115 (43.4)	265 (100)			

Chi-square test statistic was used
Significant ($p < 0.05$)

Hypothesis 2: There is no statistically significant difference between respondents' marital status and practice towards periodic medical check-up

Table 4.6.2 presents the results of the cross tabulations between respondents marital status and practice towards periodic medical check-up.

Chi square analysis was used to test for the association between these two variables and this revealed that there was no statistically significant difference ($p = 0.307$; $df = 1$; $X^2 = 1.042$) between them. Thus the null hypothesis that there is no statistically significant difference between respondents' marital status and practices towards medical check-up was not rejected.

Table 4.6.2: Chi-square test statistic to determine the significant difference between respondents' marital status and practice towards periodic medical check-up

Marital Status	Practices towards periodic medical check-up		Total	df	X ²	p-value
	Poor N _e (%)	Good N _e (%)				
Single	128 (55.4)	103 (44.6)	231 (100)	1	1.042	0.307
Married	22 (64.7)	12 (35.3)	34 (100)			
Total	150 (56.6)	115 (43.4)	265 (100)			

Chi-square test statistic was used

Significant ($p > 0.05$)

Hypothesis 3: There is no statistically significant difference between respondents' age and practice towards periodic medical check-up

Table 4.6.3 presents the results of the cross tabulations between respondents age and practice towards periodic medical check-up.

Chi square analysis was used to test for the association between these two variables and this revealed that there was no statistically significant difference ($p = 0.463$; $df = 6$; $X^2 = 5.655$) between them. Thus the null hypothesis that there is no statistically significant difference between respondents' age and practices towards medical check-up was not rejected.

Table 4.6.3: Chi-square test statistic to determine the significant difference between respondents' age and practice towards periodic medical check-up

Age (In years)	Practices towards periodic medical check-up		Total	df	X ²	p-value
	Poor N _e (%)	Good N _e (%)				
21-25	70(57.9)	51(42.1)	121(100)	4	5.655	0.463
26-30	64(58.2)	46(41.8)	110(100)			
31-35	9(56.2)	7(43.8)	16(100)			
36-40	7(50)	7(50)	14(100)			
Over 40	0(0)	4(100)	4(100)			
Total	150(56.6)	115(43.4)	265(100)			

Chi-square test statistic was used

Significant ($p > 0.05$)

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

5.1.1 Socio-demographic Characteristics of the Respondents

The data collected reviewed that MPH students of University of Ibadan are within the age range of 21-54 years in which majority of them were single and about two-third of them were female. Most of the respondents were Christians and majorities were of the Yoruba ethnicity probably because the University of Ibadan where the study was conducted is the capital city of Oyo state where the Yoruba is the major ethnic group. More than half are MPH 1 students and nearly all the respondents don't have other qualification after their first degree. Also, majority of the respondents were of the nuclear family as their family structure.

It is important to note that gender, age, religion, ethnic group, marital status and family structure were not equitably distributed among the study population because majority of the respondents are Female, Christians, Yoruba, Single, nuclear family structure and between the age of 21 and 30years.

5.1.2 Knowledge of Periodic Medical Check-Up

The study revealed the respondents level of knowledge of periodic medical check-up. Most of the respondents have a good knowledge score. This may be as a result of their formal education as they know the importance of periodic medical examination. There is no significant difference in their knowledge due to their educational profession. There have been various studies that has reported good awareness and knowledge among students in the health-related profession (Sadiq, Asim and Aziz 2017), this study also revealed that Masters of Public Health students have good knowledge of periodic medical check-up and this may be because education exposes individual to different sources of information which makes them more aware and enlightened (Jellema, and Unterhalter, 2005).

Most of the respondents defined periodic medical check-up as a thorough study or medical examination of the health of an individual. This definition is in line with Mosby's Medical, Nursing and Allied Health, (1990) definition of Health checks. In response to the health benefit of periodic

medical check-up, some respondents stated that it helps in early discovery of disease, this supported why regular check-up are necessary stated by Nakanishi et al; 1996. Some also stated that it helps to prevent sickness which is in line with World Health Organization, (2010): Boulware *et al.*, 2007), some stated that it helps in prevention of ailment (Culica *et al.*, 2002 and Lai *et al.*, 2005) while some stated that it helps to ensure healthy living (Drewnowski and Eichelsdoerfer 2010).

On the implication of not going for medical check-up, some of the respondents reported that it will cause disease of which is in line with the burden of non-communicable disease (Ghaffar, Reddy and Singhi 2004). The sources of information on periodic medical check-up reported by respondents include peer groups and friends, mass media, social media, print media, lecture, lecturer, physicians, family, health workers, books, articles, journals, health posters etc. This is in line with the findings by Tahira, Asim, and Aziz (2017) who reported the awareness among medical and non-medical students about the Practice of periodic medical examination, Fon *et al.*, (2015) and Mutyaba, Mmiro and Weiderpass (2006) who also reported knowledge, attitudes and practices on cervical cancer screening among the medical workers of Mulago Hospital, Uganda.

The commonest known type of medical checkup by respondents is blood pressure check, this supported one of the commonest type of medical check-up reported by Eke *et al.*, (2012). This reflects a good knowledge of hypertensive disorders as it might be one of the common illnesses among people. This finding corresponds with the work done in Japan (Nakagawa, 1998). The good knowledge of periodic medical check-up among Master of Public Health students suggests that the seminars, workshop, conferences, presentations and lectures receive in class in view of having a Masters degree in Public health had really had impact in their knowledge towards periodic medical check-up irrespective of their first degree discipline.

5.1.3 Perception of Periodic Medical Check-Up

This study revealed the perception of the respondents towards periodic medical check-up. Almost all the respondents had a good perception score. This was expected due to their academic programmes. Also, most of the respondents felt everybody needs medical check-up. This is due to the fact that majority of them were educated and were knowledgeable about the subject matter. Most of the respondents felt that periodic medical check-up will prevent ill-health. This is expected, considering their level of awareness of periodic medical check-up as well as the fact that most of them had the basic education needed to appreciate the benefits of periodic medical check-up. All except few felt medical check-up could improve ability to work better. Also, just little of the respondent felt male students need medical check-up more than female and few felt female students need medical check-up more than male. The result of this finding is in line with Eke et al., (2012) who reported the Perception and Practice of Periodic Medical Checkup by Traders in South East Nigeria. Few of the respondents felt the medical registration done during clearance has covered all their medical check-up. This is in line with what was reported by Akande and Salaudeen (2014) that two-third of those who did the medical examination among the hospital workers only did so just to satisfy the hospital management requirements.

5.1.4 Attitude towards Periodic Medical Check-Up

This study revealed that majority more than half of the respondents had good attitude towards periodic medical check-up. A good number of the respondents didn't go for medical check-up because of the financial implication and about one-third of the respondents don't have time to go for medical check-up due to long hours lectures of academic programme. This is similar to what was reported by Rapheal, (2017) which stated that time and financial constraints are the major factors hindering the uptake of periodic medical check-up among the respondents.

About one-fifth reported fear of the result as the reason for not going for medical check-up and just few reported that they can't encourage anyone to go for medical check-up which is in agreement with Nde *et al.*, (2014) with a study among female undergraduate students in the University of Buea. Respondents also identified lack of personnel at the screening centre and their religious belief as one of the reasons for not going for medical check which is similar with the findings by Ahmed et al ., (2013) among market women in Zaria, Kaduna State, Nigeria.

According to Aboyeji (2004) the reasons for why women avoided screening included outright rejection, fear of detection and religious beliefs. This also corresponds with the study of Udigwe (2006), Wellensiek, Moodley and Nkwanyana (2002), Farland (2003) and Ezem (2007) respectively. About half of the respondents felt it was not needed since they were not sick. This implies that mere hearing of it is not enough but they need to be persuaded and know what is expected. This is similar to some studies (Jones, Cronin and Bowen 1993, Wall and Teeland 2004, Nielsen, Dyhr, Lauritzen, Malterud 2004 and Williams, Mason and Wold 2001) for reasons put forward by non-attenders of preventive health screening services included no perceived need for health checks, absence of symptoms, lack of time, hindrances at work and having contact with the health service.

5.1.5 Practice of Periodic Medical Check-Up

Despite the fact that a good proportion of the respondents knew the benefits of periodic medical check-up, the practice among them in this study was poor. The outcome revealed that, more than half of the respondents did not have good practices towards periodic medical check-up. This is incredible because the public health professionals are meant to be role models in the area of good healthy practices to the general public because their practice will affect their community, partners, friends, children, family, colleagues, siblings, and other relations. The reason for this practice may be because of the cost implication considering the monthly allowance reported by most of the respondents. Similar evidence has shown that cost of investigations could be part of the reason for not practicing periodic medical check-up. This finding is similar to the outcome of other studies (Eke *et al.*, 2012, Ilesanmi *et al.*, 2015 and Dalton *et al.*, 2011) and World Health Organization annual report also supported this idea (Smith and Herbert 1993).

Also, a good number of the respondents had not conducted periodic medical check-up in the last one year. Among those that have conducted they did so due to the medical registration made compulsory for academic admission requirement. This supported the report of Akande and Salaudeen (2004), when conducting research among hospital workers and was stated that people are not in the habit of subjecting themselves to periodic medical check-up in developing countries. In developing countries, most of the workers have no access to occupational health services which could be one of the reasons for low practice of periodic medical check-up (Berenice and Goelzer 1998).

There is high tendency that the practice among the general population (who have little or no knowledge about it) would be worse than the situation found among public health students in this

study. This evidence shows that educational level or being a Health professional may not necessarily be sufficient to initiate practice of periodic medical check-up since health education alone is not sufficient if health behaviour is not changed (Glanz, Rimer and Viswanath 2008). Hence, there is need for to public health students to translate their acquired knowledge on the importance of periodic medical check-up to practice.

In the study, the null hypothesis that there is no statistical significant difference between respondent's sex and practice of periodic medical check-up was rejected. This shows that there was difference between respondents' sex and practice of periodic medical check-up. This findings was in contrast to the report by (Eke, Eke, Joe-Ikechebelu and Okoye 2012) who stated that sex was not found to affect the practice of periodic medical check-up significantly.

Also, the null hypothesis that there is no statistical significant difference between respondent's age and practice of periodic medical check-up was not rejected. This shows that there was no difference between respondents' age and practice of periodic medical check-up. This finding is, however, in accordance with the study from the United States where those who had undergone periodic medical check-up were older because the younger age group did not belief in the value of periodic medical check-up (Cherrington, Corbie-Smith, Donald, 2007) but in contrast to the report of (Sunday, Jesubunmi and Muhammed, 2017) who stated age to be significant to the practice of periodic medical check-up.

There was no statistical difference between marital status and practice of periodic medical check-up. This interpret that being either single or married does not translate to the practice of periodic medical check-up. Hence, there is need for public health students to take make effort in practicing periodic medical check-up.

5.1.6 Implications of the findings for Health Promotion and Education

The findings of this study have several implications for health promotion and education on periodic medical check-up among Public Health Students. It has been investigated in this study and other related studies that good knowledge of a particular matter does not directly lead to practice. Therefore, to improve and encourage the practice of periodic medical check-up, the following action is necessary to be taken:

Training

The practice of periodic medical check-up can be addressed through training, as it has been proven in the past that training is one of the important strategies used in educating people whereby they are thought what to do to promote their health through theory and practicals sessions and have given the privilege to demonstrate what they have learn and are encouraged to disseminate the information among the general population. This could be achieved by organising seminars, workshop in collaboration with State and Federal ministry of health together with NGOs. This could have a long way to encourage the people to practice preventive health.

Intersectoral approach

The issue of periodic medical check-up should be across all sectors not only the health sector but also all sector as good health is important for all. It is important that all students have a basic knowledge on how to promote health. Students should be exposed to the prevention of disease at all level of education irrespective of their discipline as good is to important to all.

5.2 Conclusion

This study investigated the knowledge, perception and attitude of periodic medical check-up among Masters of Public Health Students of the University of Ibadan. It can be concluded that knowledge did not translate to good practices as many of the respondents did not practice periodic medical check-up for early detection or prevention of disease.

The study suggest that there is need for intensive public health education, knowledge of periodic medical check-up, the important practices of periodic medical check-up and also a national health policy to guide on this important activity to promote health and prevent diseases since various forms of medical examination minimise the cost of managing a disease. The inability to have access to health facilities for prevention of periodic medical check-up can be addressed through the media in which various health checks tools, devices, machines and instruments are made available to all citizens at a subsidise amount irrespective of the individual profession with a correct and timely results.

Also, findings from the work shows that knowledge and practices of the students on periodic medical check-up should be improved since the result shows that the health education the students already had is not enough for them to practice periodic medical check-up.

The poor practice towards periodic medical check-up has been found to be obvious among the study population and there is need to address this poor practice because of its health consequence associated to the individual who don't practice it.

5.3 Recommendations

Based on the findings from this study, the following recommendations are made:

1. Review of public health postgraduate curriculum appear to be one of the promising solution to this gap between the students to make emphasis on the usefulness and importance of periodic medical check-up.
2. The students should be encouraged to pay more attention to periodic medical check-up in their Lectures, Seminars, Workshops, Presentations and Conferences attended so as to increase its practice as preventive health is cost effective compare to curative medicine.
3. Screening centre should be made available at the faculty where students can access for periodic medical check-up.
4. Communication strategies through the media (social and mass) can be used to educate students about the importance of periodic medical check-up and also social support from friends and families could be an added advantage.
5. More studies should be done at the community level and necessary intervention should be carried out base on the information gotten.

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APPENDICES

APPENDIX 1

INFORMED CONSENT FORM

IRB Research approval number:

This Approval will elapse on:

Title of Research: Knowledge, Perception and Attitude of Periodic medical checkup among Masters of Public Health students of the University of Ibadan, Ibadan, Nigeria

Name and Affiliation of Researcher: Oluwole Emmanuel YELOTAN, a Postgraduate student of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine is carrying out this study.

Sponsor of research: This study is sponsored by my parents, PASTOR & MRS YELOTAN

Purpose of research: The purpose of this study is to investigate the knowledge, perception and attitude of periodic medical checkup among Masters of Public Health students of the University of Ibadan, Nigeria.

Procedure of the research: The study will use a quantitative method (Questionnaires) to elicit information from study participants. A total of 265 Masters of Public Health students of the University of Ibadan will be requested to fill the questionnaires. Selection of study participants will be done by a two-stage sampling technique. A list of the total number of MPH students from each department in the faculty of public health will be collected and a proportionate method will be used to know the number of students to be selected from each department due to the variation in the population. After that, a simple random sampling (balloting) method will then be used to select the study participants from each department based on the total number of MPH students in the Faculty.

Expected Duration of research and Participants' involvement: Each research participants is expected to fill the questionnaire within fifteen to twenty minutes and will be collected back immediately after completion. The research work is expected to last for two months.

Risk: This research will not cause any harm. It will not involve utilization of any invasive material or collection of biological samples.

Cost to participants: Participation in this research will not have any financial cost but will require only about twenty (20) minutes of participants' time.

Benefit: The study among this population will therefore serve to inform the necessary stakeholders on how to better equip students with adequate information on periodic medical check-up and also serve as role models for people in the society.

Confidentiality: All identifiers will be removed from the questionnaire and confidentiality will be ensured through protection of data collected from participants.

Voluntariness: Your participation in this study is entirely voluntary. You have the right to choose to participate in the study or not without any consequence.

Alternatives to Participation: If you choose not to participate in the study, it will not be held against them in any way.

Due Inducement: No payment will be made to any participant for participating in this research. Individual who consent to participate in the study would be appreciated verbally.

Consequences of participants' decision to withdraw from research and procedure for orderly termination of participation: Participants can choose to withdraw from the study any time they wish without reprove. However, any information gathered prior to withdrawal may be used in reports or publication.

What happens to participant and community after the study: To ensure study participants are not left in the dark and for proper dissemination of information, the result of the findings will be sent to the Faculty which will be disseminated among the students.

Any apparent of potential conflict of interest: There is no conflict of interest as pertains to this study.

Statement of person obtaining informed consent:

I have fully explained this research to.....and have given sufficient information including about risks and benefits to make an informed decision.

DATE: _____

SIGNATURE: _____

NAME: _____

Statement of person giving informed consent: I have been explained to and fully understand the content of the study process. I understand that my participation is voluntary. I know enough about the purpose, methods, risks and benefits of the research study to judge that I want to take part in it. I understand that I may freely stop being part of this study at any time. I have received a copy of this

consent form and additional information sheet to keep for myself I hereby agree to participate in answering the questions asked in this questionnaire

DATE: _____ SIGNATURE: _____

NAME: _____

Detailed contact information including contact address, telephone, fax, email and any other contact information of researcher, institution HREC and head of the institution:

This research has been approved by the Ethics Committee of the University of Ibadan and the Chairman of this committee can be contacted at Biode Building, Room 210, 2nd Floor, Institute of Advanced Medical Research and Training, College of Medicine, University of Ibadan, Email: uiuchirc@yahoo.com and uiuchec@gmail.com

In addition, if you have any question about your participation in this research, you can contact the principal investigator,

Name _____ Department _____

Email _____ Phone _____

PLEASE KEEP A COPY OF THIS SIGNED INFORMED CONSENT

APPENDIX 2

QUESTIONNAIRE

**KNOWLEDGE, PERCEPTION AND ATTITUDE OF PERIODIC MEDICAL
CHECK-UP AMONG MASTERS OF PUBLIC HEALTH STUDENTS OF THE
UNIVERSITY OF IBADAN, IBADAN, NIGERIA**

Serial No: -----

Dear Respondent,

I am a postgraduate student of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria. The purpose of this study is to gather essential information on the **Knowledge, Perception and Attitude of Periodic Medical Check-up among Masters of Public Health students of the University of Ibadan, Ibadan, Nigeria**. Your participation in this study is voluntary. It is desired that honest and sincere answers should be given as there is no right or wrong answer. All information gathered during the course of this study will be treated with high level of confidentiality. Your willingness to answer these questions will be quite appreciated.

Thank you.

I have read and understand the consent form and voluntarily agree/disagree to participate in the study by ticking [√] in the appropriate box below:

1. Agree [] 2. Disagree []

INSTRUCTION: Please give appropriate responses that apply to you in each section.

SECTION A: SOCIO-DEMOGRAPHIC INFORMATION

1. Department _____
2. Course of study _____
3. Background (First degree) _____
4. Any other qualification after the first degree? _____
5. Sex: 1. Male [] 2. Female []
6. MPH/Track: 1. MPH I [] 2. MPH II []
7. Religion: 1. Christianity [] 2. Islam [] 3. Traditional [] 4. Others (specify).....

8. Age (year) _____
9. Ethnic group: 1. Yoruba [] 2. Igbo [] 3. Hausa [] 4. Others (specify).....
10. Marital status: 1. Single [] 2. Married [] 3. Separated [] 4. Divorced [] 5. Widowed []
6. Others (specify).....
11. Family structure: 1. Nuclear [] 2. Extended [] 3. Polygamous [] 4. Others (specify).....
12. Monthly allowance/Income: _____ in Naira (₦)

SECTION B: KNOWLEDGE OF PERIODIC MEDICAL CHECK-UP

13. What is Periodic Medical check-up?

14. Mention two health benefits of Medical check-up?

- i. _____
- ii. _____

15. Mention two implications of not going for Medical check-up?

- i. _____
- ii. _____

16. Mention two sources of information on Medical check-up available to MPH students?

- i. _____
- ii. _____

17. List four types of Medical check-up that you know?

- i. _____
- ii. _____
- iii. _____
- iv. _____

18. At what age should Medical check-up start? _____

19. What is the interval period to conduct Medical check-up? _____

20. Mention one place to conduct medical screening? _____

21. Score Obtained: _____

22. Code: _____

SECTION C: PERCEPTION OF PERIODIC MEDICAL CHECK-UP

S/N	Statement	Agree	Disagree
23	Only the sick individual should go for medical check-up		
24	Only the aged should go for medical check-up		
25	Only the children should go for medical check-up		
26	Everybody needs medical check-up		
27	Male students need medical check-up more than Female students		
28	Female students need medical check-up more than Male students		
29	Medical check-up will prevent ill-health		
30	Medical check-up is for the rich students who can make payment for the service		
31	Medical registration in the school has covered all my medical check-up		
32	I prefer going to Church/Mosque/Traditional healers for prevention from illness		
33	Medical check-up can improve ability to work better		

34. Score Obtained: _____

35. Code: _____

SECTION D: ATTITUDE TOWARDS PERIODIC MEDICAL CHECK-UP

S/N	Statement	Agree	Disagree
36	I am comfortable going for medical check-up		
37	I don't go for medical check-up because of the financial implication		
38	I cannot encourage anybody to go for medical check-up		
39	I don't have time to go for medical check-up		
40	I don't go for medical check-up due to attitude of the health workers		
41	I prefer self-medication to medical check-up		
42	I don't go for medical check-up because I don't feel sick		
43	I don't go for medical check-up because of the stress involved		
44	I don't go for medical check-up because of the fear of the result		
45	I will go for medical check-up in the future		
46	I don't go for medical check-up because of the odour of the screening centre		
47	I don't go for medical check-up because of my religion		
48	I don't go for medical check-up because of lack of personnel at the screening centre		

49	I don't go for medical check-up because the health centre is far away		
50	I don't go for medical check-up because of my cultural practices		

51. Score Obtained: _____

52. Code: _____

SECTION E: PRACTICE OF PERIODIC MEDICAL CHECK-UP

53. Have you ever conducted any medical check-up before without being sick? 1. Yes [] 2. No []

54. Do you intend to go for medical check-up? 1. Yes [] 2. No []

55. When last did you go for medical check-up? _____

56. Why did you go for medical check-up? _____

57. How many times do you go for medical check-up in a year? _____

58. List four medical check-up you can go for?

i. _____

ii. _____

iii. _____

iv. _____

59. Where did you do your last medical check-up? A. Government hospital [] B. Private hospital []

C. Medical laboratory [] D. Pharmacy [] E. Traditional settings []

60. What motivated you to go for medical check-up? _____

61. Score Obtained: _____

62. Code: _____

Thank you for your participation.

APPENDIX 3

SCORING GUIDE

KNOWLEDGE, PERCEPTION AND ATTITUDE OF PERIODIC MEDICAL CHECK-UP AMONG MASTERS OF PUBLIC HEALTH STUDENTS OF THE UNIVERSITY OF IBADAN, IBADAN, NIGERIA

A. KNOWLEDGE OF PERIODIC MEDICAL CHECKUP

S/N	QUESTION	OPTIONS AND ALLOTTED POINTS	SCORE
1	What is Periodic Medical check-up?	Periodic medical check-up is a form of preventive medicine involving thorough history, physical examination and screening of asymptomatic persons by physicians on a regular basis as part of a routine health care process.	5
2	Mention two health benefits of Medical check-up?	To ascertain medical fitness, Early diagnosis, Early discovery of disease, To know your health status, Prevention of ailment, To prevent outbreak of major disease and sickness, To improve work efficiency, To know your health status, It helps to be sure ones is healthy, etc. (Any correct two response = 2)	2
3	Mention two implications of not going for Medical check-up?	Health deterioration, Disease, Prolong disease condition, Premature death, breakdown of the body system, ill health, Sickness, Short life span, Detection of disease at late hour, Danger of the health, untimely death etc. (Any correct two response = 2)	2
4	Mention two sources of information on Medical check-up available to MPH students?	Print media, Medical personnel, Hospital, Medical Laboratory, Social media, Family, Personal decision, Friends, Internet, Clinics, Mass Media, Parents, Peer group, Lecturer, Health posters, Journals, Articles, Lecture, Health centre, Books etc. (Any correct two response = 2)	2
5	List four types of Medical check-up that you know?	Blood pressure check, Visual check, Dental check, Blood sugar, Eye check,	4

		Urine test, Kidney Function Test, Liver Function Test, Lipid Profile, Heart Function Test, Blood Sugar, Breast Examination, Pulse Rate, Temperature Check, HIV Retroviral Screening, Weight check, Cholesterol level check, Throat check, Ear check, Electrocardiogram, Chest x-ray, Prostate check, Colon and Rectum Exam, Pap smear, Urinalysis etc. (Any four correct response = 4 points)	
6	At what age should Medical check-up start?	At birth	1
7	What is the interval period to conduct Medical check-up among adult?	6 months interval/ Twice in a year	1
8	Mention one place to conduct medical screening?	Government hospital, General hospital, Federal Medical Centre, Clinic, Private hospital, Medical laboratory, Patent medicine vendor. (Any correct 1 response = 1point)	1

9. Total Score obtained = 18

10. Code

1. Poor 0 – 9
2. Fair > 9 – 14
3. Good >14 – 18

B. PERCEPTION TOWARDS PERIODIC MEDICAL CHECKUP

S/N	STATEMENT	OPTIONS	SCORE
11	Only the sick individual should go for medical check-up	Agree = 0 Disagree = 2	2
12	Only the aged should go for medical check-up	Agree = 0 Disagree = 2	2
13	Only the children should go for medical check-up	Agree = 0 Disagree = 2	2
14	Everybody needs medical check-up	Agree = 2 Disagree = 0	2
15	Male students need medical check-up more than Female students	Agree = 0	2

		Disagree = 2	
16	Female students need medical check-up more than Male students	Agree = 0 Disagree = 2	2
17	Medical check-up will prevent ill-health	Agree = 2 Disagree = 0	2
18	Medical check-up is for the rich students who can make payment for the service	Agree = 0 Disagree = 2	2
19	Medical registration in the school has covered all my medical check-up	Agree = 0 Disagree = 2	2
20	I prefer going to Church/Mosque/Traditional healers for prevention from illness	Agree = 0 Disagree = 2	2
21	Medical check-up can improve ability to work better	Agree = 2 Disagree = 0	2

22. Total Score obtained = 22

23. Code

1. Poor < 15
2. Good ≥ 15

C. ATTITUDE TOWARDS PERIODIC MEDICAL CHECKUP

S/N	STATEMENT	OPTION	SCORE
24	I am comfortable going for medical check-up	Agree = 2 Disagree = 0	2
25	I don't go for medical check-up because of the financial implication	Agree = 0 Disagree = 2	2
26	I cannot encourage anybody to go for medical check-up	Agree = 0 Disagree = 2	2
27	I don't have time to go for medical check-up	Agree = 0 Disagree = 2	2
28	I don't go for medical check-up due to attitude of the health workers	Agree = 0 Disagree = 2	2
29	I prefer self-medication to medical check-up	Agree = 0 Disagree = 2	2
30	I don't go for medical check-up because I don't feel sick	Agree = 0	2

		Disagree = 2	
31	I don't go for medical check-up because of the stress involved	Agree = 0 Disagree = 2	2
32	I don't go for medical check-up because of the fear of the result	Agree = 0 Disagree = 2	2
33	I will go for medical check-up in the future	Agree = 2 Disagree = 0	2
34	I don't go for medical check-up because of the odour of the screening centre	Agree = 0 Disagree = 2	2
35	I don't go for medical check-up because of my religion	Agree = 0 Disagree = 2	2
36	I don't go for medical check-up because of lack of personnel at the screening centre	Agree = 0 Disagree = 2	2
37	I don't go for medical check-up because the health centre is far away	Agree = 0 Disagree = 2	2
38	I don't go for medical check-up because of my cultural practices	Agree = 0 Disagree = 2	2

39. Total Score obtained = 30

40. Code

1. Poor < 22
2. Good ≥ 22

D. PRACTICE OF PERIODIC MEDICAL CHECKUP

S/N	STATEMENT OF PRACTICE	OPTIONS	SCORE
41	Have you ever conducted any medical check-up before without being sick	Yes = 2 No = 0	2
42	Do you intend to go for medical check-up?	Yes = 2 No = 0	2
43	When last did you go for medical check-up	This year = 2 Last year = 0 Last two years = 0 More than last two years = 0 Never = 0	2

44	Why did you go for medical check-up?	To check health status = 2 Sickness = 0 School Admission requirement = 0 Free medical service = 0 Employment purpose = 0 Encouraged by Parent and Family = 0 Travelling requirement = 0 NYSC requirement = 0 No reason = 0	2
45	How many times do you go for medical check-up in a year?	\geq Twice = 2 < Twice = 0	2
46	List four medical check-up you can go for?	Blood pressure check, Visual check, Dental check, Blood sugar, Eye check, Urine test, Kidney Function Test, Liver Function Test, Lipid Profile, Heart Function Test, Blood Sugar, Breast Examination, Pulse Rate, Temperature Check, HIV Retroviral Screening, Height check, Weight check, Cholesterol level check, Throat check, Ear check, Electrocardiogram, Chest x-ray, Prostate check, Colon and Rectum Exam, Pap smear, Urinalysis etc. (Any correct four responses)	4
47	Where did you do your last medical check-up?	Government hospital, General hospital, Federal Medical Centre, Clinic, Private hospital, Medical laboratory, Patent medicine vendor. (Any correct one response)	2
48	What motivated you to go for medical check-up	To know health status = 2 Sickness = 0 Free screening = 0 Friend influence = 0 Admission requirement = 0 Family = 0 Marriage requirement = 0 Employment purpose = 0 Travelling requirement = 0 NYSC requirement = 0	2

49. Code

1. Poor < 12
2. Good \geq 12

APPENDIX 4

CODING GUIDE

KNOWLEDGE, PERCEPTION AND ATTITUDE OF PERIODIC MEDICAL CHECK-UP AMONG MASTERS OF PUBLIC HEALTH STUDENTS OF THE UNIVERSITY OF IBADAN, IBADAN, NIGERIA

SECTION A: SOCIO-DEMOGRAPHICS INFORMATION

S/N	QUESTION	VARIABLES	CODE
1	Department	Health Promotion and Education Health Policy and Management Environmental Health Science Epidemiology and Medical Statistics Community Medicine Institute of Child Health Human Nutrition and Dietetics	1 2 3 4 5 6 7
2	Course of Study	Health Promotion and Education Population and Reproductive Health Human Nutrition Clinical Nutrition and Diet Therapy International Nutrition Public Health Nutrition Population and Reproductive Health Nutrition Community Nutrition Reproductive and Family Health Community Medicine Community Health Public Health Biotechnology Child and Adolescent Health Biotechnology Biostatistics Epidemiology Medical Demography Health Policy and Management Medical Statistics Environmental Health Science	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

3	Background	Basic Medical Sciences Education Public Health Science Social Science Clinical Science Agriculture	1 2 3 4 5 6 7 8
4	Any other qualification after first degree?	Yes No	1 2
5	Sex	Yes No	1 2
6	MPH/Level/Year	MPH I MPH 11	1 2
7	Religion	Christianity Islam Traditional Others	1 2 3 4
8	Age	21-25 26-30 31-35 36-40 41-45 46-50 51-55	1 2 3 4 5 6 7
9	Ethnic group	Yoruba Igbo Hausa Others	1 2 3 4
10	Marital Status	Single Married Separated Divorced Widowed	1 2 3 4 5
11	Family Structure	Nuclear Extended Polygamous Others	1 2 3 4
12	Monthly allowance/Income	≤ ₦20,000 ₦20,001- ₦40,000 ₦40,001- ₦60,000 ₦60,001 - ₦80,000 > ₦80,000	1 2 3 4 5

SECTION B: KNOWLEDGE OF PERIODIC MEDICAL CHECKUP

S/N	QUESTION	VARIABLES	CODE
13	What is Periodic Medical check-up?	Periodic medical check-up is a form of preventive medicine involving thorough history, physical examination and screening of asymptomatic persons by physicians on a regular basis as part of a routine health care process.	5pts = 1 4pts = 2 3pts = 3 2pts = 4 1pt = 5 Incorrect = 6 NR = 99
14	Mention two health benefits of Medical check-up?	To ascertain medical fitness, Early diagnosis, Early discovery of disease, To know your health status, Prevention of ailment, To prevent outbreak of major disease and sickness, To improve work efficiency, To know your health status, It helps to be sure ones is healthy, etc. (Any correct two response = 2)	2pts = 1 1pt = 2 Incorrect = 3 NR = 99
15	Mention two implications of not going for Medical check-up?	Health deterioration, Disease, Prolong disease condition, Premature death, breakdown of the body system, ill health, Sickness, Short life span, Detection of disease at late hour, Danger of the health, untimely death etc. (Any correct two response = 2)	2pts = 1 1pt = 2 Incorrect = 3 NR = 99
16	Mention two sources of information on Medical check-up available to MPH students?	Print media, Medical personnel, Hospital, Medical Laboratory, Social media, Family, Personnel decision, Friends, Internet, Clinics, Mass Media, Parents, Peer group, Lecturer, Posters, Journals, Articles, Lecture, etc. (Any correct two response = 2)	2pts = 1 1pt = 2 Incorrect = 3 NR = 99
17	List four types of Medical check-up that you know?	Blood pressure check, Visual check, Dental check, Blood sugar, Eye check, Urine test, Kidney Function Test, Liver Function Test, Lipid Profile, Heart Function Test, Blood Sugar, Breast Examination, Pulse Rate, Temperature Check, HIV Retroviral Screening, Weight check, Cholesterol level check, Throat check, Ear check, Electrocardiogram, Chest x-ray, Prostate check, Colon and Rectum Exam, Pap smear, Urinalysis etc. (Any four correct response = 4 points)	4pts = 1 3pts = 2 2pts = 3 1pt = 4 Incorrect = 5 NR = 99

18	At what age should Medical check-up start?	At birth	Correct = 1 Incorrect = 2 NR = 3
19	What is the interval period to conduct Medical check-up among adult?	6 months interval/ Twice in a year	Correct = 1 Incorrect = 2 NR = 3
20	Mention one place to conduct medical screening?	Government hospital, General hospital, Federal Medical Centre, Clinic, Private hospital, Medical laboratory, Patent medicine vendor. (Any correct 1 response = 1point)	Correct = 1 Incorrect = 2 NR = 3

SECTION C: PERCEPTION OF PERIODIC MEDICAL CHECKUP

S/N	STATEMENT	VARIABLES	CODE
21	Only the sick individual should go for medical check-up	Agree Disagree NR	1 2 3
22	Only the aged should go for medical check-up	Agree Disagree NR	1 2 3
23	Only the children should go for medical check-up	Agree Disagree NR	1 2 3
24	Everybody needs medical check-up	Agree Disagree NR	1 2 3
25	Male students need medical check-up more than Female students	Agree Disagree NR	1 2 3
26	Female students need medical check-up more than Male students	Agree Disagree NR	1 2 3
27	Medical check-up will prevent ill-health	Agree Disagree NR	1 2 3
28	Medical check-up is for the rich students who can make payment for the service	Agree Disagree NR	1 2 3
29	Medical registration in the school has covered all my medical check-up	Agree Disagree NR	1 2 3
30	I prefer going to Church/Mosque/Traditional healers for prevention from illness	Agree Disagree NR	1 2 3

31	Medical check-up can improve ability to work better	Agree Disagree NR	1 2 3
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SECTION D: ATTITUDE OF MASTERS OF PERIODIC MEDICAL CHECKUP

S/N	STATEMENT	VARIABLES	SCORE
32	I am comfortable going for medical check-up	Agree Disagree NR	1 2 3
33	I don't go for medical check-up because of the financial implication	Agree Disagree NR	1 2 3
34	I cannot encourage anybody to go for medical check-up	Agree Disagree NR	1 2 3
35	I don't have time to go for medical check-up	Agree Disagree NR	1 2 3
36	I don't go for medical check-up due to attitude of the health workers	Agree Disagree NR	1 2 3
37	I prefer self-medication to medical check-up	Agree Disagree NR	1 2 3
38	I don't go for medical check-up because I don't feel sick	Agree Disagree NR	1 2 3
39	I don't go for medical check-up because of the stress involved	Agree Disagree NR	1 2 3
40	I don't go for medical check-up because of the fear of the result	Agree Disagree NR	1 2 3
41	I will go for medical check-up in the future	Agree Disagree NR	1 2 3
42	I don't go for medical check-up because of the odour of the screening centre	Agree Disagree NR	1 2 3
43	I don't go for medical check-up because of my religion	Agree Disagree NR	1 2 3
44	I don't go for medical check-up because of lack of personnel at the screening centre	Agree Disagree	1 2

		NR	3
45	I don't go for medical check-up because the health centre is far away	Agree Disagree NR	1 2 3
46	I don't go for medical check-up because of my cultural practices	Agree Disagree NR	1 2 3

SECTION E: PRACTICE OF PERIODIC MEDICAL CHECKUP

S/N	STATEMENT OF PRACTICE	VARIABLES	CODE
47	Have you ever conducted any medical check-up before without being sick	Yes No	1 2
48	Do you intend to go for medical check-up?	Yes No	1 2
49	When last did you go for medical check-up	This year Last year Last two years More than last two years Never	1 2 3 4 5
50	Why did you go for medical check-up?	To check health status Sickness School Admission requirement Free medical service Employment purpose Encouraged by Parent and Family Travelling requirement NYSC requirement No reason	1 2 3 4 5 6 7 8 9
51	How many times do you go for medical check-up in a year?	> Twice Twice < Twice Never	1 2 3 4
52	List four medical check-up you can go for?	Blood pressure check, Visual check, Dental check, Blood sugar, Eye check, Urine test, Kidney Function Test, Liver Function Test, Lipid Profile, Heart Function Test, Blood Sugar, Breast Examination, Pulse Rate, Temperature Check, HIV Retroviral Screening, Height check, Weight check, Cholesterol level check, Throat check, Ear check, Electrocardiogram, Chest x-ray, Prostate check, Colon and Rectum Exam, Pap smear,	4pts = 1 3pts = 2 2pts = 3 1pt = 4 Incorrect = 5 NR = 99

		Urinalysis etc. (Any four correct response = 4 points)	
53	Where did you do your last medical check-up?	Government hospital, Private hospital, Medical laboratory, Patent medicine vendor Others NR	1 2 3 4 5 6
54	What motivated you to go for medical check-up	Recommended by Doctor Sickness To know health status Free screening Friend influence No reason Admission requirement Family Marriage requirement Employment purpose Travelling requirement NYSC requirement	1 2 3 4 5 6 7 8 9 10 11 12

APPENDIX 5

LETTER OF INTRODUCTION FOR PRETEST



DEPARTMENT OF HEALTH PROMOTION AND EDUCATION
AFRICAN REGIONAL HEALTH EDUCATION CENTRE
FACULTY OF PUBLIC HEALTH, COLLEGE OF MEDICINE
UNIVERSITY OF IBADAN

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Our Ref: HPE/SF.

25th June, 2018

The Dean,
Students Affairs
Obafemi Awolowo University
Ile-Ife
Osun State

LETTER OF INTRODUCTION

Re: YELOTAN, Oluwole Emmanuel
Matric No: 163431

This is to certify that the bearer YELOTAN, Oluwole Emmanuel is a Master of Public Health (Health Promotion and Education) student in the Department of Health Promotion and Education, Faculty of Public Health, University of Ibadan.

The student intends to carry out a research which focuses on: "Knowledge, Perception and Attitude of Periodic Medical Check-up among Masters of Public Health Students of the University of Ibadan, Ibadan, Nigeria".

Kindly accord him all necessary assistance he may require.

Thank you.

Dr. F. O. Oshiname



HEAD
DEPARTMENT OF HEALTH
PROMOTION & EDUCATION
COLLEGE OF MEDICINE
UNIVERSITY OF IBADAN
IBADAN, NIGERIA

HOD, Public Health
Kindly assist
DEAN, STUDENT AFFAIRS
OBAFEMI AWOLowo UNIVERSITY
ILE-IFE, NIGERIA
13/07/18

Dr. F. O. Oshiname
Ag. Head

APPENDIX 6

LETTER OF INTRODUCTION FROM THE DEPARTMENT TO THE FACULTY

**DEPARTMENT OF
HEALTH PROMOTION AND EDUCATION
FACULTY OF PUBLIC HEALTH, COLLEGE OF MEDICINE
UNIVERSITY OF IBADAN**

Tel: +234 8108955615 | E-mail: healthpromed@yahoo.com | www.comui.edu.ng

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Our Ref. HPE/SF. 27th November, 2018

The Dean,
Faculty of Public Health
University of Ibadan
Ibadan.

LETTER OF INTRODUCTION

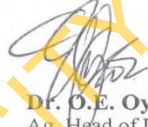
Re: YELOTAN Oluwole E. – Matric No. 163431

This is to certify that the bearer YELOTAN Oluwole E. is an MPH (Health Promotion and Education) student, in the Department of Health Promotion and Education, Faculty of Public Health, University of Ibadan.

The student intends to carry out a research which focuses on: **“Knowledge, Perception and Attitude of Periodic Medical checkup among Masters of Public Health Students of the University of Ibadan, Oyo State, Nigeria.”** He needs the total number of Masters Students (Male and Female) admitted for 2016/2017 and 2017/2018 academic session to assist him in his research work.

Kindly accord him all necessary assistance he may require.

Thank you.


Dr. O.E. Oyewole
Ag. Head of Department

**HEAD
DEPARTMENT OF HEALTH
PROMOTION & EDUCATION
COLLEGE OF MEDICINE
UNIVERSITY OF IBADAN
IBADAN, NIGERIA.**

Dr O. E. Oyewole
Acting Head

*Vision: To be a world-class department for academic excellence, geared towards meeting societal needs.
Mission: Promoting sustainable healthy living through appropriate behavioural change information and activities.*

APPENDIX 7

LETTER OF INTRODUCTION FROM THE FACULTY TO ALL DEPARTMENTS

UNIVERSITY OF IBADAN
COLLEGE OF MEDICINE
FACULTY OF PUBLIC HEALTH

INTERNAL MEMORANDUM

FROM: Faculty Officer, FPH

TO: All Heads of Departments
Faculty of Public Health

REF: FPH/D0/06 DATE: 3 December, 2018

Re: Letter of Introduction

I write to introduce to you, YELOTAN Oluwole E. – Matric NO 163431 of the Department of Health Promotion and Education, Faculty of Public Health.

The student intends to carry out a research which focuses on: **"Knowledge, Perception and Attitude of Periodic Medical checkup among Masters of Public Health Students of the University of Ibadan, Oyo State, Nigeria"**.

In carrying out the research, he needs the total number of Masters Students (Male and Female) admitted for 2016/2017 and 2017/2018 academic session.

Kindly accord him all necessary assistance he may require.

Thank you for your cooperation.



L. T. Oduola
For: Faculty Officer, FPH

APPENDIX 8

ETHICAL APPROVAL



INSTITUTE FOR ADVANCED MEDICAL RESEARCH AND TRAINING (IAMRAT)
College of Medicine, University of Ibadan, Ibadan, Nigeria.



Director: **Prof. Catherine O. Falade**, MBBS (Ib), M.Sc., FMCP, FWACP
Tel: 0803 326 4593, 0802 360 9151
e-mail: cfalade@comui.edu.ng lillyfunke@yahoo.com

UI/UCH EC Registration Number: NHREC/05/01/2008a

NOTICE OF FULL APPROVAL AFTER FULL COMMITTEE REVIEW

Re: Knowledge, Perception and Attitude of Periodic Medical Check-up among Masters of Public Health students of the University of Ibadan, Ibadan, Nigeria.

UI/UCH Ethics Committee assigned number: UI/EC/18/0428

Name of Principal Investigator: **Oluwole E. Yelotan**

Address of Principal Investigator: Department of Health Promotion & Education
College of Medicine,
University of Ibadan, Ibadan, Nigeria

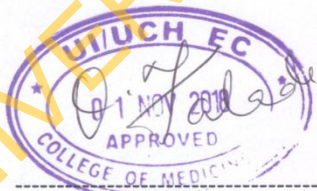
Date of receipt of valid application: 04/09/2018

Date of meeting when final determination on ethical approval was made: N/A

This is to inform you that the research described in the submitted protocol, the consent forms, and other participant information materials have been reviewed and *given full approval by the UI/UCH Ethics Committee.*

This approval dates from **01/11/2018 to 31/10/2019**. If there is delay in starting the research, please inform the UI/UCH Ethics Committee so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. *All informed consent forms used in this study must carry the UI/UCH EC assigned number and duration of UI/UCH EC approval of the study.* It is expected that you submit your annual report as well as an annual request for the project renewal to the UI/UCH EC at least four weeks before the expiration of this approval in order to avoid disruption of your research.

The National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the Code including ensuring that all adverse events are reported promptly to the UI/UCH EC. No changes are permitted in the research without prior approval by the UI/UCH EC except in circumstances outlined in the Code. The UI/UCH EC reserves the right to conduct compliance visit to your research site without previous notification.



Professor Catherine O. Falade
Director, IAMRAT
Chairperson, UI/UCH Ethics Committee
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