

**COMPLIANCE TO OCCUPATIONAL AND PUBLIC HEALTH REQUIREMENTS  
AND ASSOCIATED FACTORS IN BARBERSHOPS AND HAIR DRESSING  
SALONS, A CASE OF KINONDONI MUNICIPALITY, DAR ES  
SALAAM, TANZANIA**

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**Master of Arts in Health Policy and Management (MA-HPM) Dissertation  
Muhimbili University of Health and Allied Sciences  
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**COMPLIANCE TO OCCUPATIONAL AND PUBLIC HEALTH  
REQUIREMENTS AND ASSOCIATED FACTORS IN BARBERSHOPS  
AND HAIR DRESSING SALONS, A CASE OF KINONDONI  
MUNICIPALITY, DAR ES SALAAM, TANZANIA**

**By**

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**A dissertation submitted in partial fulfillment of the requirements for the Degree of  
Master of Arts in Health Policy and Management of the Muhimbili University of Health  
and Allied Sciences**

**Muhimbili University of Health and Allied Sciences**

**November, 2012**

**CERTIFICATION**

The undersigned certifies that he has read and hereby recommend for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled **COMPLIANCE TO OCCUPATIONAL AND PUBLIC HEALTH REQUIREMENTS AND ASSOCIATED FACTORS IN BARBERSHOPS AND HAIR DRESSING SALONS, A CASE OF KINONDONI MUNICIPALITY**, in partial fulfillment of the requirements for the degree of Master of Arts in Health Policy and Management.

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**(Supervisor)**

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**Date**

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**I, Raphael Kyalakishaija Nshunju,** declare that this dissertation is my original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

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**DEDICATION**

This work is dedicated to my **wife Happy Paschal Luteganya** and to my daughter **Tyna** and son **Trayson**.

## ABSTRACT

Hairdressing and barbering industry is one of occupations which employ significant number of young men and women. This population can be exposed to number of occupational problems such as poor posture, joint pain, prolonged standing, long working hours, missed meals, as well as being subjected to physical injuries. These problems can be reduced if barbershops and hair dressing salons are highly complying with occupational and public health regulatory and operational requirements (OHS and PH) as stipulated in Occupational Health and Safety Acts of 2003 and the Public Health Act of 2009. However, there are disparities and relaxations in terms of compliance to the OHS and PH. This study aimed at assessing compliance to OHS & PH and associated factors in salons.

Quantitative descriptive cross-sectional study was conducted in Kinondoni Municipality in Dar es salaam, Tanzania between April and May 2012. Both structured questionnaire and observational checklist was used to gather information on compliance OHS and PH requirements. A total of 381 randomly selected respondents were selected from 288 randomly selected salons from 34 wards of Kinondoni Municipality. A maximum of 2 employees were randomly sampled in each salon particularly for those with more than two workers.

Majority of salons were found to moderately (69.1%, n=199) complying with OHS and PH requirements, and none were highly complied. Salons with adequate inspections were significantly ( $P<0.001$ ) associated with high compliance to OHS and PH requirements than those with poor inspection. Moreover, Knowledge and skills on OHS and PH requirements significantly ( $P<0.05$ ) were associated with compliance to OHS and PH requirements. Other factors such as availability of policies and regulations, law enforcement, negligence, demographic characteristics and working experience were not statistically significant associated with compliance to OHS and PH requirements. It can be recommended that Occupational Health and Safety Authority (OSHA) should adequately conduct workplace inspections and awareness program to improve compliance to OHS and PH requirement in salons.

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**ACRONYMS/ ABBREVIATIONS**

OSHA	Occupational Safety and Health Authority
PH	Public Health
OA	Occupational Asthma
OHS	Occupational Health and Safety
PHA	Public Health Act
WHO	World Health Organization
HIV	Human Immune-deficiency Virus
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus

### **OPERATIONAL DEFINITION TERMS**

**Barber:** A person who cuts men's hair and shaves or trims beards as an occupation [1]

**Barbershop** means any establishment engaged in the practice of barbering for the public [1]

**Hairdresser** refers to a person who cuts and styles hair [1]

**Hairdressing Salon** means any establishment engaged in the practice of hairdressing, cosmetology, or barbering for the public [1]

**Safety** refers to the state of being safe; freedom from the occurrence or risk of injury, danger, or loss [1]

**Occupational health** include protection and promotion of health of the workers by preventing and controlling occupational diseases and accidents as well as eliminating factors hazardous to health and safety at work [2]

**Regulatory compliance** refers to obedience by a target population with regulations

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

Public health is “The science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals” [3]. Occupational health and safety (OHS) is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment. The goal of all occupational safety and health programs is to foster a safe work environment. As a secondary effect, it may also protect co-workers, family members, employers, customers, suppliers, nearby communities, and other members of the public who are impacted by the workplace environment. Occupational health and safety field has categorized occupational hazards broadly into physical, mechanical, chemical, biological, ergonomical and psychosocial hazards [4].

Regulatory compliance refers to obedience by a target population with regulations. For the people to obey any rule, several conditions are needed. The first condition is that the target group has to be aware of the rule and understand it. For example, lack of clarity in a rule may bring about unintentional non-compliance. Second, the target group has to comply willingly. Economic incentives can motivate compliance. A strong enforcement programme can discourage noncompliant behavior. The third condition is that the target group is able to comply. For some regulations, implementation of the policy should include activities such as the provision of necessary information and other technical support. If any one of these conditions is not met, non-compliance occurs. In order to ensure regulatory compliance, policymakers should direct their quality control activities not only to the drafting and publishing of a rule, but also to ensuring that the three conditions are met [5].

Tanzania is challenged by preventable occupational health diseases, hazards and risks which are associated by unhealthy working environment and conditions. Hairdressing and barbering industry is one of the areas which are employing significant number of young men and women

and hence they are exposed to the occupational hazards commonly available in this industry. Health and safety of employee in this sector and the health of their customers (general Public) is not very well protected. The Government has developed a wide range of policies, acts, regulations and guidelines which aim at promoting and safeguarding occupational health and safety issues and public health in barber shops and hair dressing salons. But we are seeing variations, relaxations and disparities in their compliance. This results into risking employees' health and jeopardizing the health of their customer (general population). The situation is evidenced by the observations that we are witnessing the concorsion of occupational health hazards i.e. physical, mechanical, chemical, biological, ergonomical and psychosocial hazards. For example, studies have demonstrated that hand dermatitis (Irritant and Allergic contact dermatitis) and skin care problems are important occupational health issues in hairdressing. Even though exposure studies in hairdressing salons and barbershops are very few, but given the variety of chemical substances that are used, some authors have documented existence of tracer agents such as hydrogen peroxide, ammonia, volatile organic compounds (toluene, ethanol, isopropanol, ether, diaminotoluene, and phenylenediamine) and carbon dioxide.

Hairdressing employment can induce asthma and the prevalence of possible occupational asthma (OA) among hairdressers. Episodes of rhinitis or dermatitis seem to be risk factors for the development of OA in this population [6]. Hairdressers are exposed to several reactive agents with potentially irritant and sensitizing effects on the airways and on the skin. Several data from population and clinical studies show that these workers are at high risk for occupational asthma (OA). In France, according to the Observatoire National des Asthmes Professionnels data from 1996 to 1999, hairdressing represents, among patients with OA, the fourth most frequent occupation (both sexes), and the second most frequent occupation in women, accounting for 6.8% of cases [7]. Studies also reveals that skin piercing, waxing, hair dressing, electrical equipments, ultra violet tanning equipments, slip and trip hazards, space heating are occupational hazards and risks common in hairdressing salons and barber shops [8].

Hairdressers are exposed to a variety of chemical agents as a result of usage of several hair cosmetic products such as hair dyes, permanent wave solutions and bleaches [9]. Several constituents of hair care products are airway irritants and may induce respiratory conditions, including impairment of the pulmonary function and chronic bronchitis [10]. Epidemiological evidence indicates that cosmetologists, hairdressers and barbers may experience an elevated cancer risk when compared to the general population for cancers of the bladder, lungs/respiratory system, digestive organs, breast and genitals; and a possible elevated risk of leukemia [11]

It is through these threats, the government of Tanzania established policies and acts/laws to ensure among other things health and safety of the workers in hairdressing salons and barber shops and the public health in general. The Occupational health and safety act No. 5 of 2003 make provisions for the safety, health and welfare of persons at work. It also provides provisions for the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with activities of persons at work. Section 152 of The Public Health Act, 2009 clearly stipulates the prerequisites for operating the hair dressing salons, beauty salons, barber shops and the like and the authorized officers in enforcing the law. The Occupational Health and Safety Act, 2003 and Public Health Acts, of 2009 have provisions for offences and penalties for non-compliers. Despite the presence the good policies and acts clearly stipulating the operational standards and prerequisites for running/operating hair salons, still there observed disparities and relaxation in terms of compliance to these requirements. This study aimed at assessing the level of compliance to OHS and PH requirements and associated factors among salons in Dar es Salaam city, Tanzania



## **1.2 Statement of the problem**

Complying with occupational and public health requirements is the pre-requisite for workers' safety in any occupational setting. Ensuring adherence to OHS and PH requirements should be taken as an important step in order to prevent these health and safety problems. However, ongoing unsafe or unhygienic practices as observed in Tanzanian barbershops and hairdressing salons may affect the health of both the customer and the worker. For instance where procedures involve skin penetration through processes such as cutting, manicure, pedicure, and skin care if not managed properly may transmit bacterial, fungal and viral infections including HIV, Hepatitis B and Hepatitis C, not only to workers, but also to their customers [14]. According to the recommendations from the Global Strategy on Occupational health for all in 1994, it's possible to avoid and control many occupational health hazards by improving the working practices and conditions. This will be achieved when workers are aware of the hazards and apply appropriate control measures.

In Tanzania, The Occupational Health and Safety Act of 2003 and the Public Health Act of 2009 specify a number of health and safety requirements for barbershops, hairdressing and beauty salons. For example, it is the requirement that all workplaces should have safe working environments, adequate workplace inspection, personal protective equipment, OHS staff and workplace policies among many other things. But in barbershops and hairdressing salons we observed disparities and relaxations in terms of how these statutory and regulatory requirements are adhered. Although, many researchers have investigated the factors affecting Occupational Health and Safety in other areas, barbershops and hairdressing salons have not yet caught attention in Tanzania. Little is known regarding health and safety issues at barbershops and hairdressing salons in Tanzania in general. It is not known to what extent these regulations /requirements are complied. Therefore there is a need to assess and know the level of compliance to occupational and public health requirements and the associated factors in this industry. This study therefore will help to assess compliance to occupational and public health requirements and associated factors in barbershops and hairdressing salons.

### **1.3 Rationale of the study**

The study will help to determine the level of compliance to Occupational Health and Safety (OHS) and Public Health (PH) requirements and associated factors at barbershops and hairdressing salons in Kinondoni municipality. The results of this study will help to suggest appropriate solutions to improve health and safety in salons, salon workers and the general public who are the main customers in this business/Industry. The findings will also be useful to researchers, policy makers, law enforcers, Occupational Health and Safety Officials and Public health officials.

### **1.4 Research questions**

1. **To what extent are** barbershops and hairdressing salons complying **with occupational and public health requirements?**
2. What are the factors affecting compliance to **occupational and public health** requirements at barbershops and hairdressing salons?
3. What are the **workers'** knowledge regarding **occupational and public health** requirements at barbershops and hairdressing salons?
4. What is the level of law enforcement in improving compliance with **occupational and public health** requirements at barbershops and hairdressing salons?

### **1.5 Objectives**

#### **1.5.1 Broad Objective**

To assess compliance to occupational and public health requirements and associated factors in barbershops and hairdressing salons in Kinondoni municipality

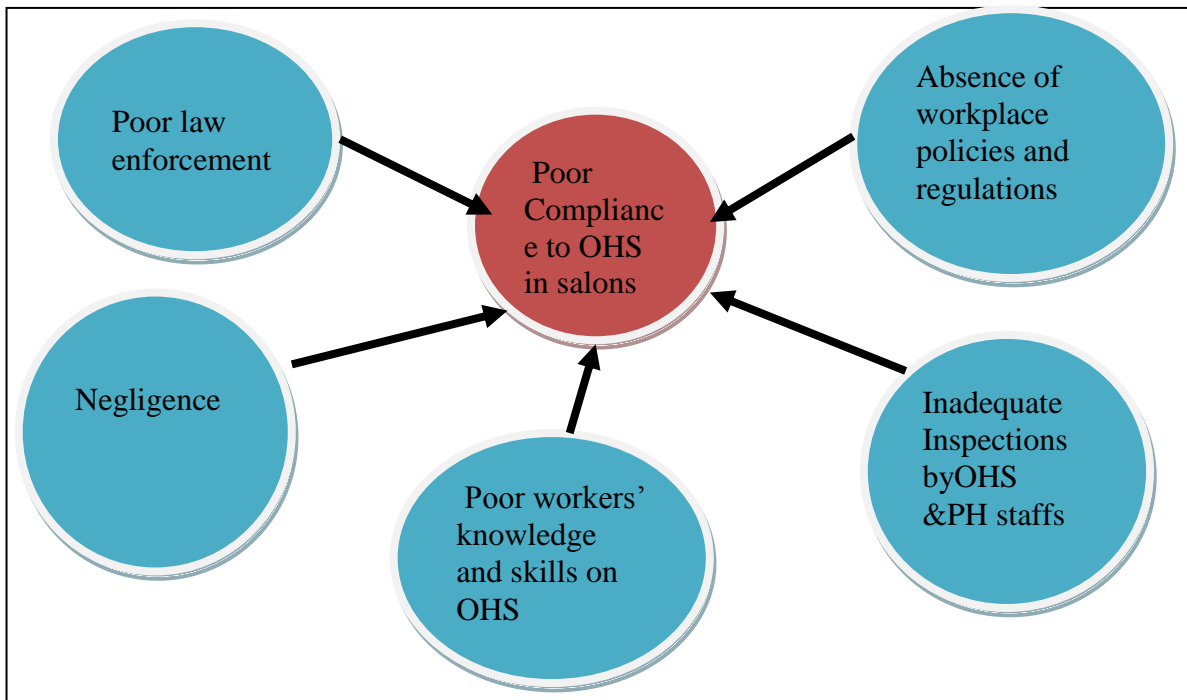
#### **1.5.2 Specific objectives**

1. To determine level of compliance with occupational and public health requirements among barbershops and hairdressing salons
2. To determine factors affecting compliance to occupational and public health requirements in salons

3. To determine level of workers' knowledge regarding occupational and Public health requirements in salons
4. To determine the level of law enforcement in improving occupational and public health requirements in salons

### 1.6. Problem Analysis Diagram

This study is built in the concept that compliance to occupational and public health requirements may be affected by a number of factors including law enforcement (whether highly or poorly enforced); negligence of workers, employees and the government; presence or absence of workplace policies and regulations; workers' knowledge on occupational and public health requirements; and adequate or inadequate workplaces' inspections. These factors may collectively or individually affect our outcome compliance variables.



**Fig.1: The conceptual framework to address well the objectives of the study**

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Literature review

#### 2.12. Exposure to OHS and PH Hazards in Salons

**Majority of hairdressers and barbers** normally work in small scale enterprises with little or no health supervision in the workplace. The hairdressers' work environment has predominantly mechanical and chemical hazards. Long working hours and poor earnings in a physically demanding job are characteristic of small scale enterprises. The regulation of work conditions in this sector continues to pose a challenge to occupational health authorities in developing countries. **One study [15] in Nigeria founded** that hairdressers complained of long working hours, poor earnings and prolonged standing. **Moreover, the study further documented that** workers were exposed to a number of occupational hazards such as needles used for fixing hair attachments (44%), hair relaxing creams (32%), blades (11%), handling hot water (4%) and electrical equipment (2%). Types of accidents reported were needle pricks, cuts, accidents involving hot water and electric shock. Joint pains (21%) and low back pain (19%) were the most frequently reported illnesses among hairdressers. Hand dermatitis was reported by 5% of hairdressers. [15].

Hairdressers are exposed to low levels of various irritating chemicals every day. The prevalence of acute symptoms related to the exposure of hairdressers to hairdressing chemicals is very high. A study to assess respiratory symptoms among hairdressers in Norway was conducted to compare hairdressers and non-hairdressers (office workers). The hairdressers reported significantly more wheezing, breathlessness, runny eyes, and blocked or runny nose from exposure to hair dyes, permanent oils, bleaching powder, and other chemicals used in a hairdressing salon, compared with the office workers [10].

#### 2.13 Knowledge and Understanding on OHS and PH Requirements

**Other study found that the level** of knowledge among barbers about health hazards associated with their profession is very poor [16]. **Majority of barbers do not have any perception of unhealthy working practices in barbering and awareness about threat of receiving hazardous infection from their customers is also unsatisfactory [16].**

There is a significant difference in the understanding of the occupational health hazards /risks associated with barbering and hair dressing among hairdressers and barbers and this might be a reason for the disparities in the quality and standards of salons and their level of compliance to health and safety and Public Health standards in Tanzania **and other** the developing countries. A study conducted in Kharian city found that 29 (58%) barbers denied about any health hazards associated with their profession whereas 21 (42%) had knowledge about hepatitis, AIDS; they also described the role of contaminated blades, clips, towels, apron, and combs in causing skin problems. It was observed that 90% of barbers did not wash hands, 80% did not change the apron, 66% did not change towel during barbering services to different customers. Besides 7 (14%) barbers were also performing minor surgeries like circumcision, in growing toe nail excision and abscess drainage. There was significant difference in level of awareness among barbers in respect of age; educational status and duration of working. Age group (15-25) had better knowledge about the health hazards than barbers in age group (26-50). There is a significant difference ( $p < 0.05$ ) in the awareness of those who got formal education [16]. A study [17] conducted among commercial barbers in Ibadan, Nigeria reveals a growing concern that barbering procedures could create opportunities for HIV transmission. However, little is known about Nigerian barbers' practices relating to the prevention of HIV. The study also assessed precautionary measures for the prevention of HIV among commercial barbers in Ibadan, Nigeria found that 98% had at-least primary school education and all of them learnt barbering through apprenticeship. The instruments used were razor blades (11.1%), manual clippers (8.9%) and electric clippers (80%). Clippers were sterilized in 10% and disinfected in 72.5%, while no decontamination was carried out in 17.5% of the sessions. Fifty two percent of the disinfections involved the use of kerosene, a disinfectant not recommended for HIV inactivation; 48.3% of the disinfectants were not in the original containers while 53.4% of the sessions involved the use of same brush for cleaning clipper and brushing hair. Hand-held flame and Ultra-violet light sterilizer were used in 50% of the sterilization process. Barbers in the high-class peripheral communities were more likely to practice appropriate equipment decontamination than those from lower-class inner-core

communities. It was concluded that the risk of transmitting HIV is high in the barbershops in the study area. Health education strategies such as training, supportive supervision and peer education are needed to facilitate the adoption of effective precautionary measures against HIV infection among barbers [17].

Strategies are needed for **raising awareness on regulations and barbers' practices**. With poor knowledge and poor enforcement of regulations compliance to occupational health and safety standards can't be achieved. Since Shaving by barbers has been identified as the key risk factor for spread of HBV and HCV, a cross sectional survey to assess knowledge, attitudes and practices of barbers to the risk of HBV and HCV transmission in Hyderabad, Pakistan and their working patterns was conducted. Observations showed that 96.2% washed razors with antiseptic after each client and 95.7% used a new blade with new clients. However, knowledge about the diseases and modes of transmission were poor and only 36.6% knew that hepatitis can be transmitted via shaving instruments. Only 3.2% of 186 barbers were vaccinated against HBV [18].

Lack of knowledge and understanding of occupational health and safety requirements among workers/employees is the challenge in implementation and compliance of the occupational health and safety guidelines, legislation and policies. A study by Sen and Osborne to assess the knowledge, attitude and practices and health and safety at work at North West Health Centre, Liverpool city UK revealed that there was a lack of knowledge and understanding of health and safety legislation in general practice surgeries. As a result, compliance with such laws was also seriously lacking. However, both knowledge and compliance could be significantly improved through information, guidance and contact with the Health and Safety Executive –HSE [19].

#### **2.14 OHS and PH regulatory Enforcement**

Lack of adequate enforcement and existence of a relaxed system to implement the existing regulation, laws and policies hinders effective performance of established regulations, laws and policies for safeguarding public health and health and safety in general. A study by Pringle and Frost, 2003 in Hong Kong, China shows that despite government concern with

occupational health and safety (OHS) and the promulgation of new laws and regulations in 2002, a lack of rigor and lax implementation are major impediments to improvements in workplace safety. The article highlighted important elements from the new work safety law on the prevention and cures of occupational diseases, and then analyzed key issues arising from bureaucratic excesses, the impact of government restructuring, continuing confusions and contradictions in government responsibility for OHS [20].

The strategy for preventing occupational disease and injury at workplaces employs several elements including setting and enforcing standards; technical assistance, research, **development and implementation of surveillance** system. Safety and Health Acts, and regulations provide for a wide array of basic public health measures to prevent occupational disease and injury at the workplaces if properly enforced. Weeks JL, 1991 stipulates the significance of having a regulatory authority in enforcing health and safety regulations, laws and guidelines. That following implementation of regulations by OSHA promulgated regulations to control exposure to vinyl chloride monomer, enforcement of the standard promoted significant efficiencies in vinyl chloride production. Similarly, when OSHA promulgated its standard regulating exposure to cotton dust, this effort provoked modernization in the cotton textile industry. It is not inevitable that occupational health and safety regulations are associated with negative economic performance. On the contrary, in some instances, public health on the job and productivity are complementary [21].

### **2.15 Availability of OHS and PH policies and laws**

Availability of the law, regulations and policies related to occupational health and safety alone cannot be the solution to improving health and safety of the workers at workplaces. This has been argued by Wong O in the public regulation of occupational exposures in China. The Author says the recent passage of the Occupational Diseases Prevention and Control Act (ODPCA) of 2002 in China and the new occupational exposure limits signify the Chinese government's commitment to improve the environment of the workplace and to eradicate preventable occupational diseases. However, the effectiveness of the ODPCA, will depend

on not only implementation and enforcement but also education and communication. Regulations can be enforced with periodic monitoring and inspections [22].

Studies have revealed that negligence among employees is one of the factors contributing towards poor compliance to occupational health and safety standards. A cross sectional survey to assess knowledge, attitudes and behaviors towards occupational risk of HIV, HBV and HCV infections were conducted in 105 out of 112 randomly selected hairdressers of Palermo-South Italy. Although the level of awareness among hairdressers about HIV, hepatitis and risk of transmission was good, there were some unsafe practices that may lead to infections due to blood-borne viruses. Therefore the survey highlights the need to improve specific health messages in media campaigns carried out to general population, diffusing more appropriate educational materials for salons and organizing obligatory refresher courses for the hairdressing sector [23].

#### **2.16 Availability of OHS and PH inspectors**

The number of existing Occupational Health and Safety inspectors is the determinant for the inspection frequency and hence compliance to the Occupational Health and Safety guidelines, laws and policies. The study conducted in Alberta, a Canadian province that employs about 1.7 million workers in over 110,000 workplaces show that in many jurisdictions, workplace inspections are used to facilitate adherence to occupational health and safety (OHS) regulations. Compliance orders issued to worksites as a result of OHS inspections are designed to reduce or eliminate risks of occupational injuries and exposure to health hazards [24]. S also studies also show that greater frequency and severity of penalties issued as a result of non compliance to health and safety regulations are associated with reduced risk of employee injuries at large US manufacturing plants [25].

In Tanzania, like other developing countries a lot of disparity in terms of compliance to occupational health and public health requirements is witnessed. While few salons seem to comply with the standards, others do not comply at all or they poorly comply with the occupational health and public health regulation despite having public health and occupational health regulations in place. For example section sections 16 and 17 of the Tanzania



Occupational Health and Safety (OHS) Act, 2003 stipulates that “Any person being the owner or occupier of a factory or workplace shall, before operating, be required to register such a factory or workplace to OSHA and before any person occupies or uses a factory or workplace or any premise, which were not so occupied or used by him, that person shall apply for registration of the premise to OSHA”. However this provision is not well implemented as observed in Tanzania barbershops and hair dressing saloons. OHS Act has also provisions for prevention of fire (section 50), health and welfare provisions (section 54), washing facilities (section 56), and first aid (section 58,) provision of protective equipment-PPE (section 62) and electrical safety (section 66). Other sections which are relevant with respect for ensuring health and safety in salons under the OHS Act are section 73 (Chemical safety provision), Section 96 (Preparation of health and safety policy) and section 95 which stipulates on the employers’ duty to raise employees’ awareness on the activities /substance/hazards/risks and health and safety associated with work in particular [26].

Section 152 of the Tanzania Public Health Act, 2009 stipulates that the authority shall ensure that an owner of a hairdressing salon, beauty salon, barbershop and the like ensure that premises used for that effect :

- a) Has sufficient water supply;
- b) Has efficient means of storage and disposal of hair, hair wigs, braids or similar things
- c) Maintains cleanliness of premises;
- d) Maintains cleanliness of instruments including towels, combs, scissors and blades;
- e) Has safety precautions regarding hair drier~ and steamers;
- f) Uses facilities which may not cause injury to the customer;
- g) Has adequate ventilation;
- h) Has adequate lighting;
- i) Has adequate sanitary provision for staff and customers;
- j) Has adequate and approved supply of antiseptics;
- k) Uses only permitted chemicals for the treatment of skin and hair;
- l) Has fire extinguishers;

- m) Maintains sterility of instruments and other utensils and materials;
- n) Has first aid facilities; and
- o) Conduct medical examination for its staff to be made after every six months

Section 153 of the same Tanzania PHA, 2009 emphasize that the authority shall regularly inspect beauty salons, barbershops and the like to ascertain for the compliance of this Act and where the authority discovers the operation of the hairdressing salon, beauty salon, barber shop and the like is in breach of the provisions of this Act, shall close that hairdressing salon, beauty salon, barber shop or the like [27].

Despite existence of these acts and their regulations, the salon industry in Tanzania is challenged with disparities in understanding and compliance to the occupational and public health requirements. While very few hair salons seem to comply with the set regulations and standards, most of the salons seem not to comply at all or poorly complying. Therefore this study aims at assessing compliance to occupational and public health requirements and associated factors in hairdressing salons and barbershops in Kinondoni municipality, Dar es Salaam

## **CHAPTER THREE: METHODOLOGY**

### **3.1 Study area**

This study was conducted in Kinondoni Municipality which is one of three Municipalities forming Dar es Salaam city in Tanzania. The Municipality covers an area of 531 km<sup>2</sup> with population of 1,088,867 people projected in 2010 with a growth rate of 4.1%. Administratively, the municipality is divided into four divisions (Magomeni, Kinondoni, Kawe and Kibamba), 34 wards and 117 sub wards. The Municipality has approximately 850 hair salons for both male and females.

### **3.2 Study design**

This was a **descriptive cross-sectional** study which was conducted study in Kinondooni Municipality, Dar es salaam, Tanzania.

### **3.3 Selection of salons**

All the 4 divisions were involved in the study as my clusters. From all the four divisions, a list of all saloons in 34 wards was obtained and randomly a selection of salons was done to randomly get the respondents. At most two salon workers were selected randomly to get the respondents. Most of salons (98, 34%) were sampled from Kinondoni division with majority of salons over all divisions, followed by Magomeni (90, 31%), Kawe (52, 18%) and Kibamba (48, 17%).

### **3.4 Study population**

Workers working in salons were considered as the study population for this study. For the salons with more than two workers, at most two workers were interviewed.

### **3.5 Inclusion criteria**

Respondents who were willing to participate and who were found to work in the sampled salons are the ones who were to participate in this study.

### 3.6. Exclusion criteria

Respondents /salon workers who refused to participate

### 3.7 Sample size estimations

Sample size was calculated from the following fomula

Where,

$$N = \frac{Z^2 P (100-P)}{E^2}$$

N = Sample size

P = Expected proportion, P = 50% for unknown proportion

E = Margin of Error=5%

Z = Level of Confidence, Z = 1.96 for 95% Confidence Interval.

$$N = \frac{1.96^2 * 50(100-50)}{5^2} \quad \mathbf{N=384 \text{ Hair dressers and Barbers}}$$

### 3.8 Variables

#### 3.8.1 Dependent variable:

Compliance to Occupational and public health requirements in salons

#### 3.8.2 Independent Variables:

1. Extent of law enforcement  
(Measured through Availability OHS policy, regulations, inspection records, OHS registration certificate, penalty records and OHS/PH inspection intervals)
2. Level adherence to OHS and PH regulations.

- (Measured use of PPE, availability of PPE, Knowledge on PH and OHS)
3. Level of workers knowledge and skills on OHS and public health issues in salons  
(Measured through correct response on OHS and PH related questions)
  4. Availability of workplace policies and regulations.  
(Observing availability of regulations, policies and Acts)
  5. OHS and PH staff inspections.  
(Measured by looking inspection reports, fines and penalty records, improvement notes and stop orders)

### **3.9 Data Collection**

To obtain necessary information, a questionnaire was prepared and used to collect desired information. The questionnaire was developed based on objectives of the study and information obtained from the literature. Collected information using questionnaire based on awareness occupational health and safety and public health requirements in salons, occupational diseases history and possible risks associated with working environment(in salons). In additional, a checklist was used as a supplement instrument for observational assessment. Information intended to be obtained from observational checklist include level of compliance to occupational and public health requirements. The tools were prepared in English and translated in Kiswahili language. Data was collected by the Principal Investigator (PI) with the help of four research assistants, and all responses were recorded in the data collection tools. Data collection was done for two weeks.

### **3.10 Recruitment and training of research assistants**

Two males and two female research assistant were recruited for data collection exercise. One day training was conducted to the research assistants. The aim of training was to orient them with the background of the study topic, objectives, research ethics and methodology used in the study.

### **3.11 Pre-testing of the tool**

The questionnaire for data collection was pretested in pilot study conducted at barbershops

and hairdressing salons in Ilala municipality and their results were not incorporated into the main study. Ilala was selected for pilot study (pretesting) because it has almost the same characteristics as that where the main study was conducted (Kinondoni municipality). The pilot study was conducted in order to help test validity of the tools to be used for data collection and Analysis. Also it was important to be conducted in order to ascertaining the prospective results of the main study. Five hairdressing salons and 5 barbershops were visited and 10 salon workers were interviewed.

### **3.12 Data collection procedure.**

The process of data collection involved 4 research assistants and the principal investigator. Data were collected from the respondents (salon workers) during working hours through interviewing the workers using structured questionnaires and through observational checklists. Workers were requested to read and sign a consent form in which the executive's liability to keep respondent's information confidential was mentioned.

### **3.13 Data management, processing and Analysis.**

Manual editing of questionnaire was done every evening after field work by the research team to minimize unexpected errors and detect any missing information and or any other abnormalities. Data were captured using SPSS statistical software version 15.0 (Statistical Package for Social Sciences). Data were cleaned for inconsistencies, incorrect values and double entries before analysis.

Analysis was done using SPSS statistical Software. Descriptive statistics (Frequencies and Percentages) were calculated to give characteristics of study variables. Cross tabulation was performed to determine relationships between dependent and independent variables in relation to compliance to Occupational health and Safety and Public Health requirements in salons. P-Value was extracted and used to interpret the significance of the statistical test. Differences between comparison groups were considered statistically significant when  $P < 0.05$ . The methodology for data analysis is clearly explained below for clarity purposes.

### **3.13.1 Construction of dummy variables and coding for analysis**

The observational checklist was used to assess compliance to occupational health and safety (OHS) and public health requirements and associated factors in barbershops and hairdressing salons. Compliance to OHS and PH requirements was assessed based on 3 criteria namely statutory requirement factors; safety requirement factors; and environmental health and sanitation conditions. Items measuring each criterion were classified as YES if they were observed available and adequate (coded 1) and if they were absent or inadequate were classified as NO (coded 0). A total of 24 required components were observed. The dichotomous items were added up to create summative index of compliance index. Compliance index were further classified into three levels namely highly complied, moderately complied and poorly complied saloons (Note that those salons having 80% of OHS requirements i.e. total score from 19-24 were classified as highly complied, 50-79% as moderately complied i.e. total score from 12 to 18, and those with below 50% requirements were classified as poorly complied i.e. scored less than 12). However, it was found that none of the salons were highly complying hence only two levels of compliance were used for bivariate and other analysis throughout the study i.e. moderately complied=1 poorly complied=0.

Level of law enforcement was assessed by using composite index of questions indicating law enforcement. These were having OSHA registration, availability of workplace policy and regulations, having Personal Protective Equipment (PPE) such as gloves, apron, goggles, ear muffs, proper liquid disposal, adequate inspection, proper solid waste disposal and having work uniform. For each item, those salons whose respondent reported their existence or applied appropriately regarded as complying (coded 1) and salons having none of those items were regarded as none-complying (coded =0). Proper liquid disposal were taken for those who disposed at sewerage system (coded 1) and others were regarded as improper disposal (coded 0). Similarly, proper solid waste disposal were taken for those who disposed solid waste into leaded container (coded 1) and the rest options in regarded as improper disposal (coded 0). Adequacy of inspection was assessed based on two questions (frequency of inspection and

type of inspector). Inspection was adequate if its frequency was either daily or weekly and the inspector was either Environmental Health Officer or Industrial hygienist (All combined and coded = 1), the remaining options were combined and regarded as inadequate inspection (coded=0). Finally, Law enforcement index was further classified into two levels namely good law enforcement (scored  $\geq 50\%$  of all indicators i.e. from 5-10 indicators) and poor law enforcement (scored  $<50\%$  of all indicators i.e. below 5 indicators).

Knowledge on Occupational Health and Safety requirements were measured using questions showing their knowledge on general health problems related to their occupation, safe work environment and factors causing poor compliance to OHS requirements. Total of 18 variables in respective questions were combined to form composite index of knowledge. In each variable, those who reported correctly were regarded as knowledgeable (recoded=1). Those who didn't mentioned those factors or answered incorrectly were regarded as unknowledgeable (recoded=0). Knowledge index were further recoded into two categories namely high knowledge (score 9 and above) and Poor knowledge (scored less than 9 items).

Other information collected and analyzed were demographic characteristics namely sex, age (19-24 and 25-38), education of respondents (primary, secondary or others), working experience ( $\leq 2$  or  $\geq 3$ ), Key responsibilities {Shaving; Facial, Cleaning & Scrubbing; hair making & Weaving, Hair Dressing (Drying and Curling) and Others (Messaging, Nailing & Decorating)}; and working hours per day ( $\leq 8$  or  $\geq 9$ ).

### **3.13.2 Statistical Analysis**

Data from the closed ended structured questions and observational checklist were entered and cleaned while the open ended questions were edited, coded, branched, entered and cleaned before analysis. The analysis was performed using SPSS version 15.0. The sample size for study respondents was 381 obtained from 288 salons. Data has been presented using frequency tables and cross-tabulation. Frequency distributions were done and the proportions were



compared using chi-square test at bivariate analysis. Furthermore, one step binary logistic regression was conducted using compliance to OHS Requirements as dependent variable while independent variable (predicators) were age group, sex, education, inspection, law enforcement, working experience, negligence, knowledge on OHS issues (composite index), knowledge and skills among workers (stated), availability of policies and regulations, and OHS staff. Odds ratios (OR), degree of freedom (df) and their correspondence 95% confidence intervals (CI) were computed. Significance level were compared at both  $P < 0.05$  and  $P < 0.001$ .

### **3.14 Ethical Consideration**

The approval to conduct this study was sought and granted by the Directorate of research and Publication committee of Muhimbili University of Health and Allied Sciences (MUHAS). Permission to conduct the study was obtained from Municipal Director Kinondoni Municipality through the Kinondoni Municipal Medical Officer for Health. The respondents' consent were sought and obtained voluntarily after the aims and objectives of the study had clearly been explained to them.

### **3.15 Plan for dissemination and Utilization of Information**

The results of this study will be disseminated to the researchers, in the academic forum and ethics committee members, Ministry of Health and Social welfare (MOHSW), Occupational Safety and Health Authority-OSHA, Kinondoni Municipal Council, workshops and Scientific conferences. Recommendations will also be available to MUHAS library. Recommendations relevant to party will be addressed. Efforts to attain publication in journals will be done.

## CHAPTER FOUR: RESULTS

### 4.1 Demographic characteristics of respondents

A total of 381 workers participated in the study whereby 36.3% (n=138) were males and 63.8%, (n=243) were females. The mean age of respondents was  $25.7 \pm 3.5$  years. Majority of workers were within the age group of 19-24 (53.8%, n=205). Sampled salons have the minimum and maximum number of workers of 1 and 8 respectively with an average of  $2.9 \pm 1.1$  and majority of them (96.1%, n=361) works over 8hrs per day. Most of respondents have sufficient experience on salon job i.e. have worked over 2 years in salon (*Table 1*).

**Table 1: Demographic characteristics of respondents (N=381)**

Characteristics	Frequency (n)	Percentage (%)	
Sex	Male	138	36.2
	Female	243	63.8
Age group	19-24	176	46.2
	25-38	205	53.8
Education Level	Primary	220	57.7
	Secondary	156	40.9
	Others	5	1.3
Working Experience	$\leq 2$	112	29.4
	$\geq 3$	269	70.6
Key responsibilities*	Shaving	112	29.4
	Facial, Cleaning and Scrubbing	109	28.6
	Hair making and Weaving	226	59.3
	Hair Dressing (Drying and Curling)	96	25.2
	Others (Messaging, Nailing & Decorating)	47	25.2
	Working hours per day	$\leq 8$	15
	$\geq 9$	366	96.1

**\*Multiple Response Option**

## 4.2 Compliance with OHS and PH requirements

Overall, majority of salons found to be moderately (69.1%, n=199) complying with OHS and PH requirements, few were poorly complying (30.9%, n=89) and none were found to be highly complying. (Note: those salons having 80% of OHS and PH requirements were classified as highly complying, 50-79% as moderately complying and those with below 50% were classified as poorly complying). It has been observed that majority of salons found to comply mostly with Environmental Health and Sanitation factors (76.3%) followed by Health and Safety Issues (69.0%) and lastly by Statutory factors (37.9%) which largely contribute to poor compliances to OHS and PH requirements (*Table 2*)

**Table 2: Compliance with OHS and PH requirements (N=288)**

No	Compliance Factor	Frequency (n)	Percentage (%)
<b>Statutory requirements</b>			
1	OSHA premises registration certificate	281	97.6
2	Occupational health and safety compliance license	63	21.9
3	Valid business license	288	100
4	Accident and incident records	14	4.9
5	Occupational health inspection report	0	0
6	Medical checkup and records for employees	117	40.6
7	Risk assessment records	0	0
<b>Safety requirements</b>			
1	First Aid Kit with necessary facilities	52	18.1
2	Fire fighting equipment	36	12.5
3	Emergency exit provided	173	60.1
4	Warning sign	210	72.9
5	Proper electrical systems	288	100
6	Equipment properly sterilized?	263	91.3
7	Containers with hazardous substances properly labeled	288	100
8	Material safety data sheet for handling chemicals	280	97.2
<b>Environmental Health and Sanitation</b>			
1	Cleaning systems adequate to reduce slipping and tripping	279	96.9

	hazards when washing hair, spraying oil-based spray or mopping		
2	Work floor areas tidy and free from obstruction	287	99.7
3	Regularly inspect chair conditions, booster seat anchor bolts and safety straps	287	99.7
4	Smocks and towels provided to protect clothing and skin for all services	288	100
5	Adequate ventilation provided to remove mists or sprays that may be harmful	288	100
6	Dryers guarded with an automatic cut-off switch to prevent overheating	214	74.3
7	Working room of adequate size	242	84.0
8	Storage arrangements adequate to control any risk from individual substances and to prevent risk of contamination by or with any other substances	72	25
9	Specific risks in movement, posture and layout involved in manual handling tasks. E.g. bending, twisting or awkward postures for frequent or prolonged periods	20	6.9

**NOTE:** There were 24 Compliance factors (table 2) which were assessed to determine the level of compliance to OHS and PH requirements .The table below summarizes the methodology used in measuring compliance to OHS and PH requirements in salons. It shows compliance level with its compliance factor score point range, with its related compliance percentage.

Compliance level	Compliance factor Score range	Percentage of compliance
Highly Complying	19-24	80%-100%
Moderately Complying	12-18	50%-79%
Poorly Complying	0-11	<50%

### 4.3 Law Enforcement

Indicator of law enforcement showed to be poor (82.2%, n=313). This is largely contributed by poor status of implementing necessary OHS and PH legal requirements including; Inadequate workplace inspection (92.7%, n=353), not registered by OSHA (70.1%, 267), No workplace policy (78.2%, 298), Lack of essential Personal Protective Equipment PPE), No uniform (85.8%, n=327), and poor waste disposal (*Table 3*).

**Table 3: Proportions of Law enforcement indicators (N=381)**

No	Indicator	Frequency (n)	Percentage (%)
1	OSHA registration	114	29.9
2	Availability of workplace policy	83	21.8
3	Gloves	321	84.3
4	Apron	347	91.1
5	Goggles	41	10.8
6	Ear muffles	16	4.2
7	Uniform	54	14.2
8	Adequate inspection	28	7.3
9	Proper solid waste disposal	129	33.9
10	Proper liquid disposal	72	18.9

### 4.4 History of work related health problems

More than half of the respondents (66.2%, n=253) reported that they have at least encountered some health problems related to their work. Large proportions reported respiratory infections (44.2%, n=168), chest pain (41.7%, 159) and Back pain (34.4%, n=131). However, majority (52.0%, n=227) of them sought medical care (*Table 4*).

**Table 4: Proportions of work-related health outcomes and action taken (N=381)**

No	Indicator	Frequency (n)	Percentage (%)
<b>Stated work related health problem experienced in the past</b>			
1	Any Health Problem related to work	253	66.4
2	Skin dermatitis	14	3.7
3	Other body dermatitis	54	14.2
4	Respiratory infections	168	44.1
5	Chest pain	159	41.7
6	Back pain	131	34.4
7	Accident at work	95	24.9
8	Injury at work	3	0.8
<b>Action taken</b>			
1	Self-care	131	35.8
2	Seek medical care	227	52.0
3	Others	8	2.2

#### 4.5 Knowledgeable on OHS and PH issues

Overall, majority of salon workers (82.4%, n=314) have poor knowledge on occupational and health issues. They mostly don't know factors causing poor compliance to OHS requirements (average scored 37.7%). Their knowledge regarding characteristics of safe working environment and work related health outcomes are also still low, i.e. average score of 42.0% and 46.7% respectively (*Table 5*).

**Table 5: Knowledge on OHS and PH Issues (N=381)**

No	Indicator	Frequency (n)	Percentage (%)
<b>Knowledge on General Safety and Health Outcomes</b>			
1	Perceived workplace safety	324	82.4
2	Dermatitis	14	24.7
3	Back pain	330	86.6
4	Respiratory infections	206	54.1
5	Physical injuries	101	26.5
6	Infectious diseases	159	41.7
7	Cancer	41	10.8
<b>Knowledge on safe work environment</b>			
1	Adequate ventilation	234	52.8
2	Adequate lightning	242	63.5
3	Personal Protective Equipment (PPE)	201	52.8
4	Sterilizer	121	31.8
5	Waste bin	137	36.0
6	Smooth floor	58	15.3
<b>Knowledge on factors causing poor compliance to OHS requirement</b>			
1	Poor law enforcement	80	21.0
2	Absence of workplace policy and regulations	92	24.1
3	Poor knowledge and skills among workers	249	65.4
4	Inadequate occupational health and safety staff	181	47.5
5	Negligence	117	30.7

#### **4.6 Bivariate analysis of factors affecting compliance to OHS and PH requirements**

Bivariate associations using chi-square test indicated significant ( $p=0.000$ ) higher proportions in salons with adequate inspection (72.8%,  $n=257$ ) moderately comply with OHS requirements as compared to those salons with poor inspection status (19.6%,  $n=10$ ). Other variables such demographic characteristics, working experience, law enforcement, knowledge, availability of policies and regulations, availability of OHS staff and negligence were found

not statistically significant associated with salons' compliance to OHS and PH requirements (*Table 6*).

**Table 6: Factors affecting compliance to OHS and PH requirements**

Predicator Factor		Total No. of response	Salons moderately complied, n (%)	Significance
Age	19-24	176	125 (71.0)	P=0.71
	25-38	205	142 (69.3)	
Sex	Female	243	168 (69.1)	p=0.59
	Male	138	99 (71.7)	
Education	Primary	220	159 (72.3)	p=0.36
	Secondary	156	106 (67.9)	
Working experience	Low ( $\leq 2$ years)	112	78 (69.6)	p=0.90
	High ( $\geq 3$ years)	269	189 (70.3)	
Law enforcement	Poor	313	222 (70.9)	p=0.44
	Good	68	45 (66.2)	
Knowledge	Poor	314	221 (70.4)	P=0.78
	High	67	46 (68.7)	
OHS inspection	Adequate	353	257 (72.8)	p=0.000
	Poor (inadequate)	28	10 (19.6)	
Availability of policies and regulations	No	289	205 (70.9)	p=0.53
	Yes	92	62 (64.5)	
OHS staff	Inadequate	200	138 (69.0)	p=0.63
	Adequate	181	129 (71.3)	
Negligence	No	264	188 (71.)	p=0.46
	Yes	117	79 (67.5)	

**Note: Statistically significant= $p < 0.05$ ,**



#### 4.7 Predictors of compliance to OHS and PH requirements by Binary logistic regressions

Binary logistic regression model was used to test the predictors of compliance to OHS and PH requirements. It was found that adequate inspection significantly ( $p < 0.001$ ) highly predict the salon's compliance to OHS and PH requirements. Other factor which significantly ( $p < 0.05$ ) predicted the compliance to OHS requirements included stated knowledge and skills on OHS and PH requirements (*Table 7*). However availability of policies and regulations, demographic characteristics, law enforcement, working experience and availability of OHS staff didn't predict the compliance to OHS and PH requirements.

**Table 7: Predictors of compliance to OHS requirements (N=381)**

S/No.	Predictors	OR	df	Significance	95.0% C.I	
					Lower	Upper
1	Age group	0.800	1	0.367	0.492	1.299
2	Sex	1.175	1	0.521	0.718	1.922
3	Education	0.817	1	0.400	0.511	1.307
4	Inspection	0.144	1	0.000**	0.061	0.343
5	Law enforcement	1.046	1	0.888	0.555	1.972
6	Working experience	1.045	1	0.871	0.612	1.785
7	Negligence	0.517	1	0.107	0.231	1.154
8	Knowledge on OHS issues (computed)	0.447	1	0.101	0.171	1.170
9	Knowledge and skills among workers (stated)	2.667	1	0.003*	1.406	5.059
10	Availability of policies and regulations	1.139	1	0.721	1.557	2.329
11	OHS staff	2.123	1	0.38	0.043	4.321

**Note: \*\*Highly statistically significant= $p < 0.001$ , \*statistically significant= $p < 0.05$ ,**

## **CHAPTER FIVE: DISCUSSION**

### **5.1 Demographic characteristics**

This study involved 381 hair salon workers in 288 salons sampled in Kinondoni municipality. The study indicates that, more participant respondents were females 63.8% and few were males 36.3%. This shows that study sample is skewed, because it was most likely to find more female salon workers in salons surveyed. The mean age of participants was  $25.7 \pm 3.5$  years. Majority of the workers were within the age group of 19-24 (53.8%, n=205). Sampled saloons have the minimum and maximum number of workers of 1 and 8 respectively with an average of  $2.9 \pm 1.1$  and majority of them (96.1%, n=361) works over 8hrs per day. Most of respondents have sufficient experience on salon job i.e. have worked over 2 years in salon

### **5.2 Barbershops and hairdressing salons complying with OHS and PH requirement**

Overall, majority of salons were moderately (69.1%) complying with OHS and PH requirements, few were poorly complying (30.9%) and none found to be highly complying. It has been observed that majority of salons complied mostly with Environmental Health and Sanitation factors (76.3%). Environmental health and Sanitation factors analyzed include cleaning system, work floor condition, chair regulation and condition, availability and maintenance of smocks and towels, ventilation, dryers condition, room size, room arrangement, working posture and manual handling tasks. This was followed by Health and Safety factors/Issues (69.0%) which analyzed issues like availability of first aid kit, availability of firefighting equipment, provision of emergency exit, availability of warning signs, electrical installation condition, equipment sterilization, labeling of hazardous materials and availability of material datasheets (MSDS) for chemical handling. and lastly the Statutory requirements factors (37.9%), which include factors like availability of OSHA registration certificate, availability of OSHA compliance license, availability of valid business license, availability of accident and incident record, availability of OHS and EH inspection report, availability of medical checkup records for salon workers and risk assessment records, the

factors which largely contribute to poor compliances to OHS and PH requirements. From the results it can be observed that salons complied differently with three elements of OHA and PH requirements (statutory requirements, safety requirements and environmental health and sanitation requirements). Poorest compliance to statutory requirements means that most saloons are opened without following applicable law and regulations. The reasons behind can be caused by inadequate initial follow-up before opening new saloons or during follow-up procedures or escaping of owners in adherence to appropriate statutory requirement. For example it was observed that none of the salons has either occupational health inspection report or risk assessment records. It seems that inspectors don't give inspection reports or never inspect at all. Other main issue of concern was that only 18.1% of salons have first aid kit with necessary facilities as the safety requirement, the others don't comply with this requirement.

### **5.3 Law enforcement and compliance with OHS and PH requirements**

Overall, computed indicators of law enforcement indicate that the level of law enforcement is still low (48.7%). This is largely contributed by poor status of implementing necessary OHS and PH legal requirements including inadequate workplace inspection (92.7%), salons not registered by Occupational Safety and Health Authority-OSHA (70.1%), No workplace Policy in salons (78.2%), Lack of essential Personal Protective Equipments (PPE), No uniforms (85.8%) and Poor waste disposal. This may have contributed to the observed moderately compliance to OHS and PH requirements. This study has shown that there is no statistically significant association between law enforcement and OHS and PH compliance ( $P=0.60$ ). But bivariate associations using chi-square test indicate significant ( $p=0.000$ ) higher proportion in salons with adequate inspections (72%,  $n=557$ ) moderately complying with OHS and PH requirements as compared to those salons with poor inspection status (19.6,  $n=10$ ). This imply that saloon which have undergo adequate workplace inspection are more likely to comply with OHS and PH requirements that those with poor inspection. This is very critical observation as it has been argue argued that during inspection enforcing authorities may offer duty holders

information and advice, both face to face and in writing. They may warn a duty holder that in their opinion, they are failing to comply with the law. Where appropriate, they may also serve improvement and prohibition notices, withdraw approvals, vary license conditions or exemptions, issue formal cautions, and they may prosecute or report to the Procurator [28].

#### **5.4 Workers' knowledge and compliance to OHS and PH requirements**

Overall, majority of salon workers (82.4%, n=314) were found to have poor knowledge on OHS and PH issues. They mostly do not know factors causing poor compliance to OH and PH requirements (average score 37.7%). Their knowledge regarding characteristics of safe working environment and work related outcomes are also till low, i.e. average score of 42.0% and 46.7% respectively. Through bivariate analysis of workers knowledge on OHS and PH found not to be associated with compliance to OHS and PH requirements. But through one step binary logistic regression, workers knowledge on OHS and PH requirements significantly predicted the compliance i.e. On binary logistic regression the distribution of salons which found moderately to comply with OHS and PH requirements are more likely to have more knowledge and skills OHS issues that those among salons with poorly knowledgeable workers (P=0.003). It may be due to the reason that they may properly advice their employers on the necessary issue to comply with or they are more likely to implement those issues which are within their power of execution without consulting their employers. However, this finding is contrary to the study conducted in USA to assess knowledge, hygiene behavior and risk of blood borne infections in the selected staff of beauty parlous and hairdressing salons, where it was found that poor knowledge and negligence in obeying some rules of work hygiene were found in the surveyed group of workers; at the same time most of the parlors and salons met legal requirements concerning sanitation and equipment hygiene [29]. This contradiction may be caused by the fact that majority of main requirements for salons found in developing countries are mostly controlled by salon workers themselves but in developed world like USA most requirements are controlled by owners/employers regardless of knowledge of the workers.

### **5.5 Availability of OHS and PH policies and regulations and compliance to OHS**

By comparing the distribution of salons which moderately found to be complying with OHS and PH requirements between salons which found to have PH and OHS policies and regulations, this study discovered that there is no association. The observed difference is not statistically significant ( $P=0.53$ ). These findings are contrary to the study conducted in USA to evaluate the effect of four common types of mandatory state-level workplace safety regulations on injury severity rates during the period 1992 to 1997 for the manufacturing sector. The full Poisson regression model showed safety committee regulations to have a highly significant reducing effect on injury rates,  $\chi^2(1, n = 3286) = 10.1774, P = 0.0014$ . Safety program regulations were significant at the  $\alpha = 0.10$  level,  $\chi^2(1, n = 3286) = 3.5676, P = 0.0589$  [30]. This means that in most salons of developed countries there are safety committees which normally ensure the availability of OHS and PH policies and regulation at workplace. But in developing countries like Tanzania none of the salons have safety committees which make it difficult to make follow-up on availability of applicable policies and regulations.

### **5.6 Inspections and compliance to OHS and PH requirements**

Through bivariate associations using chi-square test indicated significant ( $p=0.000$ ) higher proportions in salons with adequate inspection (72.8%,  $n=257$ ) moderately complying with OHS and PH requirements as compared to those salons with poor inspection status (19.6%,  $n=10$ ). Other variables such as demographic characteristics, working experience, law enforcement, knowledge, availability of policies and regulations, availability of OHS staff and negligence were found not statistically significant associated with salons' compliance to OHS and PH requirements. Moreover binary logistic regressions model used to test the predictors of compliance to OHS and PH requirements was also found that adequate inspection significantly ( $p<0.001$ ) highly predict the salon's compliance to OHS and PH requirements. Other factors which significantly ( $p<0.05$ ) predicted the compliance to OHS requirements included workers knowledge on OHS and PH requirements. This implies that OHS and PH inspections are highly associated with compliance to OHS and PH requirements. These results are consistent

with the findings from USA when tried to assess how randomized government safety inspections can reduce workers injuries with no detectable job loss, by assessing how workplace safety inspections affected injury rates and other outcomes. By comparing randomly inspected establishments as compared with controls (not inspected), randomly inspected employers experienced a 9.4% decline in injury rates (95% confidence interval = -0.177 to -0.021) and a 26% reduction in injury cost (95% confidence interval = -0.513 to -0.083) [31]. The findings imply that adequate inspection is the critical process in making salons to comply with OHS and PH requirements. For this study adequate inspections means a combination two variables namely Inspection frequency of daily or weekly inspection frequency and inspector be Environmental Health Officer/Industrial Hygienist.

## CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

### 6.1 Conclusion

Based on the study objectives which were to assess compliance to OHS and PH requirements and associated factors in salons (barbershops and hairdressing) in Kinondoni municipality, the following are major conclusions;

1. Majority of salons are moderately complied with OHS and PH requirements and none are highly complied
2. Workers have poor knowledge on OHS and PH issues particularly on general safety, health outcomes non-complying with OHS and PH requirements, safe working environment and knowledge on factors causing poor compliance with OHS and PH requirements
3. There is poor law enforcement in the salons and this may have contributed to the observed moderate and poor compliance to OHS and PH requirement.
4. The study also show that age, sex, education, working experience, law enforcement, availability of policies and regulations and negligence are not significantly associated with compliance to occupational health and Safety and Public health requirement
5. Adequate Inspections are highly significantly associated with compliance to OHS and PH requirements by both bivariate and binary logistic regression analysis
6. Workers' knowledge on OHS issues are significantly associated with compliance to OHS and PH requirements

### 6.2 Recommendations

The government through its ministries (Ministry of Health and Social Welfare) and Ministry of Work and employment through its agency (Occupational Safety and Health Authority – OSHA has developed policies, Acts and operational guidelines to ensure health and safety of the workers in salons and other workplaces and public health general. We are still witnessing relaxation poor compliance to laws, regulations and regulation are concerned. Therefore, from this study the following recommendations can be drawn;

1. Integrated enforcement should be done between the two ministries in collaboration with the local government (particularly using adequate inspection process) in order to highly enforce Occupational Health and Safety Act, so that worker protection can gain higher priority among employers and health officials. This is also supported by Cashman *et. al.*, [32].
2. The ministry of health and social welfare and the Ministry of Labor and employment through Occupational Safety and Health Authority-OSHA in collaboration with Local government should ensure that workers in the salon industry are trained on Occupational Health and Safety so that they understand the hazards they are exposed to, potential risks and protection measures.
3. The ministry of Health and Social Welfare through local governments in collaboration with the Ministry of Labour and Employment through Occupational Safety and Health Authority –OSHA should strengthen inspections in the salon Industry as it has consistently proven to be highly associated with compliance to OHS and PH requirements.
4. The ministry of health and social welfare in collaboration with the Ministry of Labor and Employment through Occupational Safety and Health Authority should revise guidelines, polices, and code of conduct on OHS and PH inspection and safety committee to ensure inclusion of standard definition of adequate inspection and functions for safety committees.



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## APPENDICES

### Appendix 1: Questionnaire (English Version)

Questionnaire Number.....

Date of interview.....

**(a) Background information:**

1. Business name (Name of Salon).....

2. Total number of workers in a salon.....

3. Sex of worker;

1. Male

2. Female.

4. Age of worker (in years) .....

5. Education Level:

1. No formal education at all

2. Primary education

3. Secondary education

4. Degree level

5. Masters level

6. PhD level

6. For how long have you worked in this occupation?

1. Less than one year (Specify if possible)

2. One year to 2 years

3. 3 -5 years

4. More than five years

7. What are your key responsibility in this salon? (Job task).....

8. For how long in hours are you working per day? .....

9. Are you smoking?

1. YES

2. NO

**(b)Worker's, knowledge,**

10. Have you received any training regarding occupational health and safety at workplaces?

1. YES
2. NO

11. If YES, where.....and who trained you? .....

12. Do you think your working environment is safe for your health

- 1.YES
- 2.NO

13. What do you think are the health hazards/riks related to your work?

- 1.Dermatitis
2. Back pain/injury
- 3.Respiratory infections
- 4.Physical injuries
- 5.Infectious diseases
6. Saratani
7. Other.....

14. What do you think are the occupational health and safety requirements in salons?

1. Adequate ventilation
2. Adequate Lighting
3. Personal protective equipments
4. Sterilizer
5. Waste bin
6. Smooth floor
7. Other mention

15. What are the factors for poor compliance to occupational health and safety in your salón?

1. Poor law enforcement

2. Absence of workplace policies and regulations
3. Poor knowledge and skills among workers.
4. Inadequate occupational health and safety staffs.
5. Negligence
6. Others (mention).....

16. Where do you store your solid wastes?

1. Leaded container
2. Open container
3. Haphazardly.

17. Where do you dispose your solid wastes?

1. Home pit
2. Municipal container
3. Burning
4. Burying
5. Haphazardly

18. Where do you dispose liquid wastes?

1. Sewerage system
2. Pit
3. Haphazardly

**© Laws enforcement:**

19. Is this salon registered under occupational health and safety Authority-OSHA?

1. YES
2. NO

20. Do you have any workplace policy in your salon?

1. YES
2. NO

21. If YES what is it all about? .....(see evidence).

22. Do you have personal protective equipments?

- 1. YES
- 2. NO

23. If YES, what are they?.....(see evidence).

24. Do you have specific uniform for your work?

- 1. YES
- 2. NO

25. If YES how many pairs?.....

26. Do you know any law regarding Occupational Health and safety in your salon? YES/NO.

27. If YES mention?.....

28. How often is an Occupational Health and Safety inspector come to your salon?

- 1. Daily
- 2. Weekly
- 3. Monthly
- 4. Yearly
- 5. Never

29. Who are the main inspectors?

- 1. Environmental Health Officers
- 2. Industrial hygienists.
- 3. City security officer
- 4. Others (mention).....

**(d) Occupational Health History:**

30. Have you experienced health problem(s) which you think is/are related to your work?

- 1. YES
- 2. NO.



31. If YES what health problems?

1. Skin dermatitis
2. Dermatitis on other parts of the body.
3. Respiratory infections
4. Chest pain
5. Back pain
6. Others (mention) .....

32. What did you do to solve the problem?

1. Self care
2. Seek medical care
3. Stop working
4. Other (mention) .....

33. Have you experienced any accident at your workplace?

1. YES
2. NO

34. If YES mention?

1. Injury (What type?)
2. Hazardous chemical exposure
3. Fire accident
4. Others (mention) .....

35. What did you do to control the problem?

.....

**THANK YOU VERY MUCH FOR YOUR PARTICIPATION.**

## Appendix 2 .Questionnaire (Kiswahili Version)

Nambari ya Dodoso.....

Tarehe ya usaili.....

### **(a)Maelezo ya awali(Background information):**

- 1 . Jina la saluni au Biashara.....
2. Jumla ya idadi ya wafanyakazi.....
3. Jinsia ya Mfanyakazi
  1. Kiume
  2. Kike
4. Umri wa mfanyakazi (Katika Miaka) .....
5. Elimu ya mfanyakazi;
  1. Sijasoma kabisa
  2. Elimu ya msingi
  3. Elimu ya Sekondari
  4. Shahada ya kwanza
  5. Shahada ya pili
  6. Shahada ya tatu (PhD)
6. Umefanya kazi kwa muda gani katika fani hii?
  1. Chini ya mwaka mmoja (Taja muda)
  2. Mwaka mmoja hadi miaka miwili
  3. Miaka mitatu-miaka mitano
  4. Miaka mitano kwenda juu.
7. Taja shughuli yako kuu katika saluni hii? (Job task).....
8. Unafanyakazi kwa muda gani kwa siku (Masaa)? .....
9. Je, unavuta sigara?
  1. Ndiyo
  2. Hapana

**(b) Uelewa wa mfanyakazi**

10. Je, umepata mafunzo yoyote kuhusu afya na usalama mahali pa kazi?

1. Ndiyo
2. Hapana

11. Kama ndiyo, taja mahali ulipopata mafunzo hayo.....na yalitolewa na nani?.....

12. Unadhani unafanya kazi katika mazingira salama kiafya?

1. Ndiyo
2. Hapana

13. Unadhani ni madhara gani kiafya unayoweza kupata kutokana na kazi kama yako?

1. Magonjwa ya ngozi
2. Maumiu ya mgongo
3. Magonjwa /Matatizo ya mfumo wa hewa
4. Maumivu ya ya mwili
5. Magonjwa ya kuambkiza(VVU/Ukimwi,homa ya ini)
6. Saratani
7. Nyingine .....

14.Taja matakwa au masharti ya afya na usalama mahali pa kazi katika saluni yako?

1. Mzunguko wa hewa wa kutosha
2. Mwanga wa kutosha
3. Vifaa vya kujikinga
4. Kifaa cha kutakasa/kusafishia vyombi/mashine(sterilizer)
5. Kifaa cha taka
6. Sakafi imara
7. Nyingine taja.....

15. Taja sababu zinazochangia wafanyakazi kutotekeleza masharti ya afya na usalama mahali pa kazi katika saluni?

1. Udhaifu katika usimamizi wa sheria
2. Kukosekana kwa será na miongozo katika saluni.
3. Uelewa mdogo na ukosefu wa ujuzi vaina ya wafanyakazi wa saluni.
4. Upungufu wa wataalam wa afya na usalama mahali pa kazi.
5. Kupuuzia (Negligence)
6. Sababu nyinginezo (Taja).....

16. Unahifadhi wapi taka ngumu?

1. Katika kifaa maalum chenye mfuniko
2. Katika kifaa maalum kilicho wazi
3. Sina kifaa maalum

17. Unatupa wapi taka ngumu?

1. Katika shimo lililo wazi
2. Container la Manispaa
3. Kuchoma
4. Kufukia shimoni
5. Kutupa ovyo

18. Unatupa wapi taka za majimaji/Uchafu kimiminika(Liquid waste)?

1. Katika mfumo wa maji taka(sewerage system)
2. Kwenye shimo
3. Kumwaga ovyo

**© Usimamizi wa Sheria (Law enforcement):**

19. Je saluni hii imesajiliwa na mamlaka ya afya na usalama mahala pa kazi?

1. Ndiyo
2. Hapana

20. Je, una sera yoyote ya afya na usalama mahali pa kazi katika saluni yako?

1. Ndiyo
2. Hapana

21. Kama ndiyo, inahusu nini? .....(Tazama ushahidi).

22. Je, una vifaa vya kujikinga na madhara ya kiafya katika saluni yako?

1. Ndiyo
2. Hapana

23. Kama vipo, taja? .....(Angalia ushahidi).

24. Je, una sare maalum za kazi katika saluni yako?

1. Ndiyo
2. Hapana.

25. Kama ndiyo kuna jozi (Pair)

ngapi?.....

26. Je, unaifahamu sheria yoyote inayohusu afya na usalma mahali pa kazi katika saluni?

1. Ndiyo
2. Hapana.

27. Kama jibu ndiyo, taja sheria hiyo au

hizo?.....

28. Je, mtaalam wa afya na usalama mahali pa kazi huja marangapi kwa ajili ya ukaguzi?

1. Daily
2. Kila baada ya wiki
3. Kila baada ya mwezi
4. Kila baada ya mwaka mmoja
5. Hajawahi fika kwa ukaguzi

29. Je, ni wataalam gani huja kwa ajili ya ukaguzi katika saluni yako?

1. Maafisa Afya Mazingira.
2. Wakaguzi wa maeneo ya kazi au viwanda (Industrial hygienists)
3. Askari Mgambo wa Manispaa
4. Wengineo (Taja).....

**(d) Historia au taarifa za afya na usalama mahali pa kazi (Occupational Health and safety History:**

30. Je, kwa uzoefu wako umewahi kupata matatizo yoyote ya kiafya katika saluni yanayohusiana na kazi yako?

1. Ndiyo
2. Hapana

31. Kama ndiyo, taja matatizo hayo?

1. Vipele au kuwashwa katika mkono (Hand dermatitis)
2. Vipele au kuwashwa katika maeneo mengine ya mwili (Dermatitis on other parts of the body)
3. Matatizo katika mfumo wa upumuaji (Respiratory infections)
4. Maumivi ya kifua (Chest pain)
5. Maumivu ya mgongo (Back pain)
6. Matatizo mengineyo taja.....

32. Je, ulifanyaje kutatua matatizo hayo ya kiafya?

1. Nilijitibu mwenyewe (Self care)
2. (Nilienda katika kituo cha kutolea huduma za afya (Seek medical care)
3. Niliacha kufanya kazi (Stop working)
4. Njia nyinginezo (Taja).....

33. Je, umewahipata ajali yoyote katika saluni yako?

1. Ndiyo
2. Hapana

34. Kama ndiyo, taja?

1. Kuumia (Injury) Taja aina ya kuumia
2. Kumwagikiwa na kemikali hatari (Exposed to Hazardous chemicals)

3. Ajali ya moto

4. Ajali nyingineyo (Taja).....

35. Je, ulifanyaje kudhibiti ajali hiyo?

.....

**ASANTE KWA USHIRIKI WAKO**

**Appendix 3: Observational Checklist (English Version)**

No	ITEM	1.YES	2. NO
	<b>RECORDS</b>		
36.	Is there OSHA premises registration certificate?		
37.	Is there any occupational health and safety compliance license?		
38.	Is there any valid business license?		
39.	Any availability of accident and incident records?		
40.	Availability of occupational health inspection reports?		
41.	Availability of medical checkup and records for employees?		
42.	Availability of risk assessment records?		
	<b>HEALTH AND SAFETY</b>		
43.	Is there any First Aid Kit with necessary facilities?		
44.	Is there any fire fighting equipments?		
45.	Any emergency exit provided?		
46.	Is there any warning sign?		
47.	Proper electrical systems?		
48.	Are equipments properly sterilized?		
59.	Are containers with hazardous substances properly labeled?		
50.	Is there any material safety data sheet for handling chemicals?		
	<b>Afya na usafi wa mazingira (Environmental health and sanitation)</b>		
51.	Are the cleaning systems adequate to reduce slipping and tripping hazards when washing hair, spraying oil-based spray or mopping?		
52.	Are the work floor areas tidy and free from obstruction?		
53.	Regularly inspect chair conditions, booster seat anchor bolts and safety straps?		
54.	Are smocks and towels provided to protect clothing and skin for all services?		



55.	Have adequate ventilation provided to remove mists or sprays that may be harmful?		
56.	Have dryers guarded with an automatic cut-off switch to prevent overheating?		
57.	Is a working room of adequate size?		
58.	Are storage arrangements adequate to control any risk from individual substances and to prevent risk of contamination by or with any other substances?		
59.	Are there specific risks in movement, posture and layout involved in manual handling tasks? E.g. bending, twisting or awkward postures for frequent or prolonged periods?		

**THANK YOU VERY MUCH FOR YOU PARTICIPATION**

**Appendix 4: Observational Checklist (Kiswahili Version)**

Na	Shughuli (Item)	1. Ndiyo	2.Hapan a
	<b>Kumbukumbu (Records)</b>		
36.	Je, una cheti cha usajili (registration certificate) wa saluni yako? (Tazama)		
37.	Je, kuna leseni yoyote ya kutekeleza masharti ya afya na usalama mahali pa kazi) (occupational health and safety compliance license)		
38.	Je, kuna leseni ya biashara? (valid business license)		
39.	Je, kuna kumbukumbu zozote za ajali na matukio mahali pa kazi? (accident and incident records).		
40.	Je, kuna taarifa zozote za ukaguzi wa kiafya katika salunu yako? (Occupational health inspection reports)		
41.	Je, kuna vyeti ya uchunguzi wa afya kwa wafanyakazi? (medical checkup and records for employees)		
42.	Je, kuna taarifa za tathmini ya hatari na madhara ya kiafya katika saluni yako? (Availability of risk assessment records)		
	<b>Afya na Usalama (Health and Safety)</b>		
43.	Je, kuna sanduku la huduma ya kwanza lenye dawa na vifaa muhimu? (First Aid Kit with necessary facilities)		
44.	Je, kuna vifaa vya kuzimia moto katika saluni yako? (Fire extinguisher nk)		
45.	Je, kuna njia au mlango wa kutokea wakati wa dharura? (Emergency exit).		
46.	Je, kuna alama zozote za onyo dhidi ya hatari au ajali katika saluni yako? ( warning signs)		
47.	Je, kuna mfumo mzuri wa umeme katika saluni yako? (Proper		

	electrical systems)		
48.	Je, vifaa vyote hutakaswa vizuri? (Are equipments properly sterilized)		
49.	Je, vifaa vya kuhifadhia kemikali hatari vina alama muhimu? (Are containers with hazardous substances properly labeled)		
50.	Je, kuna kitabu cha maelekezo ya utumiaji kemikali katika saluni yako? (Is there any material safety data sheet for handling chemicals)		
	<b>Environmental health and sanitation</b>		
51.	Je, sakafu ndani ya saluni inasafishika na haitelezi? (Are the cleaning systems adequate to reduce slipping and tripping hazards when washing hair, spraying oil-based spray or mopping?)		
52.	Je, sakafu ndani ya saluni ipo katika hali nzuri? (Are the work floor areas tidy and free from obstruction?)		
53.	Je, viti vya saluni vipo kaika hali nzuri na vinafanyiwa marekebisho ya mara kwa mara? (Regularly inspect chair conditions, booster seat anchor bolts and safety straps?)		
54.	Je, kuna nguo na taulo maalum kwa ajili ya kuzuia nguo kuchafuka? (Are smocks and towels provided to protect clothing and skin for all services?)		
55.	Je, kuna mzunguko mzuri wa hewa ndani ya saluni? (Have adequate ventilation provided to remove mists or sprays that may be harmful?)		
56.	Je, mashine za kukaushia nywele zina swichi inayojizima yenyewe endapo joto litazidi? (Have dryers guarded with an automatic cut-off switch to prevent overheating?)		
57.	Je, chumba cha saluni kina ukubwa wa kutosha? (Is a working room of adequate size?)		

58.	Je, stoo ya kuhifadhia vifaa ipo na ina ukubwa wa kutosha? (Are storage arrangements adequate to control any risk from individual substances and to prevent risk of contamination by or with any other substances?)		
59.	Je, kuna vihatarishi vyovyote katika saluni? (Are there specific risks in movement, posture and layout involved in manual handling tasks? E.g. bending, twisting or awkward postures for frequent or prolonged periods?)		

**ASANTE SANA KWA USHIRIKI WAKO**

**Appendix 5: Informed Consent Form (English Version)****MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES****DIRECTORATE OF RESEARCH AND PUBLICATIONS, MUHAS****INFORMED CONSENT FORM****Interviewee No:**     **Consent to Participate in a Study**

Greetings! My name is RAPHAEL NSHUNJU. I am working on a study on Assessing compliance to occupational and Public Health requirements and associated factors among barbers and hairdressers, the case of Kinondoni Municipality.

**Purpose of the study**

The study is conducted in partial fulfillment of the requirements for the degree of Master of Arts, Health Policy and Management of MUHAS. This study aim at assessing factors associated with poor compliance to occupational and public health requirements among barbers and hairdressers and come up with appropriate recommendations to create safe working environment in this industry.

You are being asked to participate in this study because your information, contribution and suggestions will be of tremendous importance to the study. Please be honest and fair as that will lead to a clear picture of status of your working environment and the findings will be useful for making recommendations and suggestions to be used for improvement of your working environment and health of the public in general.

**What participation involves**

If you agree to participate in the study, you will be interviewed and your workplace observed in order to answer a series of questions in questionnaire and observational checklist prepared for a study

**Confidentiality**

I assure you that all the information collected from the interview and observational checklist will be respected, treated confidentially, and used for the purpose of the study only. Your answers, opinion and suggestion will be valued for the improvement and better implementation; your name will not be written in the report/document. All information collected from the interview and checklist will be entered into computers with only the interviewee number.

**Risks**

We do not expect that you will come to any harm as a result of participating in this study. There may be some questions you are not able or comfortable to answer. Please feel free to say “I don’t know”, or you can refer the researcher to a colleague with the required information including data to support the answer. You may decline to answer any particular question and may stop the interview at anytime.

**Right to withdraw and alternatives**

Taking part in this study is completely voluntary. You can stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdrawal from the study will not involve any penalty.

**Who to contact**

If you ever have questions about this study, you should contact the **Researcher, RAPHAEL NSHUNJU** of Muhimbili University of Health and Allied Sciences, P. O. Box 65001, Dar es Salaam (Tel. 0788-182829).

If you ever have questions about your rights as a participant, you may call **Prof. Muhsin Aboud, Chairperson of the Senate Research and Publications Committee**, P. O. Box 65001, Telephone : 255 22 215 2489 Dar es Salaam.

**Signature:**

Do you agree to participate in the study?

I ..... have read the contents in this form. My questions have been answered.

I agree  I DO NOT agree

Signature of participant .....

Date of signed consent .....

**Appendix 6: Informed Consent Form (Kiswahili Version)**

**MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES**

**DIRECTORATE OF RESEARCH AND PUBLICATIONS, MUHAS**

**FOMU YA RIDHAA**

Namba ya Msailiwa

**Ridhaa ya kushiriki katika utafiti**

Salaam,

Jina langu ni RAPHAEL NSHUNJU, mwanafunzi wa shahada ya uzamili katika Chuo Kikuu cha Sayansi za Afya Muhimbili, Dar es Salaam.

**Dhumuni la Utafiti**

Mpendwa mshiriki, ninapenda kukujulisha kuwa tunafanya utafiti wenye kichwa cha habari *“Kuangalia uzingatiaji wa matakwa ya afya ya jamii na usalama mahali pa kazi na sababu zake katika saluni za kike na za kiume Manispaa ya Kinondoni.* Ningependa kukupa taarifa kuhusu ushiriki wako katika utafiti huu. Utafiti huu un a lengo la kuainisha sababu za uzingatiaji mzuri au mbovu wa matakwa ya afya ya jamii na usalama mahala pa kazi kwenye saluni za kike na za kiume katika Manispaa ya Kinondoni. Tafadhali ninakuomba uwe muwazi na mkweli kwani matokeo ya utafiti huu yatakuwa sehemu ya mapendekezo yatakayoweza kuboresha mazingira ya kazi katika maeneo yenu ya kazi na afya ya jamii kwa ujumla.

**Usiri**

Tunakuhakikishia usiri wa hali ya juu kwa kadri ya uelewa wetu. Hatutaandika jina lako katika dodoso au ripoti au nyaraka zozote ambazo zinaweza kumfanya mtu mwingine kukufahamu. Taarifa zote zitakazokusanywa zitatunzwa na mtafiti mkuu.



**Haki ya kujitoa kwenye utafiti**

Kushiriki kwenye utafiti ni hiari. Uamuzi wako wa kushiriki au kutoshiriki hautoathiri haki yako kama raia. Unaweza kujitoa kushiriki katika utafiti wakati wowote, hata ikiwa umekwishafanya ukubali. Uamuzi wako wa kushiriki au kutoshiriki katika utafiti hauambatani na adhabu yeyote na wala hautapoteza mafao yeyote ambayo unastahili kupata.

**Kama kukitokea madhara**

Hatutarajii uwepo wa madhara yeyote juu yako kama mshiriki kwenye utafiti huu. Hata hivyo kama madhara yatatokea kwako kutokana na wewe kushiriki katika utafiti huu, tunaahidi kutoa ushirikiano wa hali na mali kwa kadiri ya uwezo wetu.

**Mawasiliano na wahusika**

Ikiwa una maswali yeyote kuhusiana na haki zako wewe kama mshiriki katika utafiti huu, unaweza kuwasiliana na **Prof. Muhsin Aboud**, ambaye ni Mwenyekiti wa Kamati ya Utafiti na Uchapaji ya Chuo Kikuu cha sayansi za Tiba na Afya Muhimbili, P.O Box 65001, Dar es Salaam, Simu 022-2150 302.

Kwa maelezo zaidi unaweza kuwasiliana na watafiti wafuatao kwa kutumia anwani zifuatazo:-

<b>Jina</b>	<b>Simu</b>	<b>Cheo</b>	<b>Taasisi</b>
RAPHAEL NSHUNJU	0715 304 263	Mwanafunzi shahada ya Uzamili	Chuo Kikuu cha Sayansi za Tiba na Afya Muhimbili

**UKUBALI**

Maelezo yaliyopo hapo juu yanayoelezea malengo, usiri, madhara, faida, na taratibu katika utafiti unaoitwa Kuangalia sababu za uzingatiaji wa matakwa ya afya ya jamii na usalama mahala pa kazi katika saluni za kike na za kiume katika Manispaa ya Kinondoni ” umesomwa kwangu na ninakubali kushiriki katika utafiti huu.

**Sahihi ya Mshiriki** ..... Tarehe .....

**Sahihi ya Mtafiti** ..... Tarehe .....

