

**EXPERIENCE AND LEVEL OF SATISFACTION WITH  
INSTITUTIONALIZED MEDICAL CHECK UP AMONG STAFF OF  
COLLEGE OF MEDICINE, UNIVERSITY OF IBADAN, NIGERIA**

**BY**

**ODUNAYO TINUADE IFE-AJAYI  
B.TECH PHYSIOLOGY (LAUTECH)  
MATRIC NO. 173625**

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## DEDICATION

This research work is dedicated to Almighty God who in his infinite mercy brought me thus far.

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## ABSTRACT

Medical check-up (MC) is a type of screening test for those in the general public that do not have any particular disease; when patients exhibit symptoms they are referred to consult with a doctor in a specialized department. Institutionalised Medical Check-up (IMC) put in place for staff of the University of Ibadan (UI) is to ensure optimal health. While the efforts are in the right direction, the uneven demand and perceptions of poor health service delivery that plague the general public may influence the uptake of this service. The study investigated the experience and level of satisfaction with IMC among staff of UI who participated in the general MC.

A descriptive cross-sectional study was conducted using a three-stage sampling technique. Three hundred and one respondents were selected from all the faculties and service departments in the College of Medicine (COM), University of Ibadan. A self-administered questionnaire investigating practices, experiences and satisfaction with IMC was used to collect data from respondents. Satisfaction was measured on a 14-point scale; scores less than 14 was categorised as not satisfied. Experience was assessed using 16 selected domains of what happened during the MC exercise. Data were analysed using descriptive statistics and Chi-square test at  $p=0.05$ .

Respondents' age was  $43.9 \pm 15.7$  years and most respondents (36.5%) were from the service departments of the COM. More of the respondents (32%) who participated in the study are senior non teaching staff while least (11%) participation was shown among teaching staff. Majority of respondents (69.6%) claimed that they got the information about the MC through internal memo. Although 63.8% of the respondents felt compelled to participate in the MC programme, 82.8% respondents felt the need to participate. Majority (69.4%) participated to know their health status while 38.9% respondents did it to satisfy the establishment. Majority (89.7%) completed the MC, 84% collected all their results and only 67.7% went back to the doctor with the results. About half (59.1%) of respondents were not satisfied with the medical check-up. Out of all the domains of satisfaction, time spent for the MC had the least percentage of satisfied respondents (67.8%) while provider-client interaction had the highest satisfied respondents (88.0%) Majority (88.4%) of respondents recommended that the MC

should continue. Educational level of respondents was significantly associated with level of satisfaction, with secondary education and below (65%) showing higher level of satisfaction.

A relatively low level of satisfaction was found among staff in relation with the University of Ibadan medical check-up, staff had a pleasant experience. However, satisfaction with waiting time was lower than that of other domains. In addition respondents with higher education were less satisfied with the service. An effective communication and continuous health education; Seminar should be incorporated in standard of healthcare delivery to give service improvement which would in turn increase participation and effectiveness of Institutionalised Medical check-up.

**Keywords:** Institutionalised medical check-up, Experience, Satisfaction, University staff

**Word count:** 469

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## CERTIFICATION

I certify that this study was carried out by Miss. Odunayo T. Ife-Ajayi under my supervision at the Department of Health Promotion and Education, Faculty of Public Health College of Medicine, University of Ibadan

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### SUPERVISOR

Oyedunni S. Arulogun

B.Ed, M.Ed, MPH, Ph.D. (Ib), Dip.HIV Mgt and Care (Israel), FRSPH (UK), CCST (Nig)

Reader

Department of Health Promotion and Education,  
Faculty of Public Health, College of Medicine,  
University of Ibadan, Ibadan

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## ABBREVIATIONS/ACRONYMS

COM.....	College of Medicine
IMC.....	Institutionalized medical check-up
MC.....	Medical check-up
UI.....	University of Ibadan
PHE.....	Physical Health Examination

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the study

Technological advances in modern medicine and a growing emphasis on preventive care have led to increased enthusiasm for screening in apparently healthy people (Thompson and Tonelli, 2012). In primary care practice, the general health check (also termed periodic health evaluation or routine medical examination) is the usual mechanism used to screen asymptomatic people for disease. The term is generally not meant to include visits for the purpose of newborn checks, Pap smears for cervical cancer, or regular visits for people with certain chronic medical disorders (for example, diabetes). It involves a medical history, a (brief or complete) physical examination and sometimes laboratory tests. Some more advanced tests include ultrasound and mammography (Adejoro, 2014).

In an editorial released by Thompson and Tonelli, (2012) it was revealed that although widely practiced, there is no universally accepted definition of what constitutes a general health check; screening may occur at variable frequencies and include a spectrum of diagnostic manoeuvres ranging from physical examination to invasive procedures. Despite this variability, all general health checks share a common goal: to reduce morbidity and mortality by detecting disease or modifiable risk factors at an earlier stage—implicitly assuming that this will improve clinical outcomes compared with waiting until symptoms develop (Thompson and Tonelli, 2012).

In the United State of America, the first universal physical health examination proposals began to appear at the turn of the 20<sup>th</sup> century. Possibly the first to suggest this was George Gould, a national figure in the medical community (Gould, 1900). In 1915, the National Tuberculosis Association designated a week for general physical examinations. This help to popularise the examinations as a tool for the early diagnosis of disease in general, and tuberculosis in particular (Rosen, 1975). Organised medicine also played a major role in the

development of the periodic health examination. In 1922 the American Medical Association (AMA) officially endorsed periodic Health Examination and began a campaign to spread its practice in 1923(Emerson, 1923).

In the area of health, the University of Ibadan's administration mandated the University Health Services to provide free comprehensive medical check-up for all staff. This exercise was the first in the history of this University, and the benefits of the exercise were clear to all (UI Annual report, 2012). This exercise was bided to promote good health and prevent sudden death from preventable/controllable diseases in the middle and high level manpower sectors of the economy. The Vice Chancellor, Professor Isaac Adewole during his 57<sup>th</sup> birthday vowed that no worker in UI will die of treatable disease. He facilitated a plan to see all workers undertake a fresh medical check up in order to determine their health condition (University of Ibadan Media, 2014). Staff of the University were screened for six (6) major diseases; Hypertension, Diabetes, Glaucoma, Obesity, Lipid disorders, Hepatitis B infection and possible Cancers such as cervical, prostate and breast cancer.

Client satisfaction is the level of satisfaction that clients experience having used a service. It therefore reflects the gap between the expected service and the experience of the service, from the client's point of view. Asking patients what they think about the care and treatment they have received is an important step towards improving the quality of care, and ensure local health services are meeting patients' needs (Health care Commission-North West London Hospitals NHS Trust, 2005). It is an established fact that satisfaction influences whether a person seeks medical advice, complies with treatment and maintains a continuing relationship with practitioners (Margaret, Rheeder, Vanzyl and Seager, 2003; Larsen and Rootman, 1976). Donabedian (1988) arguably the leading theorist in the area of quality assurance, has emphasized that client satisfaction is of fundamental importance as a measure of the quality of care because it gives information on the provider's success at meeting those client values and expectations, which are matters on which the client is the ultimate authority (Donabedian, 1988 and James, 1990). With growing need and demand for periodic medical check up to help curb increasing burden of non communicable disease, the need to check for clients' satisfaction with such services cannot be overemphasized.

## 1.2 Statement of the Problem

Patient satisfaction can be defined as patient's judgment on the quality and goodness of care (Sixma, Spreuwenberg and Van der Pasch, 1998) while experience refers to what happens to people when they are interacting with the health care system and trying to have their needs met. The relative success of a given health care intervention depends largely on patient's perspective vis-à-vis the health care provider's perspective (Asadi-lari, Tamburini, and Gray, 2004). Institutionalized medical check-up put in place for staff of the University of Ibadan is to ensure optimal health. While the efforts are in the right direction, the uneven demand and perceptions of poor health service delivery that plague the general public may influence the uptake of this service.

In Nigeria, health care delivery systems have received many negative comments, both by the patients and the society. These negative comments range from poor quality of service delivery to service delay, discontinuity of care, indifferent staff attitude, and bureaucratic procedures. These negative comments have led to poor public confidence in healthcare which has made medical consultations unattractive to the consumers (Iloh, Ofoedu, Njoku, Odu, Ifedigbo and Iwuamanam, 2012).

Few studies have sought patients' views on satisfaction with services, and there is little effort to involve them in measuring satisfaction or defining health service standards. Consequences of patient dissatisfaction can include patients not following treatment regimen, failing to pursue follow-up care and, in extreme cases, resorting to negative word-of-mouth that dissuades others from seeking health care from the system.

Modern medicine is slowly beginning to recognize the importance of the perspective of the patient in health care and more investigations are needed to understand the importance of the inter-relationships among health needs, satisfaction, and quality of life. If satisfaction with structural, process and outcome of care are critical elements of quality of care, then the way in which care is delivered should be evaluated through the eyes of the patients. Evaluating to

what extent patients are satisfied with health services is relevant, as satisfied patients are more likely to comply with treatment, take an active role in their own care, to continue using medical care services and stay within a health provider and maintain with a specific system.

### **1.3 Justification**

There is dearth of information on the prevalence of periodic medical examination. Little is known in Nigeria on the practice of periodic medical examination. The Staff of College of Medicine form a critical mass of people who need to stay healthy and impart knowledge and develop tertiary education. Although, the mandatory institutionalized medical check up was free but it is important to assess the level of satisfaction of staff of the university with the programme. This study aim at documenting staff of University of Ibadan's experience and level of satisfaction with institutionalized medical check up conducted previously. This study will serve as evaluation for the previously conducted medical check up in the institution. Findings from this study will serve as input in designing educational programmes to reach out to staff of the higher institution and would also contribute in improving the standard and willingness of staff to do a regular check up. The data from the study could also be used to formulate informed policies on the practice and uptake of regular medical check up in the country.

This study would have an important input in assessing the level of clients' satisfaction on outpatient as well as inpatient health care services, identify the factors affecting the clients' satisfaction, and provide a recommendation on an improved health service delivery that will be helpful to fill research knowledge gaps which ultimately contributes to enhance quality of clients' services in the hospital and improve the level of clients' satisfaction. This study is to document the experience and level of satisfaction of staff with institutionalized Medical check up.



#### **1.4 Research Questions**

This study answered the following research questions:

1. What is the experience of staff of College of Medicine with Institutionalised Medical check up?
2. What is level of satisfaction of staff of College of Medicine with the institutionalized Medical check up?

#### **1.5 Objective of the study**

##### **Broad objective**

The broad objective of this study was to investigate the experience and level of satisfaction with institutionalized medical check up among staff of University of Ibadan who participated in the general Medical check up.

##### **Specific Objectives**

The specific objectives were:

1. To describe the experience of staff of College of Medicine with institutionalized Medical Check up.
2. To determine the level of satisfaction of Staff of College of Medicine with institutionalized Medical Check up.

#### **1.6 Hypothesis**

The following null hypothesis was tested by the study:

Hypothesis 1: there is no significant association between respondents' demographics and level of satisfaction with institutionalized medical check up

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Overview of Medical Check up

Medical check-up is a type of screening test for those in the general public that do not have any particular disease. And when patients exhibit symptoms they are referred to consult with a doctor in a specialized department. A health check-up is defined as a thorough study or examination of the health of an individual (Mosby's Medical Dictionary, 1990). 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 check-ups are necessary to detect problems like heart diseases, cancers, diabetes and others.

Life expectancy and prosperity have risen in developed and developing countries over the past 50 years and are expected to continue to rise (Lomborg, 2002). Most adults need a thorough medical examination of which the frequency increases if there is a health problem that requires continuing care. The interval between check-ups depends on age. Staff of Academic institution usually fall between the ages of 23 and 70 years and are expected to benefit maximally from periodic medical check-ups because they are regularly under stress. Regular check-ups save lives even when there is no specific problem, since the absence of disagreeable symptoms does not necessarily guarantee that one is in good health.

The main goals of a periodic medical examination are to diagnose treatable asymptomatic diseases. Some studies have also shown decreased rates of invasive cancers and decreased mortality in people who undergo regular medical check-ups. By 2020, the life expectancy in the developing world is expected to pass the 70 years barrier, causing the world's life expectancy to continue to climb. Health was defined by the World Health Organization as the state of physical, mental and social well-being, not merely the absence of disease or infirmity. Most Nigerians don't make it a point of duty to know their health status while many practise self-medication even when they are sick (Adejoro, 2014).

## 2.2 Origin of Medical Health Examination

D'Souza, (1978), stated that the origins of the Periodic Health Examination (PHE) or screening occurred in a brothel in the papal state of Avignon in 1347, "when an abbess and a local surgeon, every Saturday, singly examined women 'in the home' and if any of them had contracted any illness by their whoring, they were separated from the rest and not allowed to prostitute themselves for fear the youth who had to do with them should catch their distempers."(D'Souza, 1978). This account is an early record of screening applied in the cause of community medicine and antedates by at least five centuries, the use of medical examination for the apparently healthy to prevent the spread of disease.

The precise origin of periodic health examination (PHE) is difficult to trace but it has been suggested that the intellectual beginnings were due to a British physician, Horace Dobell, a renowned clinician, author and expert on tuberculosis and diseases of the chest (Dobell, 1861). Dobell proposed the periodic health examination as a way to identify "these earliest invasive periods of defect in the physiological state and to adopt measures for their remedy". In the United States (US), the public health use of screening probably first became established in the mid 19th century when, in conjunction with quarantine regulations, it was applied to immigrants. Its value in checking the flow of epidemics was taken for granted and at no time was its effectiveness tested. At the beginning of the 20th century, medical examinations were recognised as being of use to insurance companies for the purpose of rejecting or loading the policies of poor risk clients. The terms PHE and screening have similar meanings and are used interchangeably.

Experiments and practice in PHE were also undertaken in Australia, Canada, France, Germany, Ireland, Israel, Italy, Japan, New Zealand, Norway, Scotland and South Africa. Despite the enthusiasm, or perhaps because of it, in the late 1960s, the value of screening (periodic health examinations) began to be tested and examined more critically. WHO commissioned a comprehensive review of screening worldwide which enunciated ten common sense criteria to be applied before consideration of screening for a particular disease (Wilson and Jungner, 1968).

These were:

1. The condition sought should be an important health problem.
2. There should be an accepted treatment for patients with recognised disease.
3. Facilities for diagnosis and treatment should be available.
4. There should be a recognisable latent and early symptomatic stage.
5. There should be a suitable test or examination.
6. The test should be acceptable to the population.
7. The natural history of the condition including development from latent to declared disease should be adequately understood.
8. There should be an agreed policy on whom to treat as patients.
9. The cost of case-finding (including diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole.
10. Case-finding should be a continuing process and not a 'once and for all' project.

### **2.3 Types of Medical Health Examination**

#### **Body Measurements**

Examination of Body Composition, Stress Examination, Height, Weight, Blood Pressure

#### **Ophthalmic Examination**

Fundus Photography, Colour Signal, Visual Acuity, Ocular Tension

#### **Audibility Test**

Early Discovery of Deafness, Diagnosis of Auditory Disorder

#### **Blood Test**

CBC (Complete Blood Count), Blood Type, Hepatitis Examination, Thyroid Disease. Immune Serum Examination (Syphilis, Rheumatoid Factor, Erythrocyte Sedimentation Rate, C-Reactive Protein) Tumour Marker (CAE: Carcinoembryonic Antigen, Fetoprotein, PSA, CA19-9, CA125) Liver Function Test, Kidney Function and Electrolyte Test, Gout, Lipid Test, Blood Sugar.

#### **Urinalysis**

The pre-examination of adrenal or urogenital disorders and a urine glucose test for diabetes mellitus are also performed.

### **Faeces Examination**

This is conducted because several kinds of Parasites, Trematode, and Haemorrhage occur in the digestive system.

### **Digestive System Examination**

This consists of a check up on the Oesophagus, Stomach and Duodenum through a gastroscopy or an upper gastrointestinal (UGI) series examination (When making a reservation, a gastroscopy or an upper gastrointestinal (UGI) series examination should be selected)

### **Abdomen Ultrasonography**

Liver, Gallbladder, Pancreas, Kidney, Spleen

### **Respiratory Function Test**

Pulmonary Function Test, Chest PA Radiograph and Chest Lateral Radiograph

### **Electrocardiography**

Arrhythmia, Conduction Defect and Angina Pectoris, Myocardial Infarction

### **Anoscopy**

Digital rectal examination, Hemorrhoid, Digital Prostatic Examination

### **Gynaecological Examination (For Female)**

Cervical Cytologic Screening Test Breast Cancer or Mammography – It is applicable for females over 35 Bone Density Examination (Osteoporosis)

### **Dental Examination**

#### **2.4 Non-communicable diseases and Regular medical check-up**

Non-communicable diseases (NCD) are a major health burden in the industrialized countries, and are increasing rapidly in the developing countries owing to demographic transitions and changing lifestyles (WHO, 2003). Although these lifestyle diseases have become important threats to the health of adults in sub-Saharan Africa, efforts to detect these diseases are haphazard and prevention targets are largely inexistent (Nissinen et al, 2001). Most people tend to take good health for granted. It is a known fact that almost every major ailment first manifests itself as minor symptoms, which are often not noticed and hence, neglected. As

such, proper preventive health check-ups are necessary for early detection and diagnoses of these health conditions (Chobanian et al, 2003).

The influences of urbanization as a contributing factor to the increase in prevalence of NCDs, are also apparent in the most Nigerian cities, with the increasing use of motorized transport and sedentary types of occupation such as trade and office work. This is also usually accompanied by other high risk dietary and lifestyle behaviours (Byass and Wall, 2009)( Steyn and Damasceno,2006)( Unwin and Alberti,2006). Cardiovascular disease, diabetes and cancers which account for a major share of the burden of NCDs also share common lifestyle related risk factors. These risk factors include poor dietary habits (excessive calorie and inadequate fruit and vegetable intake), excessive alcohol use, physical inactivity and tobacco use (Derman, 2008). The emerging evidence of the increasing burden of NCD and the risk factors in Sub Saharan Africa should have provoked targeted public health intervention. However, in Nigeria the lack of data on health and economic burdens attributable to NCDs particularly in urban areas have prevented the actions needed to curb this rising toll of NCDs (WHO, 2002).

## **2.5 Benefits of Medical Check-Up**

Getting a routine medical check-up is important for everyone, particularly those with chronic health problems, a complicated health history or a genetic predisposition to certain conditions. Regardless, no matter your age, gender or medical history, it's a great idea to get a routine physical exam once a year. There are many benefits that come from getting a regular annual medical exam. Prevention and the early detection of potential health problems is the most significant benefit. Others include peace of mind and a more comprehensive health history that can help you make informed health decisions throughout your lifetime.

It is impossible to maintain good health these days without a regular check up, at least once a year. Our lack of a culture of medical check-up needs to be addressed, because of our high mortality rate. Check-Ups enable us to know the state of our health, preempt diseases or treat them. Several of the cancers, breast and prostate included, can be cured if detected early. The

same goes for many other diseases – early diagnosis is a key to better health (The Leader news Online, 2014).

As prevention is better than cure, to prevent diseases, we must live a healthy lifestyle and that includes understanding our bodies or knowing what diseases or conditions we are pre-disposed to in order to take the necessary precautions to facilitate treatment or, better still, a cure. The greatest benefit of an annual physical is knowledge – for both you and your physician. These visits establish a baseline of your personal health against which your doctor can detect unhealthy trends before they become risk factors.

Nearly a third of the 133 million Americans with a chronic disease don't even know they have the disease. According to the Partnership to Fight Chronic Disease, as many as 100,000 lives could be saved each year simply by increasing the use of common preventive care services. Crucial, and often simple, health screenings easily detect the two most common chronic conditions – diabetes and high blood pressure – before they cause serious health issues.

Or maybe you have already been diagnosed with a chronic health condition. The Centers for Disease Control cites that seven out of every 10 deaths are caused by chronic disease. But proper disease management can prevent unnecessary hospitalization and reduce the cost of primary care. Another benefit of an annual physical is the connection you will develop with your doctor. When a health crisis occurs, you will have a doctor (and the doctor's staff) who already knows and cares about you – and you can probably be seen sooner.

The major reasons why people don't go get medical check-up vary from living too busy lives to no sense of urgency. Denial of aches and pains has been identified also as a reason why people don't get medical check-ups; people are in denial for aches and pain and delaying the inevitable of losing weight, or exercising more or ignoring signs of diseases. Also people also consider the financial implication of medical check-up with the ignorance of the knowledge that Preventive medicine might be cheaper than curative medicine.

According to studies, as high as 60 percent of the causes of death are due to preventable diseases which could easily have been detected and prevented by regular medical check-ups. This statistic underlines the importance of regular medical check-ups.

There are three levels of preventive care: All three of these levels of preventive care are important components of disease prevention and health maintenance.

Primary prevention includes interventions that can completely prevent the disease in people at risk. One example is immunizations against certain vaccine-preventable diseases such as measles and tetanus.

Secondary prevention identifies established risk factors for disease. Checking blood pressure, cholesterol, and performing Pap tests for cervical cancer screening are examples in which identifying abnormal results can lead to effective interventions that may prevent serious disease from developing.

Tertiary prevention is a process for optimizing health once a disease has been diagnosed. An example is a management plan to prevent a person from having another heart attack once they already have established heart disease (William and Shiel, 2014).

## **2.6 Health Seeking Behaviour**

Health or care seeking behaviour has been defined as any action undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy (Ward., Mertens, and Thomas, 1997). Examining consumers' healthcare behaviour can help in the design of ways to ensure better access to health and the quality of care. Health-seeking behaviour is viewed as the varied response of individuals to states of ill-health, depending on their knowledge and perceptions of health, socioeconomic constraints, adequacy of available health services and attitude of healthcare providers. The study conducted by Afolabi et al,(2013) pointed out that Significant barriers to seeking medical attention at the health centre were cost of care, protracted waiting time, inadequate health information, unfriendly attitude of healthcare workers and drug shortage. Nevertheless, people may engage in preventive health behaviours not only for health reasons. They may develop such behaviours according to their desires (Reach, 2003), in order to respond to other motivations such as ego-related or socially oriented ones (Jayanti and Burns, 1998).



Health seeking behaviour is influenced by a large number of factors apart from knowledge and awareness. This behaviour among different populations, particularly in the rural communities, is a couple outcome of many factors operating at individual, family and community level including their bio-social profile, their past experiences with the health services, influences at the community level, availability of alternative health care providers including indigenous practitioners and last but not the least their perceptions regarding efficiency and quality of the services. Belief systems prevalent in the communities i.e. how people conceptualize the aetiology of health problem and how symptoms are perceived is an important factor in deciding the first step of treatment seeking (Detmar et al, 2002)

Several models have been created in order to explain whether people develop preventive health behaviours or not. Many of them are social cognition models which consider that people engage in preventive health behaviours after: the analysis of its consequences, an assessment of the disease's perceived risk, and an evaluation of self-efficacy, e.g. personal capability to develop the target behaviour (Bandura, 1989). Much research has shown that self-efficacy is the main determinant of preventive health behaviours (Schwarzer, 1992; Schwarzer and Fuchs, 1996). But the impact of self-efficacy on preventive health behaviours may be influenced by other variables such as emotions associated with previous experiences with the target behaviour. Social cognitive theory identifies factors (behaviour, cognition and other personal factors, and the environment) that influence how and to what extent people are able to change old behaviours and adopt new ones. Psychosocial factors such as stress and anxiety regarding perceived risk for disease, along with social support for engaging in the health-promoting behaviours must be considered. Finally, the action plan must be tailored to fit with the patient's values and belief systems (Martucci and Gulnik, 2012). The researchers identified some related factors affecting health seeking behaviours

- New condition, altered health status
- Lack of awareness about environmental hazards affecting personal health
- Absence of interpersonal support
- Limited availability of health care resources
- Unfamiliarity with community wellness resources

- Lack of knowledge about health promotion behaviours

Also in a similar study by Warner and Procaccino (2004), it was identified that women tend to assess the process of seeking health information (women's health information needs, the search strategies they employed for filling the information need, and the use of the health information found), and their awareness of specific health and medical information resources.

Health seeking behaviour is preceded by a decision making process that is further governed by individual and/or household behaviour, community norms and expectations as well as provider related characteristics and behaviour. For this reason the nature of care seeking is not homogenous depending on cognitive and non-cognitive factors that call for a contextual analysis of care seeking behaviour. Context may be a factor of cognition or awareness, socio-cultural as well as economic factors. The interplay of these factors are central in the final choice of a care seeking option. This interplay is such that no one option is selected and we may observe a series of options often reflecting a pattern of resort in care seeking.

Werle, (2011) reported that people normally know they should follow a few preventive health behaviours in order to have a better and long life: to not smoke, to have a balanced diet low in fat and rich in vegetables and fruits, to exercise regularly, to avoid heavy drinking, to take medical screens for dangerous diseases, to have immunizations and to use seatbelts while driving. But even knowing that these measures can prevent serious future problems, some people do not adopt them. In a study by Fuschia and Voth (2007), Wellness behaviours were defined as behaviours that people perform in order to maintain a healthy lifestyle. For example, wellness behaviours can include eating breakfast or taking time to relax. The researcher explained in their study how Preventive health-care behaviours were measured by using two questions that asked participants if 1) they see the dentist for regular check-ups, and 2) they see the doctor every year for an annual physical. About a third of the participants reported that they delayed visiting the dentist for a regular check-up, while 53 % of participants reported having regular check-ups. A little over a half (51 %) of participants indicated that they visit the doctor annually, whereas a third did not see their doctor annually for a physical (Fuschia and Voth, 2007).

Several models have been created in order to explain whether people develop preventive health behaviours or not. Many of them are social cognition models which consider that people engage in preventive health behaviours after: the analysis of its consequences, an assessment of the disease's perceived risk, and an evaluation of self-efficacy, e.g. personal capability to develop the target behaviour (Bandura, 1989). Much research has shown that self-efficacy is the main determinant of preventive health behaviours (Schwarzer, 1992; Schwarzer and Fuchs, 1996). But the impact of self efficacy on preventive health behaviours may be influenced by other variables such as emotions associated with previous experiences with the target behaviour. Social cognitive theory identifies factors (behaviour, cognition and other personal factors, and the environment) that influence how and to what extent people are able to change old behaviours and adopt new ones. Psychosocial factors such as stress and anxiety regarding perceived risk for disease, along with social support for engaging in the health-promoting behaviours must be considered. Finally, the action plan must be tailored to fit with the patient's values and belief systems. ( Martucci and Gulanik , 2012).

Dupas (2011) in her work which gave her insight to health seeking behaviour in developing country explained that the first possible explanation for why households in developing countries often under investigated in preventative health care is that there is a lack of information on illness prevention or on the effectiveness and cost-effectiveness of preventative behaviours. A series of recent studies suggests that lack of information could indeed be an important factor. The researcher reviewed about eight studies, conducted in a variety of contexts for a variety of health issues, all showing that providing information can have substantial impacts on health behaviour. Not all information will influence behaviour, however: Dupas (2011) also reviewed four studies that clearly show that the impact of the information depends on what information is provided and to whom. Finally, although information can make a difference, it is often not sufficient to achieve optimal health behaviour, suggesting that there are other important determinants of health behaviour.

Foster and Anderson (1980) noted that underutilization of modern health services is rarely due to the influence of local beliefs or an aversion of western medicine but rather depends on the cost and availability of those services. Whereas availability and physical access is important,

it has become apparent that client perspectives on the quality of care as experienced through the client-provider encounter is recognised as playing a major role in health seeking behaviour.

Patients of all ages may be involved in improving health habits, though younger patients often more aggressively approach risk factor reduction in areas where research has documented beneficial effects. Less research has been conducted with the elderly population, though patients of any age should be encouraged to adopt a healthy lifestyle to improve their quality of life. Age is also a consideration in designing specific interventions such as exercise. Elderly patients require a longer warm-up period when initiating exercise and their target heart rate may be lower.

For the purposes of planning health programmes it is generally health seeking behaviour which is of interest, more specifically the use of modern health care facilities. In addressing this aspect it is important to recognize that this behaviour does not exist in a vacuum, but is part of wider health behaviour. Successful interventions will depend on their acceptability and accessibility, both of which relate to broader social factors than simply decisions about "going to the doctor".

When an individual makes a decision in relation to their health, they weigh up the potential risks or benefits of a particular behaviour. But they do so in a way that is mediated by their immediate practical environment, their social rootedness and their whole outlook on life more generally. Not all of this is immediately apparently relevant to an act of health seeking behaviour, but it is all nonetheless inherent to that act, and must therefore be acknowledged.

In order to understand how people reach the decisions they do around their health seeking behaviour, we need to understand not only the information sources and how they are interpreted, but also the underlying, unspoken, unconscious feelings and assumptions which support that cognitive process and the journey taken during it. This reflects findings of previous studies on health seeking behaviours that confirm decisions around health seeking behaviour are underpinned by both rational cognitive processes and less easily identifiable affective-emotional processes.

## **2.7 Knowledge of Regular Medical Health Examination**

Studies have shown that formal education has a great influence on the awareness and knowledge of periodic medical check-up. Eke (2012), showed that this high level of knowledge is predominantly higher among females than male. This might be due to nonchalant attitude of many males towards health care as well as the fact that the females might have been educated on that during antenatal visits when pregnant. This finding is also in keeping with findings in other parts of the world (Chee et al, 2003; Remennick, 1999).

The result of the study also showed that majority felt that medical check-ups are needed by everybody. However, a reasonable proportion (36.4%) felt it is for the sick only. This is restricted to those with lower level of education who not surprisingly might have very little knowledge of the Indications and implications of periodic medical check up.

The study carried out by Centre for Health Protection in Hong Kong (2008) pointed out that majority of persons have high expectations on the effectiveness of medical check-ups on early detection of diseases. Also the study showed that majority believed that “for the majority of disease, detection at stages can improve their prognosis” (Centre for Health Protection, 2008).

## **2.8 Effectiveness of Regular Medical Health Examination**

In Japan, comprehensive periodic health examinations have been undertaken for many years. There is little evidence of any, other than belief, that it is of any value. Analysis of the procedure showed that it increased health care utilisation and costs. The only possible benefit was that there was an increase in health care utilisation (Ren et al, 1994).

A more recent systematic review of the value of periodic health evaluation in 2007 (Boluware et al, 2007) was unable to show any improvement in outcomes in any of the studies examined. The authors concluded that PHE improves delivery of some recommended preventive services and may lessen patient worry, although additional research is needed to clarify the long term benefits, harms and costs of receiving the PHE.

## **2.9 Patient’s experience with health care system**

Patient’s experience is an important element of overall care. It refers to what happens to people when they are interacting with the health care system and trying to have their needs

met (Gallagher, 2014). A patient's experience is broader than just the clinical aspects of care (Did I receive the most appropriate care for my condition? Was the outcome the best possible?); all of the various non-clinical interactions also inform their experience. Because patients are often at their most vulnerable while receiving health care services, each interaction takes on added significance. All of these interactions, or touch points, are the basis of 'The Patient Experience'. Each touch point offers the health care provider the opportunity to deliver unique benefits to the patient and to create a platform for differentiation and competitive advantage (Feirn and Betts, 2009). Non-clinical touch points can far outnumber those that a patient has with a physician or caregiver. They also are often the first and last impression a patient has of the organization. However, when a patient must choose between two providers with equally high-quality clinical care, patients likely will choose the one that provides unique value in all of their other interactions, the one that they believe provides the "best" experience (Feirn and Betts, 2009).

In the future, measures of patient experience, intended to capture the "responsiveness" of the health system (Valentine, de Silva, Kawabata, Darby, Murray and Evans, 2003) a concept developed by WHO, are likely to receive even greater attention as physicians and hospitals come under growing pressure to improve the quality of care, enhance patient safety and lower the cost of services. Health system responsiveness specifically refers to the manner and environment in which people are treated when they seek health care. The study by Bleich, Ozaltin and Murray (2009) pointed out that the relationship between satisfaction with the health-care system and patient experience revealed that the latter is an important determinant of degree of satisfaction.

Delnoij (2009) wrote that the reasons for studying patient experiences can differ between countries. The motives vary from external accountability of health care providers to enhancing patient choice, improving the quality of care or measuring the performance of the health care system as a whole. Often, patient experience surveys serve multiple purposes. In a study by Wong and Hargetty (2013) Monitoring information about patients' experiences is essential to stimulate innovation, track changes in quality, and help Canadians become more informed about their health care system.( Health Council of Canada,2006) . Patients are uniquely positioned to report on their care experiences and they are often the only common

thread across disparate health care settings (National Academy of Science, 2006) Consequently, measuring the quality of the PHC system from patients' perspectives has been identified as a crucial step towards defining areas of improvement and monitoring the impact of change (Institute for Healthcare Improvement, 2006).

The absence of a solid conceptual basis and consistent measurement tool for consumer satisfaction has led, over the past 10 years, to a proliferation of surveys that focus exclusively on patient experience, i.e. aspects of the care experience such as waiting times, the quality of basic amenities, and communication with health-care providers, all of which help identify tangible priorities for quality improvement.

## **2.10 Patient's Satisfaction**

Satisfaction can be defined as the extent of an individual's experience compared with his or her expectations (Pascoe, 1983). Patients' satisfaction is related to the extent to which general health care needs and condition-specific needs are met. In the current health care setting patient satisfaction is one of the main indicators. Assessment of patient satisfaction is a useful parameter to predict the quality and availability of health care services (Illana, 2003). Nowadays, the health care sector is doing continuous efforts to ensure a higher consumer satisfaction. By doing so, one can identify the deficiencies in the delivery of healthcare services and intervene them to enhance patient satisfaction (Mira and Aranaz, 2000).

Seeking to understand patient perspectives is an important step in the efforts to improve the quality of health care. However, research examining patient satisfaction with health care provision in Nigeria and, more specifically, the perceived quality of care given by the health care providers is limited. Results from a study conducted in South Africa showed that there were consistently significant differences regarding patient satisfaction between male and female patients across selected items in the various domains (Phaswana-Mafuya et al, 2011).

Studies done in Nigeria have found that patient satisfaction surveys are means of determining patients' views on primary health care (PHC) (Ajayi, Olumide and Oyediran 2005; Andaleeb



2001; Campbell, Ramsay and Green 2001). These surveys are increasingly being promoted as a means of understanding health care service quality and the demand for these services in developing countries for various reasons. Firstly, they highlight those aspects of care that need improvement in a health care setting. Secondly, they are simple, quick and inexpensive to administer. Thirdly, they are critical for developing measures to increase the utilization of PHC services. Fourthly, they can help to educate medical staff about their achievements as well as their failures, assisting them to be more responsive to their patients' needs. Lastly, they allow managerial judgment to be exercised from a position of knowledge rather than guesswork in the important task of managing public expectations and resources (Ajayi et al., 2005; Muhondwa et al., 2008; Newman et al. 1998; Glick 2009).

Mckinley (2001) found out in his study about factors depending on satisfaction that patients' relation between expectations and received reduction in services related with satisfaction. Andaleeb, Siddiqui and Khandakar (2007) concluded in their study that greater responsiveness, assurance, and tangibility of health care providers will satisfy patients at the greater level.

The result of another study conducted in the Emergency Department of a health facility showed that patient satisfaction is a major health problem; the study revealed that in the Emergency Department (ED), the role of the gatekeeper is considered in the treatment of the patient. Emergency department should have to provide quality service to attain customer's satisfaction. For monitoring and evaluating healthcare quality of life and patients' satisfaction both are essentials (Joseph and Nichols 2007). Patients' attitudes and behaviours towards hospitals has become an important issue in the competitive industry of health care and it depends upon the hospital's brand image.

Evidence from developed countries for gender differences in mean satisfaction levels is mixed. Some authors report that women are more satisfied than men with medical care received (Weiss, 1988), and some report that women are more critical of medical care than men (Kaplan, 1996). A South African study pointed out that simply controlling for demographic differences might result in the needs of important demographic groupings being overlooked. In addition, demographic differences, such as gender are likely to shape patients' needs and preferences and might be a particularly important consideration in shaping specific



health services to better meet needs and support treatment adherence (Phaswana-Mafuya et al, 2011).

In a similar study, Jawaid et al (2009) reported that gender difference showed that females were less satisfied as compared to males in three items: support staff, physician's professionalism and explanation given by physician. The reason suggested was maybe males being more confident and more vocal are likely to ask questions if they do not understand and so they were more satisfied. Age has been found out to be mostly influence satisfaction with healthcare service. An analysis of the influence of respondents' demographics showed that patient satisfaction was found affected with a variety of issues. i.e. the age of patients significantly affecting the level of satisfaction. It was seen that the old patients were more satisfied with the pharmacy services provided than the other age groups. In addition, other factors that were associated with the patient satisfaction were gender, nationality and education (Mansour and Khan, 2012). Some international studies (Kamei et al., 2001) explore no difference in satisfaction between male and female. However, keeping in view the current findings it can be assumed that Women may be more willing to know about their drugs from the pharmacist. More studies have shown that women elicit more health seeking behaviours than men.

Development Canada, (2009) found almost similar satisfaction levels between male (86%) and female (84%) patients. However, a meta-analysis of 110 studies of patient satisfaction, using standard instruments, concluded that there was no average difference in satisfaction with medical care between women and men (Hall and Dornan, 1990). Wessels et al (2010) and Babikako et al (2011) argued that past experience and consequently patient expectations might influence age and gender difference in satisfaction.

Ferris (1992) reported that satisfied patients are more likely than their dissatisfied counterparts to show positive illness behaviours (Ferris, 1992). Other studies have shown that satisfied patients are more adherent to physician recommendations and more loyal to physicians,( Zolnieriek and Dimatteo, 2009; Safran , Montgomery, Chang, Murphy and Rogers, 2001). In addition, researches have suggested a tenuous link between patient

satisfaction and health care quality and outcomes (Schneider , Zaslavsky , Landon et al, 2001; Rao, Weinberger and Kroenke, 2000; Sequist, Schneider, Anastario, et al, 2008).

Brent, Morris, Jahangir and Manish (2014) concluded in their study that managing patient expectations and psychosocial factors, such as pain and depression that can drive patient satisfaction can be difficult. They reported that individualizing patient preoperative counselling and shared decision-making can help to identify patient-specific factors, such as chronic pain and depression that may negatively impact patient satisfaction scores. By setting appropriate preoperative expectations and managing pain and depression, physicians can help patients achieve good outcomes.

Kravitz (1998) also reported that if patient satisfaction is to take its place alongside morbidity, mortality, and functional status, several critical measurement issues must be addressed. First, scale developers and end-users need to be clear about what they are measuring. “Patient satisfaction” is not a unitary concept but rather a distillation of perceptions and values. Perceptions are patients' beliefs about occurrences and they reflect what happened. Values are the weights patients apply to those occurrences. They reflect the degree to which patients consider specific occurrences to be desirable, expected, or necessary.

Satisfaction surveys done in some developed countries showed greater satisfaction and quality of care from patients whose views were sought in tertiary institutions (Asekun-Olarinmoye et al., 2009; Benjamin, 1999). Studies have shown that seeking patients’ opinion while providing treatment improves their responses to respective treatment, continued accessing health care in health care facility, return for other health care assessment and even pay out of their pocket for services offered to them without grudges (Jawaid et al. 2009; Ahmed et al., 2004).

However, it is hard to identify a single factor that is directly associated with a low or high level of patient satisfaction. A variety of factors might be involved in patient satisfaction process. Some of these are; patient demographics, health status, characteristics of the health care provider i.e. technical expertise, interest in patient oriented care and waiting time (Mira and Aranaz, 2000 and Hall and Dornan, 1998). Furthermore, the patient satisfaction level is found to directly associate with the patient expectations (Mira and Aranaz, 2000 and Hall and Dornan, 1998). In this way, one can define patient satisfaction as the sum of the patient

expectation and perceptions toward the treatment or pharmaceutical service provided to them (Ikegami and Kawakita, 1987). If the perceived expectations are met, it will result in a satisfied patient. Otherwise, a poor satisfaction level can be seen if there is a higher variation in the expectance versus perception rate (Ichijo, 1987).

In health care services, patient satisfaction is considered as one of the main factors that help the stakeholder to improve the quality of the health services. Globally, the criteria to measure the patient satisfaction vary markedly. Different cultural settings have different needs or expectation that affect the overall satisfaction with the health care services.

### **2.11 Measurement of Satisfaction**

The heart of the satisfaction process is the comparison of what was expected with the product or service's performance – this process has traditionally been described as the 'confirmation/disconfirmation' process (Vavra, 1997). First, customers would form expectations prior to purchasing a product or service. Second, consumption of or experience with the product or service produces a level of perceived quality that is influenced by expectations (Oliver, 1980).

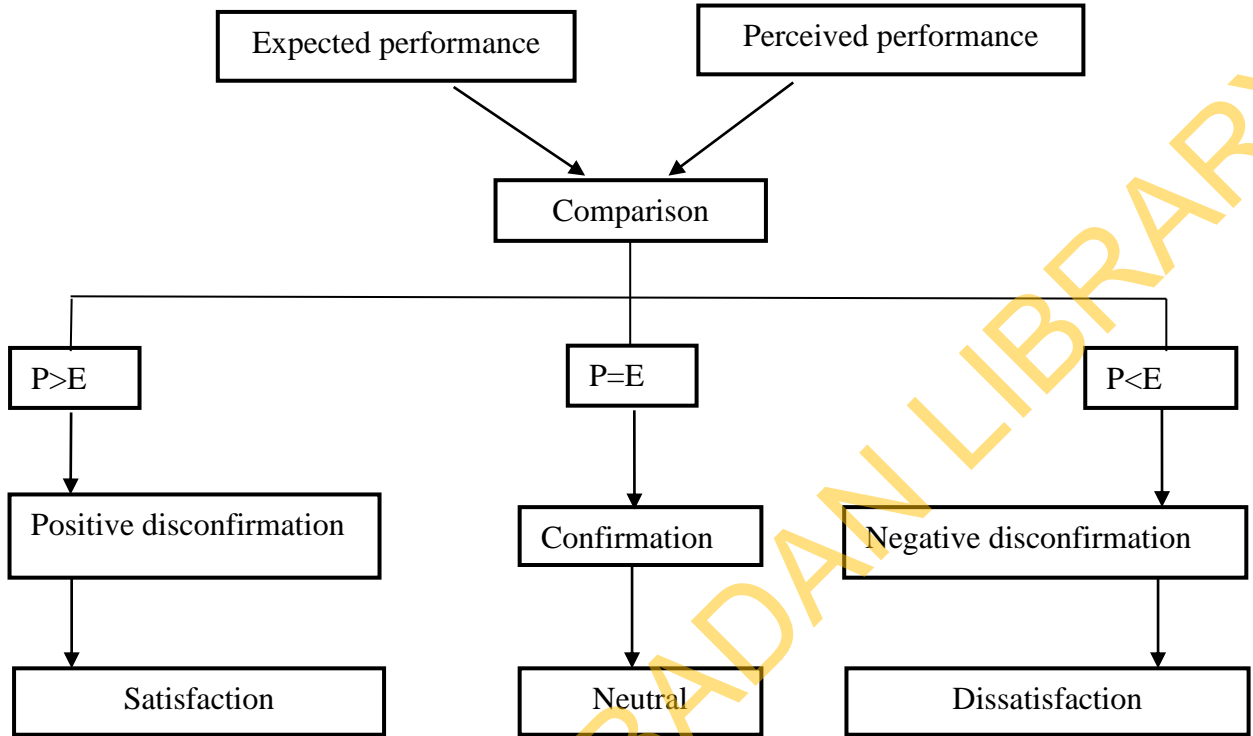
If perceived performance is only slightly less than expected performance, assimilation will occur, perceived performance will be adjusted upward to equal expectations. If perceived performance lags expectations substantially, contrast will occur, and the shortfall in the perceived performance will be exaggerated (Vavra, 1997). Measuring patient satisfaction has many purposes, but there are three prominent reasons to do so (Sitzia and Wood, 1997). Such interviews help to evaluate health care services from the patient's point of view, facilitate the identification of problem areas and help generate ideas towards solving these problems.

### **2.12 Conceptual framework**

The conceptual framework for this research was based on Disconfirmation theory. This theory is the most dominant of the conceptual models of consumer satisfaction, it proposes that the consumer compares his or her perceptions of the product or service against a 'pre-purchase' comparison level or standard, the most widely researched being consumer expectations. Disconfirmation theory argues that 'satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against

expectations' (Ekinici and Sirakaya, 2004). Szymanski and Henard found in the meta-analysis that the disconfirmation paradigm is the best predictor of customer satisfaction (Petrick, 2004). Ekinici et al (2004) cites Oliver's updated definition on the disconfirmation theory, which states "Satisfaction is the guest's fulfilment response. It is a judgement that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under- or over-fulfilment" (Ekinici and Sirakaya 2004).

If patients are viewed as consumers, a consumer model such as Disconfirmation model from marketing theories can be applied to healthcare provision. In this model, the assumption is that staff of University of Ibadan has expectations when they accessed the annual medical check-up. These expectations arise from prior experience or word-of-mouth communication, third party information or cultural milieu, the degree to which these expectations are fulfilled can be measured and there is a relationship. The higher the perceived fulfilment of expectation the higher the satisfaction. When fulfilment is lower than expectation, the lesser is the satisfaction. When expectations are low, they are easily fulfilled and satisfaction level is kept high and vice versa



**Figure 2.1. Disconfirmation Theory Model**

Mattila, and O’Neill (2003) discuss that “Amongst the most popular satisfaction theories is the disconfirmation theory, which argues that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations. Basically, satisfaction is the result of direct experiences with products or services, and it occurs by comparing perceptions against a standard (e.g. expectations). Research also indicates that how the service was delivered is more important than the outcome of the service process, and dissatisfaction towards the service often simply occurs when guest’s perceptions do not meet their expectations (Mattila and O’Neill, 2003).

In application, the study showed a fairly pleasant experience with the institutionalised Medical Check-up which can be simply stated has been exceeding respondents’ expectation, thus a positive disconfirmation which in turn led to satisfaction of staff of College of Medicine with Institutionalised Medical check-up.

## CHAPTER THREE

### METHODOLOGY

#### 3.1 Study Design

This was questionnaire-based descriptive cross-sectional study that was set out to document the experience and level of satisfaction with institutionalized medical check up among staff of College of Medicine, University of Ibadan, Oyo State, Nigeria.

#### 3.2 Study Location

The study was carried out at the College of Medicine in University of Ibadan. The University of Ibadan is located in Ibadan North Local Government area of Oyo State. Ibadan the capital of Oyo state located in the south western part of Nigeria. The University was established on the 1<sup>st</sup> of August 1948. The University consists of 13 faculties namely Agriculture and Forestry, arts, basic Medical sciences, Dentistry, Education, law, Pharmacy, Public Health, Science, Social sciences, Technology, Veterinary Medicine and other academic departments.

The University is being serviced by a total of 4,886 members of staff made up of 1,416 Teaching staff. There are also 857 senior Technical staff, 1095 senior administrative staff and 1518 junior staff (UI Annual reports, 2012).

The faculty of Medicine was one of the first faculties created when the University College, Ibadan came into being in 1948. Initially the University was linked to the University of London which issued the degree MBBS for Ibadan graduates. The first set of students graduated from Ibadan in 1960. The faculty of Medicine was restructured into the college of Medicine of the University of Ibadan (CMUI) in 1980. The College of Medicine is situated in University College Hospital, which is the teaching Hospital for the University of Ibadan. The College of Medicine consists of four faculties: Faculty of Basic Medical Sciences, Faculty of Clinical Sciences, Faculty of Public Health, and the Faculty of Dentistry. The college of Medicine awards the degree of MBBS. The total population of staff of College of Medicine is 951; 421 teaching staff, 388 senior non-teaching and 142 junior non-teaching staff.

### 3.3 Study Population

The study population comprised of both the academic and non academic staff from all the faculties of the College of Medicine, University of Ibadan.

### 3.4 Sample Size Calculation

The sample size was determined using EPI INFO statistical package 7

Size of the population	951
Desired precision	0.5
Expected prevalence	0.5 (There is no evidence to support prevalence of regular medical check-up)
Design effect	1.0
Confidence interval	95%
Sample size	274
10% attrition	27
Total	301

### 3.5 Sampling Technique

A two-stage sampling technique was used to select the study population. The stages are as follow:

Stage 1: Staff of College of Medicine were stratified into 4 faculties and service departments

Stage 2: non- probability sampling technique was adopted in selecting the sample size: every respondent that met the inclusion criteria was selected for the study until the required sample size was gotten while the survey period lasted.

### 3.6 Inclusion Criteria

Staff of College of Medicine who participated in the general medical check-up and willing to give an informed consent were included in the study.

### 3.7 Exclusion Criteria

Staff of College of Medicine who did not partake in the general medical check-up or any staff that is not willing to give an informed consent were excluded in the study.

### **3.8 Instrument for Data Collection**

A self-administered, semi structured questionnaire was used for the survey. The questionnaire contained questions addressing research variables namely: experience and level of satisfaction. It was divided into three (3) sections accordingly: Section 1 focused on the socio-demographic information about the respondents, section 2 explored the experience of respondent's with the institutionalized medical check-up and section 3 assessed the satisfaction of the respondents with IMC. Also an open ended question was asked to elicit information on how Institutionalised Medical Check-up may be improved.

### **3.9 Validity of Instrument**

Validity and reliability describe expected measure and the accuracy of the research measuring instruments. The questionnaire was critically examined by various experts within and outside of the Department of Health Promotion and Education. The opinions of supervisor and experts was sought to ascertain the face and content validity of the developed instrument.

### **3.10 Reliability and Pre-testing of Instrument**

The validity and reliability of the instruments was ensured by conducting a pre-test among 30 (10% of minimum sample size) staff members of The Polytechnic Ibadan with a draft of the questionnaire to determine its consistency and accuracy. The instrument was pre-tested among Staff the Polytechnic Ibadan. 10% of the study population was administered with the questionnaire and collected within 2days. This was to determine how effective the developed instrument would be in collecting appropriate data relevant to the research objectives. Reliability analysis for questionnaires was done by using Cronbach- Alpha statistical test with a reliability coefficient of 0.602. A revision was made based on the analysis of the results of the pre-test.

### **3.11 Data Collection Procedure**

Four research assistants who are literate, mature and undergraduates of various tertiary institutions also have had previous experiences on data collection were recruited and trained for one day. The contents of the training included purpose of the study, interpersonal



communication and data collection procedures. Survey was self-administered except where clarifications were sought from research officers on any items or questions. Questionnaires were administered to the 301 participants who met the inclusion criteria. To ensure privacy, the study participants were allowed to complete the questionnaires wherever they are comfortable. Fifteen (15) days was used in collecting the data.

### **3.12 Data Management and Analysis**

The investigator checked all copies of administered questionnaire one after the other for purpose of completeness and accuracy. Serial number was assigned to each question for easy identification and for correct data entry and analysis. A coding guide was developed to code and enter each question into the computer for analysis. A 14 point scale was used in assessing the level of satisfaction. Satisfactory had a score of 2, 1 for not satisfactory and 0 for not sure. Respondents with total score of 14 were classified as satisfied with all while less than 14 were classified as not satisfied. Analysis was done with the use of Statistical package SPSS version 16. The data entered into the computer was subjected to descriptive (mean, median, mode) and inferential (Chi-Square) statistical analyses. The demographics was analysed with the use of frequency distribution tables and cross tabulations of categorical variables (demographics) against the categories of level of satisfaction with institutionalized medical check-up and Chi square was used to test the hypotheses.

### **3.13 Ethical Consideration**

Written informed consent was obtained from respondents before administering questionnaires. Ethical issues like confidentiality, opportunity to decline interview at any stage and non exposure to risk was also discussed with each respondents. Only respondents who were able to give informed consent (i.e. are able to demonstrate an understanding of the objectives of the study and the implication of their role in it) were recruited into the study. A written consent was obtained though it did not require the names of the participants but required their signatures and date. They were informed that participation is voluntary and that data collected would be used mainly for research purposes. Anonymity and confidentiality of responses was ensured.

**Confidentiality of data:** In order to assure respondents of confidentiality of the information that were supplied, names of respondents were not required, only identification number was assigned to the questionnaires for proper recording.

**Translation:** The official language in the University of Ibadan is English, thus, questionnaires was not translated to respondents' native language.

**Beneficence to participants:** The outcome of the research will be of benefit not only to the participants, but the other staff of the University of Ibadan as it will help the institution in improving on the programme and Hence, a better healthcare for the staff.

**Non-maleficence to participants:** The research does not require collection of invasive materials. Therefore, safety of the participants is guaranteed.

**Voluntariness:** The participants had the full detail concerning the research before taking part in it so as to ensure that she fully understands the research and is willing to take part in it.

### **3.14 Limitations of the study**

This study has a number of limitations. First the study is restricted to only staff of the College of Medicine and the findings may not be generalised to the entire UI staff. Secondly the non-probability sampling method could have resulted in a non-representative sample also affecting the generalizability. Finally there is a slight chance of recall bias due to the relatively long interval between when the medical check was done and data was collected.

## CHAPTER FOUR

### RESULTS

The results are represented in this chapter. It consists of four sections as follows:

- Socio-demographics Characteristics
- Perception and practice of medical check-up before the mandatory medical check up
- Experiences with institutionalized medical check-up in the University of Ibadan
- Satisfaction with institutionalized medical check up

#### 4.1 Socio-demographics Characteristics

The ages of respondents ranged from 21 to 61 years with a mean of  $43.9 \pm 15.7$  years. Majority (65.2%) fell between 30 and 49 years age group. Many of the respondents (53.8%) were males and majority (86.7%) were married while 11% were singles. Almost 87% of respondents have tertiary education. A few (19.6%) had spent 20 or more years in employment at the institution while 29.2% had spent less than five years. Respondents' average monthly income ranged from less than ₦50,000 to over ₦201,000 while 49.7% earn less than ₦50,000 (see table 4.1). A high proportion (36.5%) of respondents were from the service departments of the College of Medicine closely followed by 22.9% each from faculties of Basic Medical sciences and Clinical sciences while the least (5.3%) were from the faculty of Dentistry. Many (32%) of the respondents that participated in the study are senior non-teaching staff while least (11%) participation was shown among teaching staff.

**Table 4.1. Socio-Demographic information of respondents (N=301)**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age (years)</b>		
<30	29	9.6
30-39	98	32.6
40-49	98	32.6
50+	76	25.2
<b>Sex</b>		
Male	162	53.8
Female	139	46.2
<b>Marital status</b>		
Single	33	11.0
Married	261	86.7
Separated	3	1.0
Divorced	3	1.0
Widowed	1	3
<b>Educational status</b>		
Primary education	8	2.7
Secondary education	32	10.6
Tertiary education	261	86.7
<b>Years of employment (Years)</b>		
<5	88	29.2
5-9	74	24.6
10-19	80	26.6
20+	59	19.6
<b>*Average monthly Income (Naira)</b>		
<b>(N=300)</b>		
≤50000	149	49.7
51000-100000	75	25.0
101000-200000	52	17.3
≥201000	24	8

\*Missing responses were left out

#### **4.2 Perception and Practice of Medical Check-up before the Mandatory Medical Check up**

About two-third (47.5%) of respondents rated their health has been very good while only 28.9% rated theirs as excellent. Out of the total of 301 respondents, 143 (64.5%) had undergone medical check-up in the past 12months. One hundred and forty one (46.8%) respondents think that a person should undergo medical check-up every six months (twice a year) while only 3% do not have an idea (see Table 4.2).

In practice, out of 195 respondents who had undergone medical check-up before the one mandated by University administration in 2011, 29.6% of the respondents had gone for medical check-up at least once a year. Most respondents' fell (54.5%) into the category of between one to four years when asked for the last medical check-up before the one the University administration mandated and the most frequent reason for (46.8%) medical check-up was to check their health status (see Table 4.3).

**Table 4.2 Perception of Medical Check-up (N= 301)**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Respondents' health rating</b>		
Excellent	87	28.9
Very good	143	47.5
Good	67	22.3
Fair	4	1.3
<b>Respondents who had undergone medical check-up in the past 12 months</b>		
Yes	194	64.5
No	105	34.9
Don't know	2	0.7
<b>Frequency of medical check-up</b>		
Monthly	95	31.6
Every 6 months	141	46.8
Yearly	51	16.9
Every 2 years	5	1.7
I don't know	9	3.0

**Table 4.3: Practice of Medical check-up before the mandatory medical check-up by the University (N=301)**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Respondents who had undergone medical check-up before the one mandated by the University of Ibadan (N=301)</b>		
Yes	195	64.8
No	106	35.2
<b>Frequency of medical check-up (N=181)</b>		
Monthly	35	11.6
2-4 times a year	50	16.6
once a year	89	29.6
Can't remember	3	1.0
whenever ill	4	1.3
<b>Respondents' last medical check-up before the one mandated by the University (N=161)</b>		
<1 year	62	31.8
1-4 years	92	47.2
5+	8	4.1
Can't remember	7	3.8
<b>Purpose of the medical check-up (N=180)</b>		
check health status	141	78.3
Medical examination for pre employment	16	8.9
medical appointment	7	3.9
Staff games	6	3.3
Antenatal	5	2.8
Post surgery	2	1.1
routine for all drivers of the institution	2	1.1
Can't remember	1	0.6

#### **4.4 Experiences with institutionalized medical check-up in the University of Ibadan**

Majority of respondents (69.6%) claimed that they got the information about the medical check-up through internal memo while only few (12.7%) heard from their colleagues. Almost all (90.6%) of the respondents acknowledged that the information was adequate and well understood. Although two third (63.8%) of the respondents felt compelled to participate in the medical check-up programme, 247(82.8%) respondents felt the need to participate. The major (69.4%) reason for participating that top the list was to know their health status and 38.9% respondents did it to satisfy the establishment (See table 4.4a).

Majority (75.7%) considered the timing of the medical check-up convenient for them while 81.8% of respondents spent between one to five days to complete the medical check-up. Only a few considered the exercise was a waste of time. Majority of respondents (66.7%) spent about thirty minutes waiting before consultation started and only few (2.8%) spent more than two hours. One hundred and forty one (47.2%) of respondents acknowledged that the healthcare staff gave them opportunity to ask questions while 53.8% said things were explained to them completely in the way they could understand (See table 4.4b).

Out of the 277 respondents who said the medical check-up was beneficial to them, 84.5% acknowledged that it enabled them to know their health status and out of 23 respondents who didn't see the programme as beneficial to them, 13% said they didn't see the need to participate while some said they weren't ill. Out of 301 respondents, 89.7% completed the medical check-up, 84% collected all their results and only 67.7% went back to the doctor with the results. (See Table 4.4c)

Majority of the respondents who didn't complete the medical check-up gave time factor as the major reason for not completing the check-up. Out of the 32.3% of respondents who didn't take their results back to the doctor, 15(24.2%) said the results were fine and saw no need to return to the doctor. Respondents with major findings that required referral or further investigation were 40.1% (See Table 4.4d)



**Table 4.4a: Experiences with institutionalized medical check-up in the University of Ibadan**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Means of Information (N=300)</b>		
Internal memo	209	69.6
Seminar/conference	23	7.7
Email	4	1.3
Friends	26	8.7
Colleagues	38	12.7
<b>Adequacy of the Information (N=299)</b>		
Yes	271	90.6
No	28	9.4
<b>Respondent felt compelled to undergo the medical check-up (N=301)</b>		
Yes	192	63.8
No	109	36.2
<b>Health status before undergoing the medical check-up mandated by the University (N=301)</b>		
Poor	12	4.0
Fair	23	7.6
Good	186	61.8
Excellent	80	26.6
<b>**Reasons for undergoing the medical check-up at that time.</b>		
To satisfy the establishment.	117	38.9
Early diagnosis and treatment.	67	23.3
Body fitness	119	39.5
Know your Health status	209	69.4

\*\*Multiple responses were allowed

**Table 4.4b: Experiences with institutionalized medical check-up in the University of Ibadan**

Variable	Frequency	Percentage
<b>Timing of the medical check-up convenient for the respondents (N=301)</b>		
Yes	228	75.7
No	73	24.3
<b>Days spent in completing the medical check-up(days) (N=297)</b>		
1-5	246	82.8
6-10	41	13.8
11-15	9	3.1
Don't remember	1	0.3
<b>Medical check-up is a waste of time (N=301)</b>		
Yes	85	28.2
No	216	71.8
<b>Waiting time before consultation started (N=282)</b>		
≤30 minutes	188	66.7
31-60 minutes	69	24.5
61-120 minutes	17	6.0
≥121 minutes	8	2.8
<b>Respondents given the time and opportunity to ask questions about anything (N=299)</b>		
Yes, at every point in time	141	47.2
Yes, most of the time	79	26.4
Yes, some of the time	55	18.4
No, I was not given the opportunity	15	5.0
I don't know/ I can't remember	9	3.0
<b>Healthcare staff explain things to respondent in a way that you could understand (N=299)</b>		
Yes, completely	161	53.8
Yes, to some extent	113	37.8
No, they did not	18	6.0
I didn't need an explanation	7	2.4

**Table 4.4c: Experiences with institutionalized medical check-up in the University of Ibadan**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Medical check-up was beneficial to respondents (N=301)</b>		
Yes	277	92.3
No	23	7.7
<b>Ways in which medical check-up was beneficial to respondents (N=277)</b>		
Able to know the present health status	234	84.5
Reduced medical expenses	6	2.2
follow up on previous test	2	0.7
to ascertain the fitness of my health	15	5.4
It gave me room to make other complaints known to the doctors and got treatment where necessary	2	0.7
Rekindled the consciousness of medical check up	1	0.4
No reason	17	6.1
<b>Reasons why some respondents didn't see the Medical check-up as beneficial (N= 23)</b>		
I have a personal doctor	1	4.3
I was not sick	3	13.0
Waste of time	1	4.3
No need to participate	5	21.7
Improper coordination and planning for the programme	2	8.9
No reason	11	47.8

**Table 4.4d: Experiences with institutionalized medical check-up in the University of Ibadan**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Respondents who completed the medical check-up (N=300)</b>		
Yes	269	89.7
No	31	10.3
<b>Reasons why some respondents did not complete the medical check-up (N=31)</b>		
Travelled	3	9.7
time factor	10	32.6
large Population of people waiting to see the doctor	3	9.8
Unable to do Pap smear	1	3.2
Could not do cervical test because I was pregnant	2	6.5
staff were not patient enough so I left	1	3.2
No money	1	3.2
No reason	10	31.8

#### **4.5 Satisfaction with institutionalized medical check up**

Out of all the domains of satisfaction, time spent for the medical check-up programme had the least percentage of satisfied respondents (67.8%) while provider-client interaction had the highest satisfied respondents (88.0%) (See table 4.5).

Many (56.1%) of the respondents were satisfied with the facility where the medical check-up was conducted and 88.4% of respondents recommended that the medical check-up programme should continue (see table 4.6). The most occurred suggestion for improvement of medical check-up in University of Ibadan was improvement of the health facilities (24.2%) followed by provision of more qualified medical personnel. Some respondents also suggested that it should be done annually (See table 4.7).

**Table 4.5: Satisfaction with institutionalized medical check-up (N=301)**

STATEMENTS	SATISFACTORY	NOT	NOT SURE
	n (%)	SATISFACTORY n (%)	n (%)
During my visit to the health clinic, the doctors/health officers explained things in a way I could understand (N=298)	265 (88.0)	29 (9.6)	4 (1.3)
The time spent for the medical check up programme (N=300)	204 (67.8)	92 (30.6)	4 (1.3)
The quality of the screening tests I did during my visit	259 (86.0)	31 (10.3)	11(3.7)
The time spent to discuss with the doctor during consultation (N=299)	239 (79.4)	53 (17.6)	7 (2.3)
The quality of courtesy I received during my visit (N=299)	232 (77.1)	53 (17.6)	14 (4.7)
I received adequate answers to the questions I asked (N=299)	241 (80.1)	48 (15.9)	10 (3.3)
I had enough time to discuss my medical problem with the doctors/health officers or nurse (N=296)	225 (74.8)	57 (18.9)	14 (4.7)

**Table 4.6: Category code for Satisfaction level with Institutionalized medical check up (IMC) (N=295)**

<b>Category</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Satisfied with all	142	48.1
Not Satisfied with all	153	51.9

\*Missing responses were left out

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**Table 4.7: \*Suggestions for improving institutionalized medical check-up in University of Ibadan (N=301)**

<b>*Suggestion</b>	<b>Frequency</b>	<b>Percentage</b>
staff should be grouped into batches and department for the Medical check up	14	4.7
the University should improve on standard healthcare	151	50.2
it should be done annually	29	9.6
the University should mandate all her staff to go for medical check up	26	8.6
they should make it totally free	5	1.6
Staff should be encouraged by giving them medical check up leave day	6	2.0
Create more awareness on the importance of medical check up	17	5.6
None	10	3.3
The University should improve in taking care of the Health workers	3	1.0
The timing for the programme should be revised	24	8.0
The University should pay workers so they can do it themselves and present it to the institution	3	1.0
Regular conduct of Medical check up	20	6.6
The Medical check up programme should be brought down to departmental level	13	4.3
Staff of College of Medicine should be made to do the medical check up in UCH	1	0.3
Make the exercise biannual	2	0.7
The institution should look for other way of organising this program	4	1.3

\*Multiple responses were allowed



#### 4.5 Test of Hypothesis

Null hypothesis: there is no significant association between selected socio-demographics and satisfaction with institutionalized medical check up.

Table 4.8 shows the association between satisfaction with IMC and socio-demographic characteristics. Significant association was found only between satisfaction and level of education. ( $p = 0.022$ ), with secondary education and below (65%) showing higher level of satisfaction. A higher proportion of males (52.2%), singles (57.6%) and senior non teaching staff (55.3%) were satisfied, however the association were not statistically significant.

**Table 4.8: Association between satisfaction with Institutionalized medical check up and selected socio-demographic characteristics (N=295)**

Variables	Satisfaction with all aspects of care		Total	Chi square X <sup>2</sup>	P value	Significance
	Yes (%)	No (%)				
<b>Sex</b>						
Male	83(52.2)	76(47.8)	159	2.284	0.131	Not significant
Female	59(42.4)	77(56.6)	136			
<b>Age</b>						
<30	15(55.6)	12(44.4)	27	2.310	0.511	Not significant
30-39	48(49.5)	49(50.5)	97			
40-49	41(42.3)	56(57.7)	97			
50+	38(51.4)	36(48.6)	74			
<b>Years of employment</b>						
<5	43(50.6)	42(49.4)	85	1.444	0.695	Not significant
5-9	31(42.5)	42(57.5)	73			
10-19	38(48.1)	41(51.9)	79			
20+	30(51.7)	28(48.3)	58			
<b>Cadre</b>						
Teaching staff	13(40.6)	19(59.4)	32	3.114	0.211	Not significant
Senior non teaching	77(45.6)	92(54.4)	169			
Junior non teaching	52(55.3)	42(44.7)	94			
<b>*Marital Status</b>						
Single	19(57.6)	14(42.4)	33	1.294	0.255	Not significant
Married	120(47.1)	135(52.9)	255			
<b>Education</b>						
Secondary and below	26(65)	14(35)	40	5.272	0.022	significant
Tertiary	116(40.5)	139(54.5)	255			

\*Missing responses were left out

## CHAPTER FIVE

### DISCUSSION, CONCLUSION AND RECOMMENDATIONS.

This study explored the experience and level of satisfaction with institutionalized medical check up among staff of College of Medicine. Staff's experience with the medical check up programme had a negative effect on the overall satisfaction level. Implication of the findings of this study to health promotion and education was also discussed. Recommendations were made at the end of this report.

#### **Socio-demographic characteristics and affiliation of staff**

Many of the respondents recruited were senior non-teaching staff and from the service departments of the college of medicine. The preponderance of non-teaching staff in the sample can be explained by several reasons. First, the burden of teaching, research and other administrative duties could prevent teaching staff from making time to utilize the services. In addition the services were at the Jaja clinic in University of Ibadan; however, most of the teaching staff investigated are based in University College Hospital which could further make access difficult. Secondly, the teaching staffs of the College of Medicine are likely to be more knowledgeable about health matters and this could make them less enthusiastic about utilizing such institutionalised medical checks. In fact studies have shown a relatively poor utilization of health services among healthcare professionals. Concerning mammography for example, only 8% of health workers in Lagos University Teaching Hospital (Ibrahim and Odusanya 2009) and 3.1% of nurses in two government hospitals in Benin City (Akhigbe and Omuemu 2009) ever utilized this screening service. Awodele et al (2011) similarly showed that majority of nurses at the Lagos University Teaching Hospital had not had a Pap smear done. Thirdly, it could have resulted from the non-probability sampling technique adopted for the study which does not guarantee a representative sample. Finally, more senior non-teaching staff were willing to participate in the study compared to most teaching and Junior non-teaching staff who were either not available at the time of that medical check-up or were employed after the medical check up. However, majority of the respondents had spent at least

five years in service, with almost half being in employment for at least ten years, hence it is expected that the participants should be quite familiar with the University systems.

### **Perception and practice of medical check up before the mandatory medical check up**

Majority of respondents rated their health as very good which was expected as many Nigerians have the religious mentality of not saying negative things about their health. Thus one should take this finding with a pinch of salt as there is a high chance of underreporting of poor health among a typical Nigerian population. Furthermore, the use of self-rated health as a measure of health status has been criticized as it depends on age, ethnicity and educational status (Salomon et al 2009). Hence self-rating of health has its limitations.

About half of the respondents were of the view that a person should undergo medical check up at least two times in a year. In practice, About two-third of respondents had undergone medical check up in the past twelve months, this is encouraging and shows that people are becoming more conscious of their health in order to stay fit. Though this finding should be viewed with caution as the details of the medical check were not investigated in this study. However hospital visits in itself is an important first step in disease prevention through early diagnosis and prompt treatment. The importance of regular medical check cannot be overemphasized. According to the WHO, two thirds of the about 55 million people that died worldwide in 2011 were due to non-communicable diseases such as cancer, diabetes, and chronic cardiovascular and lung diseases (WHO 2011). Screening from these preventable diseases can be done and they are diagnosed early before it is too late to save the patient.

More than half of the respondents also had undergone medical check up at least once a year did that between 1-4 years before the one mandated by the University administration. The major purpose of undergoing the medical check was to check their health status. The relatively long period between the respondents' last medical check and the one introduced by the University shows that the University's programme may have reawakened many respondents about knowing their health status. This further stresses the importance of the IMC for staff, as this service has the potential to get staff to undergo routine medical check when the potential barriers of time or lack of funds could hamper routine medical checks. The point

about funds is particularly important in a country like Nigeria where there is no vibrant health insurance system and most payments for health are still out-of-pocket (NDHS, 2013).

### **Experience with institutionalized medical check up in the University of Ibadan**

More than two thirds of the respondents stated that they got the information about the medical check up through internal memo while information through email was very low. Hence the use of traditional methods of communication such as internal memo still appears to be popular and the authorities should take advantage of this medium for future dissemination of information and advertisements. The very low proportion that reported getting the information through email reflects the general poor level of electronic literacy with few having regular access to the internet. Even when the internet is available it has been shown that there are several barriers to its use such as poor power supply and low connectivity (Ajuwon, 2006). This finding of only handful obtaining information via email has implications for the continued use of email to disseminate important information to staff. The world is becoming a global village which every staff should have easy access to internet facility.

This study showed that almost all the respondents testified that the information about the medical check was adequate enough and well understood; this may have motivated the staff to participate in the medical check up. However despite seeing the need to participate in the medical check up, more than half of the respondents felt compelled by the University administration to undergo the medical check up. In addition one third of respondents mentioned that the reasons for undergoing the medical check up was in order to satisfy the establishment while more than half seized the opportunity to know their health status. This result implies that some respondents perceived they were being forced to take the check-up, a situation which could have affected their attitudes to the programme. An exercise such as a medical check-up should be voluntary rather than using a power coercive approach to change staff's health seeking behaviour. Rather, a normative-reeducative approach should be adopted for behavioural change. The study also revealed that majority of the respondents spent between 1-5days which is encouraging. This prompt service portends well for future similar programmes and staff are more likely to participate based on a good first experience. However a few spent about 3weeks to complete the exercise. The specific reasons for such delay are not known but deserve further investigation.

Over two third of the respondents agreed that the medical check-up was beneficial to them. Some reasons given included ability to know their health status and rekindling of their consciousness of medical check-up. It is pleasing to record these positive statements about the programme and this could be an index of the success of the programme. However others saw no benefit in the programme giving reasons like there is no need to participate or they have their own personal doctor. Though those with unfavourable comments about the programme constituted only a small percentage, in-depth investigation of this category is warranted to ensure high degree of participation of staff in future similar medical checks.

The study showed that the waiting time of respondents before consultation started was fair enough as majority of respondents spent less than about half an hour before consultation started. Respondents were also given the time and opportunity to ask questions during the consultation and also the providers explained things to them in a way they could understand. These findings are all in support of a successful programme and the authorities deserve commendation for its organization.

Though about 89% completed the medical check-up, 84% collected all results of all tests performed, and even a lower proportion of 67% returned to the doctor with their test results. This result supports the reason that many respondents went for the medical check up just to satisfy the establishment. Perhaps more would have returned if the normative-reeducative approach of behavioural change was adopted. However the main reason stated for not going back to see the doctor with the results was that the results were okay and thus they did not see any need to take it to a doctor. This behaviour could support the earlier point made about the health workers' attitudes of not feeling the need to see a doctor since they are knowledgeable about health matters.

### **Satisfaction with institutionalized medical check up**

The overall satisfaction of patients with different aspects of care was good as over three quarters of respondents in six out of seven aspects investigated were satisfied with the service. The relatively high level of satisfaction found in this study has been reported by several authors For instance Iliyasu et al (2010), Olusina et al (2004) and Eze (2006) reported that 83%, 75% and 53% of outpatients in Kano, Ibadan and Enugu respectively were satisfied with

the services received from different units although in teaching hospitals. This study shows that there is a significant relationship between level of education and satisfaction. This is in agreement with Iliyasu et al (2010) who stated that the satisfaction levels could be affected by socio-cultural differences and variation in levels of literacy. The lower satisfaction expressed by those with higher educational level could indicate higher expectations about quality of care from the more educated especially since they more likely utilize private facilities or hospitals with higher charges and possibly better services. However, studies have shown that patients differ in their satisfaction with the quality of care (Abdosh, 2006) and a variety of factors might be involved in patient satisfaction process. Some of these are; patient demographics (Butler, Oswald and Turner, 1996), health status, characteristics of the health care provider i.e. technical expertise, interest in patient oriented care and waiting time (Mira and Aranaz, 2000 and Hall and Dornan, 1998) influence the perceived quality of care in hospitals. However these factors were not investigated in the present study.

Patient waiting time in outpatient clinics is often the major reason for patients' complaints regarding their experiences in outpatient clinics. Therefore, patient satisfaction with waiting time plays a crucial role in the overall satisfaction with services. In the present study, time spent for the medical check-up programme had the lowest percentage of satisfied staff (67.8%). Satisfaction with time spent on the medical check was acknowledged by about two thirds of respondents, lower than other domains. Studies have shown that long waiting time are usually an issue in government owned hospitals (Hutchinson et al, 2011) The low level of satisfaction with waiting time may be attributed to the fact that the hospital/health care facility which is the University Health centre is not well prepared for the turnout of staff that came for the medical check. The hospital serves over twenty thousand students of the University and maybe short staffed which reduced its capability to handle the influx of patients/staff that came for the medical check-up which lead to over stretching of the personnel and facilities.

This study found that a high proportion of patients (88%) were satisfied with care provided by doctors, nurses and other health workers. Patients were particularly satisfied with their explanation and their listening abilities. Good communication between patients and care providers has been described as the single most important component of good medical practice, not only because it identifies problems quickly and clearly, but it also defines expectation and help to establish trust between the clinician and the patient (Reeder, 1972;

Wilson and McNamara, 1982). In contrast, bad communication, particularly, when the doctor appears indifferent, unsympathetic or short of time make most patients dissatisfied (Bush et al, 1993). The high level of satisfaction with providers in the present study may be attributed to the fact that respondents were staff of the University with majority with tertiary education and hence more likely to have better understanding of how the health care provider is supposed to be and what s/he is supposed to do.

### **Implication for Health Promotion and Education**

Findings from this study have health promotion and education implication and suggest the need for multiple interventions directed at tackling the phenomenon.

Awareness of the existence and health education on the importance of medical check up must be raised among staff of the University of Ibadan and other institutions. Awareness among staff can also be achieved through regular health talks at departmental level. Information, education and communication materials like posters deciphering messages on the importance of medical check up should also be employed.

Health Education is the part of health care that is concerned with promoting healthy behaviour. Health education is therefore any planned combination of learning experiences designed to predispose, enable and reinforce voluntary behaviour conducive to health in individuals, groups or communities (Durodola, 2009). Staff of the university needs to be empowered and equipped with skills to take greater control over their health and also to make informed choices about health behaviour. However, periodical seminars should be organised in order to rekindle staffs' consciousness to medical check up and also encouraging individual to adopt health behaviours which improve health.

Policy need to be developed guiding the institutionalized medical check up mandating all staff to participate in the exercise but flexibility should be put in mind in the sense that the programme should be voluntary for all staff rather than using a power coercive approach to change staffs' attitude to health. Staff should be helped to view health as a property of individual(s).



## **Conclusion**

In conclusion this study has found a relatively low degree of satisfaction with the UI medical check, and the experience of staff was pleasant. However satisfaction with waiting time was lower than for other domains. In addition respondents with higher education were less satisfied with the service.

## **Recommendations**

1. Satisfaction of teaching staff with institutionalized medical check up (IMC) is relatively low compared to other categories of staff, more in-depth studies should be carried out to find out the factors contributing to the low satisfaction with the programme which will help to improve subsequent IMCs.
2. The study showed a low use of email in disseminating information among staff of the Institution. Hence, it is therefore suggested that aside the use of internal memo, there should be increase use of email to pass information which is faster and handy.
3. Standard of healthcare should be improved upon by providing enough qualified medical personnel which can handle the turnout of the staff for the exercise also there is need to expand the details of the medical check up which can also increase participation of staff in the medical check up.
4. The overall degree of staffs' satisfaction with provider-client interaction was high. But there is low satisfaction with time spent for the medical check up programme. The study also showed that senior members of non teaching staff underwent the medical check up more than other categories of staff. Therefore, it is imperative that the review of the timing and ways of planning the programme so that it will increase the participation from different categories of staff. Also, more in-depth studies to determine the underlying factors for the pattern of utilization of University health services by staff should be carried out. These measures when adopted can enable the clinic concentrate on its core function of providing quality health care for staff.
5. The increasing awareness of the consumers of healthcare goods and services on the quality of care, therefore, should leave no room for dissatisfaction because it is dangerous to allow patients' discontent with service delivery to go unaddressed, especially in the milieu of alternative sources of care, more demanding patients' expectation, and stepped up

competition among healthcare providers in the environ. This will invariably guide the institution into position of strength for future growth.

6. This study has shown that the overall patients' satisfaction with the services provided was very good with patient-provider relationship rated highest and patient waiting time the least. There is need to sustain and improve on the current level of patient-provider relationship and patient-provider communication, while effort should be made to address patient waiting time and hospital bureaucracy.
7. The University calendar should also contain information about the schedule of the medical check up and this will help departments to prepare for such event and hence, large turnout of staff.

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## APPENDIX I

### INFORMED CONSENT

#### EXPERIENCE AND LEVEL OF SATISFACTION WITH INSTITUTIONALIZED MEDICAL CHECK UP AMONG STAFF OF COLLEGE OF MEDICINE, UNIVERSITY OF IBADAN

My name is **Odunayo Tinuade Ife-Ajayi**, a Post graduate student of Department of Health Promotion and Education, Faculty of Public health, College of Medicine, University of Ibadan. The purpose of this study is to document the experience and level of satisfaction with institutionalized Medical check-up among staff. The findings from this study will help improve on the University of Ibadan and other institutions' medical check-up programme for staff and also as input in designing educational programmes to reach out to staff of the higher institution and would also contribute in improving the standard and willingness of staff to do a regular check up. Your identity, responses and opinion will be kept strictly confidential and will be used for the purpose of this research only. Please note that you do not have to write your name on this questionnaire, your kind assistance is sought for you to answer the questions below accurately as possible to make the research a success. However, your participation is voluntary and you may request to withdraw at any time.

**Would you want to participate in the study?** Yes [  ]

No [  ]

**Date**.....

**APPENDIX II**

**QUESTIONNAIRE**

**EXPERIENCE AND LEVEL OF SATISFACTION WITH INSTITUTIONALIZED  
MEDICAL CHECK UP AMONG STAFF OF COLLEGE OF MEDICINE,  
UNIVERSITY OF IBADAN**

<b>SECTION 1: SOCIO DEMOGRAPHIC CHARACTERISTICS</b>		
<i>Please tick(√) in the appropriate column</i>		
S/N	Questions	Responses/Code
1	Respondent's Sex	1.Male [ ] 2.Female [ ]
2	How old are you (as at last birthday)	.....(years)
3	Marital status	1.Single [ ] 2.Married [ ] 3.Divorced [ ] 4.Widowed [ ] 5.Separated [ ] 6.Cohabiting [ ]
4	What is the level of education you have completed?	1. Primary education [ ] 2. Secondary education [ ] 3. Tertiary education [ ] 4. Others (Please specify).....
5	Years of employment	.....(years)



6	Department	.....
7	Cadre	<i>Academic staff</i>
		1. Professor [ ] 2. Reader [ ] 3. Senior Lecturer [ ] 4. Lecturer I [ ] 5. Lecturer II [ ] 6. Assistant Lecturer [ ]
		<i>Non-Teaching Staff</i>
	1.Senior Staff [ ] 2.Junior Staff [ ]	
8	What is your average monthly income (in Naira):	N.....
9	In general, how would you rate your health?	1.Excellent [ ] 2.Very good [ ] 3.Good [ ] 4.Fair [ ] 5.Poor [ ]
10.	Have you gone to the doctor in the past 12months even when you were well?	1. Yes [ ] 2. No [ ] 3. Don't know [ ]
11.	How often do you think a person should undergo Medical Check-up	1.Monthly [ ] 2.Every 6 months [ ] 3.Yearly [ ] 4.Every 2 years [ ] 5.I don't know [ ]

## Section 2: EXPERIENCE WITH INSTITUTIONALIZED MEDICAL CHECK-UP

*Instruction: One objective of this study is to document the experience of the University staff with the annual medical check-up programme which started in 2011. Please answer the following questions.*

Thinking about your participation in the annual medical check-up conducted by the University Health Services .....

12. Have you undergone medical check-up **before** the one mandated by the University of Ibadan?
  1. Yes [ ]
  2. No [ ] (*If No, skip to question 15*)
13. If yes, How often do you go?.....
14. When was the last medical check-up before the one mandated by the University?  
.....
15. What was the purpose?.....  
.....
16. How did you hear about the annual medical check-up mandated by the University of Ibadan?
  1. Internal Memo [ ]
  2. Seminar/conference [ ]
  3. Email [ ]
  4. Friends [ ]
  5. Colleagues [ ]
  6. Others (Please specify).....
17. Was the information about the medical check-up adequate and well understood?
  1. Yes [ ]
  2. No [ ]
18. Did you feel compelled to undergo the medical check-up?
  1. Yes [ ]
  2. No [ ]
19. How will you rate your health status **before** undergoing the medical check-up conducted by the University?
  1. Poor [ ]
  2. Fair [ ]
  3. Good [ ]
  4. Excellent [ ]
20. Did you see the need to participate in the medical check-up at that time?
  1. Yes [ ]
  2. No [ ]
21. What were your reasons for undergoing the medical check-up?
  1. To satisfy the establishment [ ]
  2. Early diagnosis and treatment [ ]
  3. Body fitness [ ]
  4. Know your health status [ ]

- 5.Others (please specify).....
22. Was the timing of the annual medical check-up convenient for you?  
 1. Yes [ ]      2.No [ ]
23. How long did it take you to complete the medical check-up? (In days).....
24. Did you consider it as a waste of time?  
 1. Yes [ ]      2.No [ ]
25. Was the medical check-up beneficial to you?  
 1. Yes [ ]      2. No [ ]
26. *If yes to Q21*, in what ways was it beneficial to you? (Please specify)  
 .....  
 .....
27. *If no to Q21*, why? .....  
 .....  
 .....
28. How long did you wait for your consultation to start? .....Minutes
29. Were you given the time and opportunity to ask questions about anything?  
 1. Yes, at every point in time [ ] 2.Yes, most of the time [ ] 3.Yes, some of the time [ ]  
 4.No, I was not given the opportunity [ ]      5.I don't know/can't remember [ ]
30. Did the Healthcare staff explain things to you in a way that you could understand?  
 1. Yes, completely [ ]    2.Yes, to some extent [ ]    3.No, they did not [ ]  
 4.I didn't need an explanation [ ]
31. Did you complete the medical check-up?  
 1. Yes [ ]    2.No [ ]
32. If No, what were your reasons?  
 .....  
 .....
33. Did you collect all your results of medical test performed?  
 1. Yes [ ]      2.No [ ]
34. Did you go back to the doctor with the results of the tests?  
 1. Yes [ ]      2.No [ ] (*If No, Skip to Q35*)

35. *If Yes to Q33*, were there any findings requiring referral or further investigation?

1. Yes [ ]      2.No [ ]

36. *If No to Q33*, what were your reasons?

.....

.....

.....

**Section 3: SATISFACTION WITH INSTITUTIONALIZED MEDICAL CHECK-UP**

*Instruction: Rate the following statements based on Satisfactory, Not Satisfactory or Not Sure. Tick as appropriate*

S/N	Statements	Satisfactory	Not satisfactory	Not sure
37.	During my visit to the health clinic, the doctors/health officers explained things in a way I could understand			
38.	The time spent for the medical check-up programme			
39.	The quality of the screening tests I did during my visit			
40.	The time spent to discuss with the doctor during consultation			
41.	The quality of courtesy I received during my visit			
42.	I received adequate answers to the questions I asked			
43.	I had enough time to discuss my medical problem with the doctors/health officers or nurse			

44. Would you prefer the medical check-up being conducted in an alternative healthcare facility? 1. Yes [ ]      2.No [ ]

45. Would you recommend that this annual medical check-up should continue?

1. Yes [ ] 2. No [ ] 3. Don't know [ ]

46. Suggest ways you think an Institutionalized Medical check-up can be improved in

University of Ibadan

i. ....

ii. ....

iii. ....

iv. ....

**Thank you for participating.**

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