

## Occupational Health Hazards and Safety of the Informal Sector in the Sekondi-Takoradi Metropolitan Area of Ghana

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### Abstract

In Ghana, the informal sector comprises over 70% of the labour force and contributes substantially to the poverty reduction objective of the country. Yet most of their activities are often considered hazardous and take place in unhealthy and unsafe environment. This study was conducted to systematically identify the various occupational hazards and risks faced among beauticians, Garage/mechanics, taxi Drivers and head Porters in the Sekondi-Takoradi Metropolitan Area of Ghana. The study finds that workers are exposed to a range of physical, ergonomic, chemical and psycho-social hazards which cause diseases. Yet nearly 62.5% of them have not registered under the National Health Insurance Scheme (NHIS) which can cushion them for paying high medical bills in cases of serious injuries. The paper consequently recommends that an Occupational Health and Safety Policy is formulated and intensive education through the mass media, undertaken to sensitize workers on their work environment and the level of risk exposure.

**Keywords:** Ghana, informal sector, occupational hazards, occupational safety

### 1. Introduction

Globalization and widespread economic restructuring over the past three decades or so have facilitated an increase in the growth of the informal employment sector and changed the way people are connected to the formal labour market (Bacchetta, Ernst, & Bustamante, 2009). The informal sector since the early 1970's has therefore become a focus of increased attention in international discussions on economic development. The International Labour Organization (ILO) and other multilateral agencies such as the World Health Organization (WHO) and United Nation Development Programme (UNDP) have played a major role in understanding the phenomenon and in formulating policies governing the sector. In Sub-Saharan Africa, the informal sector has become a growing source of employment for large numbers of youth, and also for older workers pursuing entrepreneurial goals and others adjusting to structural changes in the region's employment (ILO, 2002). The informal sector is characterized largely with low incomes, limited job security and less social protection in many developing countries (Bacchetta et al., 2009). Fox and Gaal (Fox & Gaal, 2008) observes that initially the sector was viewed as a safety net for those unable to find employment in the modern sector. However, this image of the sector has changed with time. People now view the informal sector not as a temporary stop while searching for employment in the formal wage economy, but as a preferred destination offering opportunities to those wanting to become entrepreneurs (Adams, 2008).

Ghana has a large informal sector which is said to constitute 70% of its over 7.7 million labour force (Clarke, 2005). According to the Institute for Statistical, Social and Economic Research (Institute for Statistical Social and Economic Research, 2003), the main source of employment for many populace in Ghana is the informal sector which provides employment opportunities for at least 80% of the labour force. A survey in Accra by Jobs and Skills Programme for Africa (JASPA) in 1991 indicated that the informal sector accounts for about 22% of real GDP in Ghana (Institute for Statistical Social and Economic Research, 2003). This sector consists of varied industries comprising enterprises which are normally categorized as small or medium based on their asset base, number of employees and turnover (Aryeetey, 2008; Osei-Tutu, Nketiah, Kyereh, Owusu-Ansah, & Faniyan, 2010). Participants of this sector include the aged, young and women workers who are essentially low-skilled and are involved mainly in the services sector, and in the construction and manufacturing sectors (Adu-Amankwah, n.d).

While the informal sector contributes enormously to employment creation and economic development, there are numerous hazards, risks, injuries and diseases associated with work in the sector which affects staff attendance and service delivery. These include communicable diseases, schistosomiasis, malaria and HIV/AIDS which is particularly associated with mining and the transport sector. Non-communicable diseases widespread in the

informal service sector include Noise-Induced Hearing Loss (NIHL), chemical poisoning, stress and occupational asthma (ILO, 2002; National Institute of Occupational Health, 2012). According to the World Health Organization (World Health Organisation, 2006), poor occupational health and reduced working capacity of workers cause economic loss up to 10-20% of the Gross National Product of a country. The World Health Organization (Karjalainen, 1999) has comprehensively documented the various diseases, causes and occupations or work environments associated with these diseases. These problems reduce labour productivity and efficiency as “the occupational health and safety of working people are crucial pre-requisites for productivity and are of utmost importance for all socio-economic and sustainable development” (World Health Organisation, 1995).

Evidently, in the informal sector there is an annual occupational injury rate of about 11.5 injuries/1,000 persons in the urban areas and 44.9/1,000 in the rural areas in Ghana (Mock, Adjei, Acheampong, Deroo, & Simpson, 2005). The attainment of the goal of occupational health for all will require a strategy to secure work conditions that protect and promote occupational health, especially among the vulnerable groups (World Health Organisation, 1995). In the Section 10 (a) of Ghana’s Labour Law (Act 651 of 2003) every worker or labour has the right to work under satisfactory, safe and healthy conditions (Government of Ghana, 2003). This provision therefore implies that the health and safety of workers in both the formal and informal sectors of the Ghanaian economy must be of priority. Despite the provision in the Labour Act, the traditional Occupational Health Safety (OHS) policies and regulations in Ghana focus almost exclusively on formal workplaces like factories, offices and shops with the neglect of the informal workplaces (Alfers, 2009). There is therefore a dearth of evidence on the Occupational Health and safety of the informal service sector. This study aims to contribute to understanding of the various occupational and health hazards by different categories of workers in the informal sector.

The study is focused on the informal service sector to assess the key health and safety risks and identify any current interventions made by the government and relevant stakeholders to improve their well being. Our analysis focuses on four categories of workers: Beauticians, Garage/mechanics, taxi Drivers and head Porters in the Sekondi-Takoradi Metropolitan Area of Ghana. Findings from the research will provide basis for necessary interventions which can help improve the health status and productivity of the informal service workers.

## **2. Understanding occupational health hazard and safety: a theoretical framework**

Occupational health and safety is becoming a cross-disciplinary area which concerns itself with protecting the safety, health and welfare of people engaged in work or employment. In 1995, the ILO and the WHO provided for a broad definition of the concept as: “Occupational health should aim at: the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the workers in an occupational environment adapted to their physiological and psychological capabilities; and, to summarize : the adaptation of work to man and of each man to his job” (World Health Organisation, 1995). This understanding of the concept shows the comprehensive emphasis on individual worker’s physical, mental and social well-being, general health and personal development—which marks a shift from the previous monodisciplinary risk-oriented conceptualization. Occupational health and safety (OHS) management therefore protects the safety, health, and welfare of people at their workplaces. It also focuses on the maintenance and promotion of workers’ health and capacity to work; the improvement of working environment and work to become conducive to safety and health as well as the development of work organizations and working cultures in a direction which supports health and safety at work and in doing so also promotes a positive social climate and smooth operation and may enhance productivity of the undertakings (Stellman, 1998). The concept of working culture is intended in this context to mean a reflection of the essential value systems adopted by the undertaking concerned. Such a culture is reflected in practice in the managerial systems, personnel policy, principles for participation, training policies and quality management of the undertaking. An analysis of occupational hazards and risks represent an important step toward an understanding of the health and safety policy prescriptions needed to protect the welfare of workers.

## **3. Methodology**

### *3.1 Brief Description of study Area*

This study was undertaken in the Sekondi-Takoradi Metropolitan Area (STMA) of the Western Region of Ghana. The Western Region is the third largest region of the country with a relatively large commercial centre known as the ‘Market Circle’. The Sekondi Takoradi Metropolitan Area, with Sekondi as the administrative capital,

occupies the south-eastern part of Western Region. It is located on the coast, about 200km west of Accra and is within the Greenwich Mean Time (See fig. 1). The total population of the Metropolis in 2011 was 404,041 with a growth rate of 3.2% per annum. The local economy of the Metropolis could be classified into three major sectors; namely industry, agriculture and service. The industrial sector is estimated to be engaging about 19.1 percent of the labour force while about 21 percent are engaged in some forms of agricultural activities (Sekondi Takoradi Metropolitan Area, 2011). The service sector is the largest employer of the labour force in the Metropolis. It employs 59.9 percent of the active labour force and more than 45 percent can be accounted for in the informal sector (Sekondi Takoradi Metropolitan Area, 2011). The major commercial activities in the district include buying and selling, with the major items of trade being agricultural products and inputs, orthodox and herbal drugs, autoparts, clothing, provisions, petroleum and plastic products.

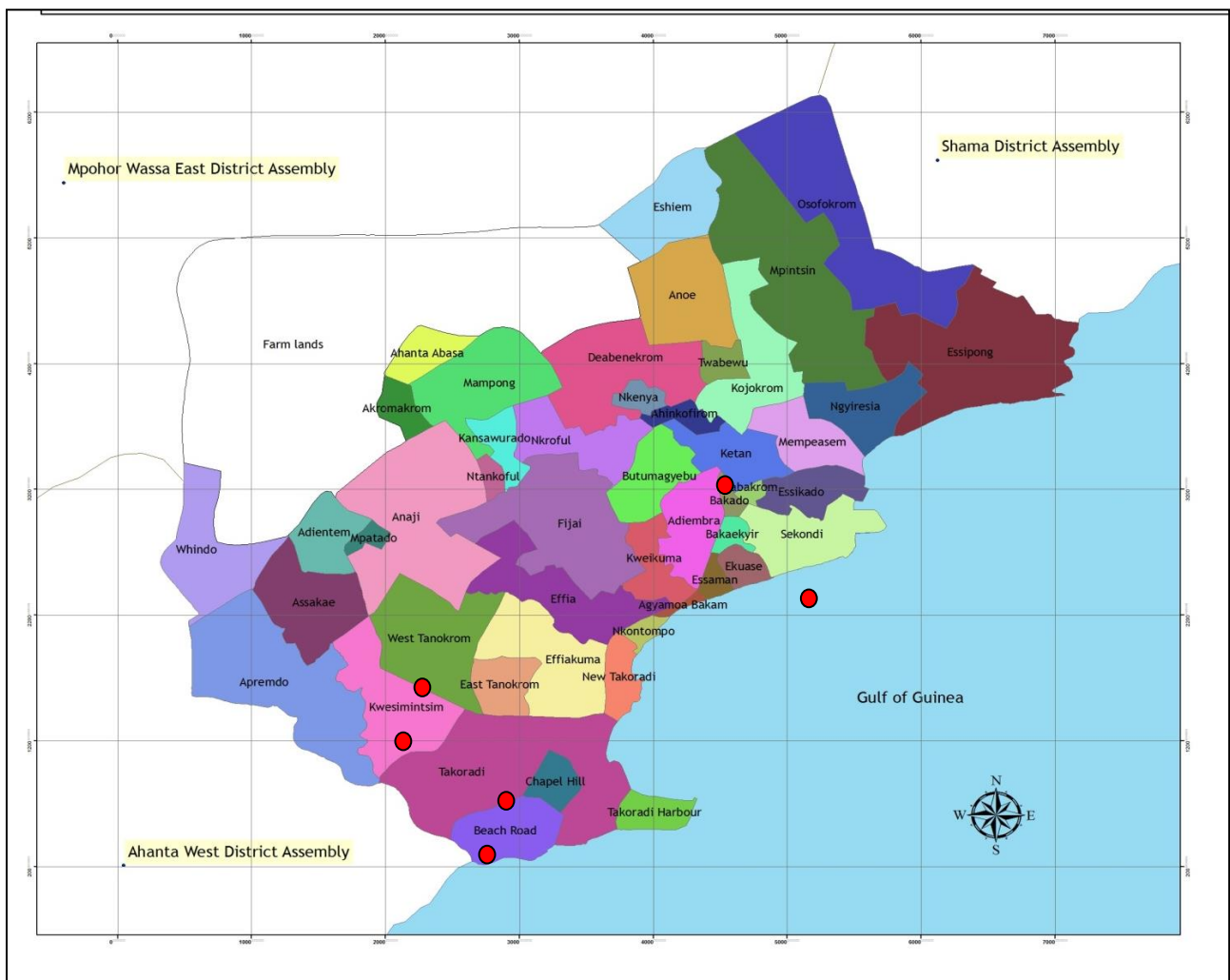


Figure 1. Map of STMA showing study areas in red  
 Source: Sekondi Takoradi Metropolitan Area (2011)

### 3.2 Data Sources and Methods of Collection

The research utilized both primary and secondary sources in the data collection processes. Secondary data were obtained from relevant literature such as Scholarly articles, Annual reports, Acts (from the regulatory bodies) and books. Primary data were also obtained through a field survey during which informal service employees/apprentice and employers and heads of the Department of Factories Inspectorate (DFI), the Labour Department (Accra and Sekondi Takoradi metropolis) and the Occupational Health and Safety Department of the Ministry of Health were interviewed. The Informal service workers were selected from four main categories; (i) Beauticians, (ii) Garage and allied workers including auto mechanics, sprayers, welders, vulcanizers, (iii) Commercial Drivers and (iv) Head Porters popularly known as ‘Kayaye’. These categories of workers were

selected because they constitute large proportion of the informal economy in the Area and are also considered to be prone to a number of occupational hazards. A questionnaire was the main research instrument used to obtain the information that has informed the analysis and arguments of this study. Based on a sample frame of 39,800 workers (obtained from the Business Advisory Committee and Station masters in the case of drivers) and a margin of error (e) of 0.05, a sample size of 396 respondents were chosen. In addition, some employers (from the beauticians and mechanics sub groups who, as part of their general duty of care, are required to ensure safety at their work-place) were interviewed in course of the study. Overall, the questionnaire was personally administered to 440 respondents comprising 400 employees/apprentices and 40 employers.

The aim of the use of questionnaire was to generate reliable and valid data from a high proportion of population within a reasonable time period at a minimum cost (Gorard, 2006; Taylor, Sinha, & Ghoshal, 2006). Questionnaires are often criticized for their failure to allow for interaction and capturing of views and experiences of interviewees (Gorard, 2006; Taylor et al., 2006). In order to manage this challenge, the questionnaires employed in this study were both closed ended and open ended. In this way, the method allowed some interaction between the interviewees and the interviewer and deeper probing of issues (Cohen, Manion, Morrison, & Morrison, 2007; Gorard, 2006; Taylor et al., 2006). The study was carried out from December 2010 to May 2011 in six zones (See table 1). The data collected was analyzed using Statistical Package for Social Scientists (SPSS version 19) to provide frequency tables. Workers' perceptions regarding the type of hazards, safety at their work places and preventive measures were also discussed extensively during the data collection stages.

Table 1. List of Communities Visited

Location	Category of Workers	Sample
MARKET CIRCLE	Porters	60
	Beauticians	35
	Drivers	100
KOKOMPE	Mechanics	70
TANOKROM	Mechanics	50
SEKONDI	Porters	40
	Beauticians	20
KWESIMINTSIM	Beauticians	35
KETAN	Beauticians	30
Total		440

#### 4. Results and Discussion

##### 4.1. Basic Information about respondents

Out of the 440 respondents who participated in the study, 67.8% (n=298) were males while 32.2% (n=142) were females. Table 2 shows more information of the socio-economic characteristics of the respondents of the study. All the drivers interviewed were males, 96% (n=115) of mechanics, 70% (n=70) of porters and 5% (n=6) of beauticians were males. This number of male porters found was quite surprising since several studies (Agarwal et al., 1997; Opere, 2003; Yeboah & Appiah-Yeboah, 2009) have consistently shown the dominance of females in head portering in Ghana. This observation sends signals of the changing nature of the head portering business although it is not yet clear what might be driving this change. The general observation made in relation to the basic characteristics of the respondents is that economic activities that demand lots of strength and are strenuous in nature are mostly undertaken by males while the contrary is also true.

In the area of education, approximately 67% of respondents had attained basic education with nearly 14% (n=59)

not having any formal education. Sixty percent of the informal service workers belonged to an association. These associations were Ghana Beauticians and Hairdressers Associations (GHABA), Garages Association of Ghana (GAG) and the Ghana Private Road Transport Union (GPRTU). The porters in the metropolis were the only exceptional group without any association. According to respondents who belonged to associations, their associations seek to help them by setting standards to maintain their codes of ethics, advocating in government, marketing of members and providing education.

#### 4.2. Key Health and Safety Risks Associated With the Informal Service Sector

Our analysis reveals a range of hazards of which the informal service workers in the Metropolis are exposed to. We have broadly grouped these hazards into ergonomic hazards, physical hazards, chemical hazards and psychosocial hazards. Table 3 throws more light on the range of occupational hazards experienced by the different categories of workers.

Table 2: Socio-Economic Characteristics Of Informal Service Workers

Variable	Frequency(n=440)	% (100)
<b>Category of workers</b>		
Drivers	100	22.7
Mechanics	120	27.3
Beauticians	120	27.3
Porters	100	22.7
<b>Age</b>		
< 30 years	154	38.5
30-49 years	203	43.3
50+	83	18.2
Minimum age: 17 (1.75%)	Maximum Age: 73 (0.5%)	Mean Age: 16
<b>Educational Level</b>		
Basic School	295	67
SHS	48	11
Vocational	5	0.8
Technical	33	7.5
Never Attended School	59	13.5
<b>Employment Status</b>		
Full time	412	93.6
Part-time	28	6.4
<b>Work Hours (Per day)</b>		
< Eight Hours	28	6.4
Eight Hours	112	25.4
12 Hours	266	60.5
14 Hours	23	5.2
16 Hours	11	2.5
Minimum = 4 hours	Maximum = 16 hours	Mean = 9.9 hours
<b>Years of Employment</b>		
< Five Years	92	20.9
Five – 20 years	111	25.2
Above 20 years	237	53.9
Minimum = 6 months	Maximum = 50 years	Mean = 7.2 years
<b>Registration of Shops: Salons and Mechanical Shops (n=40)</b>		
Registered	16	40
Unregistered	24	60
<b>Associations (n=264)</b>		
GHABA	98	37.1
GAG	92	34.9
GPRTU	74	28

Source: Field Survey, 2011



Table 3: Perceptions Of Occupational Risk Exposure Among Informal Service Workers

Occupation	Drivers (n=100)	Beauticians (n=120)	Mechanics (n=120)	Porter (n=100)	Total (n=440)
<b>Risk</b>					
<i>Physical Hazards</i>					
Noise	94	0	96	100	290
Vibration	0	0	33	0	33
Burns	12	80	80	0	172
Fire	2	5	67	0	74
Filthy Environment	19	27	22	100	168
Mean Average ( $\bar{X}$ )	25.4	22.4	59.6	40	147.4
<i>Chemical Hazards</i>					
Smoke	19	41	86	0	146
Dust	23	63	67	0	153
Fume Inhalation	44	48	86	0	178
Other chemicals	100	100	100	0	300
Mean Average ( $\bar{X}$ )	46.5	63	84.8	0	194.3
<i>Ergonomic Hazards</i>					
Poor Posture	76	87	89	78	330
<i>Psycho-social</i>					
Sexual Abuses	0	0	0	14	14
Stress	76	68	10	0	154
Mean Average ( $\bar{X}$ )	38	34	5	7	84

Source: Field Survey, 2011

**(a) Physical hazards**

Physical hazards are those risks affecting physical safety. They arise primarily from sources such as noise, vibration, fire, poor sanitation radiation and extreme temperatures (World Health Organization, 2001). Generally, we found mechanics to be those exposed most frequently to physical hazards ( $\bar{X}$ =60), followed by porters ( $\bar{X}$ =40), then drivers ( $\bar{X}$  =25) and beauticians ( $\bar{X}$ =22). However, there are significant variations in terms of the exposure to specific hazards considered in the study (See table 3). Noise appeared to be the major physical hazard experienced by the respondents of the study as 290 (representing 66%) out of the 440 respondents mentioned this. Of all the categories of informal workers, porters are those that have high number of respondents experiencing noise. The study found out that all the porters (100%) are exposed to noise for more than eight hours. The source of this noise according to the porters is from vehicles, traders and public address systems. Majority of porters (68 percent) perceive noise levels to be very loud, 24 percent as loud and eight percent consider it as moderate. Those who perceive the noise level to be moderate claimed it was normal implying they were used to the environment.

Similarly, the major physical hazard drivers are exposed to relate to constant noise from their own vehicles and the dominance of noise around the various work stations. From the survey, 94 percent of drivers are exposed to noise. Out of the 100 respondents, 90 percent perceive the source of the noise to be from their own vehicles, two percent from nearby machines and the remaining eight percent from traders and passengers. For mechanics, it was realized that 80 percent (n=96) of the respondents were exposed to noise whilst the remaining respondents do not experience noise at their workplace primarily because they were sprayers who did not use any noise emitting machines. For the mechanics, the main source of noise exposure was from machines and the beating of panel. More than half (51 percent) of the respondents classified the noise levels as very loud with 28 percent classifying it a loud noise and 17 percent, a moderate level of noise. What is worrying is that as high as 72 percent of the respondents were exposed to noise for over 6 hours a day which has serious implications on their hearing abilities—as observed by the researchers during the interviews.

### **(b) Chemical Hazards**

Closely linked to the physical hazards is the exposure to chemical hazards. Chemical hazards typically arise from liquids, solids, dusts, fumes, vapours and gases may cause adverse effects on health. Apart from the porters, all the other category of respondents mentioned some form of chemical hazards experienced as part of their daily activities. There were about 300 (representing 68%) of the 440 respondents who are exposed to some form of chemical substance other than smoke, dust and fumes inhalation. Mechanics ( $\bar{X}=85$ ) were found to be mostly experiencing chemical hazards than beauticians ( $\bar{X}=63$ ) and drivers ( $\bar{X}=47$ ).

Among mechanics, some of the poisonous chemicals used include: paint additives, gasoline, solvents, isocyanates and other volatile organic compounds. The toxicants as well as the radiations of light resulting from the use of these chemicals for welding, abrasive cleaning, fusing vehicle parts together and spraying activities pose significant health risks to these workers (National Institute of Occupational Health, 2012). Due to the nature of these chemicals as much as 80 percent, 86 percent, 67 percent of the mechanics are exposed to burns, inhalation of fumes and dust respectively. Unfortunately, 42 percent of the mechanics mentioned that they do not read labels on containers which raise risky implications for the workers. Beauticians are also exposed greatly to chemical hazards as almost all the products used in their services have some chemical composition. An overview of the common products used by the beauticians and associated health risk have been given in table 4.

Respondents mentioned that the direct skin contact with these chemicals or inhalation has serious health consequences such as irritations, inflammations and other skin diseases. Beauticians also asserted to the fact that they easily inhale some chemicals like hair sprays because they do not use nose mask. For drivers, they are mostly exposed to diesel fuels with carcinogenic properties and exhaust emissions from the total vehicle fleet also containing pollutants such as carbon monoxide, nitrogen oxides and sulphur dioxide all of which can damage the respiratory system (WHO, 2004). From the survey, exposure to fumes emerged first with 44 percent of drivers being exposed to it. This was followed by dust (from untarred roads) which was experienced by drivers who mostly provide intra-city services.

### **(c) Ergonomic Hazards**

Ergonomic hazards relates to how a workplace, the equipment used there and the work environment itself contribute adversely to comfort, efficiency, safety and productivity (Hagberg et al., 1995; Ross, 1994). Poor workplace design, awkward body mechanics or postures, repetitive movements, and other ergonomic hazards induce or contribute to a staggering number of cumulative and musculoskeletal trauma disorders (Ross, 1994; Westgaard & Winkel, 1997).

In this study, poor posture was identified as the commonest ergonomic hazard. Out of the 440 respondents, about 330 (representing 75%) mentioned it as a common hazard. Drivers appeared to be the group that has greatest number of respondents complaining of discomfort due to posture. Sitting in the driving position exerts considerable forces on the spine and can cause a number of problems with the musculoskeletal system in particular backaches, neck problems, pulled muscles, and general stiffness (Whitelegg, 1995). From the study, as many as 76 percent (n=76) of the drivers mentioned poor posture as a common hazard. Nearly all of them also complained of pains associated with their posture. For the beauticians, the commonest posture in salons is standing for long hours, which according to 87 percent (n=104) of beauticians causes a lot of discomfort. Almost all respondents complained of having a leg discomfort after work each day. In the case of mechanics, a combination of standing, bending, squatting and sitting is used by 65 percent (n=78) of them. Nearly all the respondents who are mechanics complained of pains associated with their posture. These pains include: waist, knee, feet and general body pains. Interestingly, 54 percent (n=65) of the mechanics were of the view that with passage of time, their posture becomes comfortable as they become used to the work. Among the porters, the continuous posture of carrying and pulling heavy loads is done on equal basis by all porters. These postures according to 78 percent of them are not comfortable and thus cause pain, which are felt greatly after daily work. The major pain associated with the work of porters, is waist pains (47 percent) and general body pains (34 percent). Chest pains are experienced by eight percent, knee pains by seven percent and the least (four percent), arm pains.

### **(d) Psycho-Social Hazards**

Psycho-social hazards cause fatigue, stress and general loss of interest in work. From the study, the major psycho-social hazard identified relate to stress and sexual abuse especially among the porters. The study revealed

that 266 out of the 440 respondents (representing 60.5%) are full-timers working for 12 hours, 5.2% for 14 hours, 2.5% for 16 hours and the remaining 25.4% working for eight hours. Part-time workers who were mainly porters constituted 6.4 % of the total respondents and they work between four and six hours a day. They were engaged in other informal activities such as trading and shoe making. This shows the kind of irregularity in the working hours in the informal sector which can lead to stress.

Table 4: Overview Of Common Products, Chemical Composition And Health Risk

Product	Chemical Composition	Health Risk
<b>Mechanics</b>		
Paint additives	Binder, Solvent, Pigment and Additives	When inhaled excessively causes difficulty in breathing and over a long period of time gives asthma symptoms
isocyanates	Compounds classified as potential human carcinogens	irritation of skin and difficult breathing
Gasoline	benzene, toluene, ethyl benzene, xylene Hydrocarbons, alkane cyclic and aromatic compounds	Most exposure causes serious respiratory problems or even death
<b>Drivers</b>		
Fumes	The chemical composition depends on the reactors	Exposure can cause eye, nose, and throat irritation, fever, chills, headache, nausea, shortness of breath and coughing
<b>Beauticians</b>		
Shampoo	Sodium laureth sulphate, triethanolamine laurel sulphate cocamido propyl betaine	Skin Inflammation
Neutralizers	Hydrogen peroxide	Skin and Eye Irritant
Conditioners	Cetrimonium chloride, cocoamido propyl betaine, betaine monohydrate	Mild irritation which causes skin wrinkles after prolonged exposure
Peroxide solutions, emulsions and creams	Hydrogen peroxide	When concentrated whitens the skin cause strong itching and pain. Cause burns when it splashes in to the eye.
Styling gels and Setting Lotion	Ethanol	Degreases the skin irritation Ingestion causes pain in the mouth and throat.
Hair Sprays and Mouses	Ethanol, hydrocarbons	Prolonged exposure causes occupational asthma and cold.
Relaxer	Sodium hydroxide, potassium hydroxide, lithium hydroxide, calcium hydroxide, guanidine hydroxide	Causes severe burns to skin and blindness to the eye
Rubber Gloves	Thiuram Mercaptobenzothiazole	Causes itching of hands
Nail Polish Remover	Methylated spirit	Excessive use causes whitlow

Source: Field Survey, 2011

Apart from the long working hours, less sleep was also identified to be causing stress. Stress can cause fatigue and have a negative influence on productivity and the quality of work, and on personal health and safety (Jill,



1997). According to Filiatrault (Filiatrault, Vavrik, Kuzeljevic, & Cooper, 2002), to be able to work efficiently one must sleep for not less than eight hours. However, we found some workers sleeping as less as three hours a day. Among the drivers, about seven percent of them sleep for three hours a day while 58 percent sleep between five and seven hours a day. There were however 24 percent of the drivers who sleep for eight hours and above a day. Among beauticians, majority (68 percent) of them work for 12 hours followed by 14 hours of work by 16 percent of beauticians during peak times like festive seasons. Respondents from the porters' category mentioned sexual harassment and abuse as the major hazards that expose them to psycho-social hazards. Their work environment as well as places of abode put them in a very risky and unsafe situation. Forty-eight percent of porters live in slums like Sekondi zongo, Kwesimintsim zongo and Effiakuma zongo. There were 12% of the porters who were sleeping in shops in and around the market circle with the rest sharing rooms with friends around the Central Business District. Those who sleep in the market do so because they do not have places to sleep and also to be able to carry loads when traders and other travelers arrive in the middle of the night. Almost half of the female porters (46.7 percent) had been sexually harassed by other male porters and 'Area boys' who deceive them and take advantage of them, confirming studies by Opare (Opare, 2003).

#### 4.3 Occupational Injuries and Diseases

After identifying the risk exposure and the hazards, we also sought perceptions of diseases and injuries experienced more regularly by the respondents. It was discovered that malaria, abdominal disorders, chronic cold and skin rashes are the commonest diseases reported to be experienced by the respondents (based on their own account of medical history).

While causality between the risks and hazards identified and the diseases reported need to be treated with caution (as we could not obtain hospital records), it nevertheless gives an indication of a possible effect that the occupational risks and hazards may be having on the respondents. Occupational Asthma and chronic cold were seen to be rampant among the respondents. This is partly due to the strong scented nature of the chemicals used by the beauticians and mechanics as well as the dust and smoke in their work environment. Beauticians asserted to the fact that they easily inhale some chemicals like hair sprays and mousse. The higher rate of triggering of Asthma among beauticians is consistent with other studies such as those of Akpinar-Elci, Cimrin and Elci (Akpinar-Elci, Cimrin, & Elci, 2002). In As shown in table 5, the dominant ailment among informal service workers is malaria followed by general injuries. The highest injury by 37.6 % of informal service workers was recorded among porters. Skin rashes were peculiar to porters (7.2%) because of unsanitary environment whilst whitlow was peculiar to mechanics (4.6%) and beauticians (11.7%) as a result of the chemicals they use.

Table 5: Actual Occurrence Of Occupational Injuries And Diseases Among Informal Service Workers In Percentages

Ailments	Drivers (100%)	Mechanics (100%)	Beauticians (100%)	Porters (100%)
Malaria	43	18.4	28.6	26.4
Abdominal Disorders	8.1	4.6	7.8	15.2
Skin Rashes	0	0	0	7.2
Chronic Cold/Catarrh	12.2	19.5	15.6	2.4
General Body Pains	18.1	21	0	11.2
Eye Infection	0	15	7.8	0
Occupational Asthma	16.2	19.5	19.5	0
Whitlow	0	4.6	11.7	0
Injuries	20	18.4	9	37.6

Source: Field Survey, 2011

#### 4.4. Membership to National Health Insurance

In 2004, Ghana began to implement a National Health Insurance Scheme (NHIS) to improve health care access for its citizens and eventually as a cardinal strategy towards universal health coverage. The basic benefits package (BBP) of Ghana's NHIS is very broad with as many as 95% of burden of diseases covered (Agyepong & Adjei, 2008). This means that many of ailments identified above are covered under the NHIS. For valid NHIS subscribers, hospital fees are in principle very minimal.

While workers in the formal sector a deducted a monthly contribution at source-which exempt them from paying

premium, this is not so with their counterparts in the informal sector. For these workers, an annual subscription is required to allow one to benefit from the services offered under the NHIS. The study therefore took into consideration whether respondents have registered under the scheme in view of the many occupational risks identified. In all, it was 43.8% of respondents that had registered under the National Health Insurance Scheme out of which 12.6% had not renewed after registration. This was surprising to us as we expected more workers to be on the scheme since the NHIS is largely considered as a key safety measure. This finding thus puts the lives of the workers at a very high risk, in terms of the high cost that may be paying at hospitals.

#### 4.5 Interventions by Employers, Employees and Government

The study also took into consideration the various interventions being carried out by government departments, employers and employees themselves. Section 25 of Ghana's Factories Offices and Shops Act stipulates that a person employed in a process which involves excessive exposure to wet or any injurious or offensive substance must be provided with suitable protective clothing by the employer. Employers are thus generally required to protect their employees from workplace hazards that can cause injury by providing them with Personal Protective Equipment (PPE). These are basically equipments that are worn to minimize exposure to a variety of hazards. Examples of PPE include but not limited to items as gloves, hard hats, full body suits, foot and eye protection and protective hearing devices (e.g. earplugs, muffs). Once employers provide these equipments, it then becomes the responsibility of employees to use them appropriately to minimize exposure to a variety of hazards. We found out from the study that, the use of workplace protective equipment among informal service workers in the STMA was generally not encouraging. The major PPE found to be in use are shown in Table 6. It was realized that among beauticians and mechanics the provision of PPE's was a shared responsibility between employers and employees. Goggles and gloves were the most used PPE's among mechanics and beauticians respectively as indicated in Table 6.

Table 6: Interventions By Employers And Employees

PPE	Mechanics (%)	Beauticians (%)	Drivers (%)	Porters (%)
Goggles	53	0	0	0
Gloves	0	90	0	0
Seatbelts	0	0	91	0
Driver's license	0	0	80	0

Source: Field Survey, March 2011

#### 5. Interventions by Government

The study also focused on the interventions being made to in control exposure to occupational risks and hazards by Government Departments, Agencies and other para-statal organizations including the Trade Union Congress, which is an umbrella body for workers in Ghana. We identified four main departments that were playing related roles in this direction. They include the Environmental Protection Agency (EPA), the Department of Factories Inspectorate (DFI), Department of Labour and the Trade Union Congress (TUC). The major roles and functions noted include promoting health and safety of factories and offices, public education regular inspection, assisting with compensation of injured workers among others. It has been widely acknowledged that OHS requires an inter-agency and inter-sectoral approach for a successful outcome. It was realized that all the state agencies covered in the study had links with each other. However, the Department of factories Inspectorate in Takoradi seems to have a conflicting role with the Environmental Protection Agency (EPA). This is because DFI saw the EPA to be intruding in its affairs to the extent that employers call EPA for workplace inspection instead of the DFI. This problem is as a result of less clarity on the roles and responsibilities for both departments and the overlapping nature of their work. In fig. 2, we have presented a simplified layout of interaction. From the fig.2, it is obvious that all four institutions work towards a common goal of ensuring health and safety of formal workers. The key role of all institutions is Public education. This implies that education is key in addressing OHS issues. If workers are educated on the dangers of what and how they do them they will be careful not pose any threat to their health.

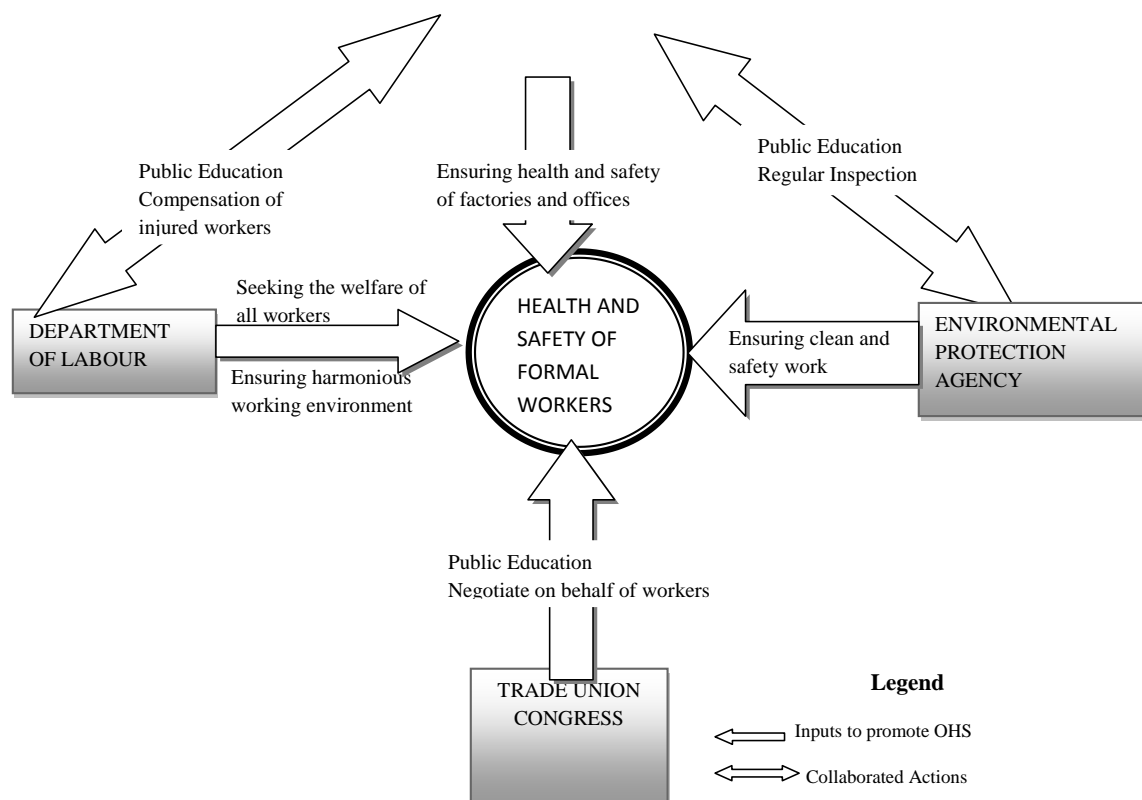


Figure 2: Inter Agency Collaboration in Occupational Health and Safety

## 6. Policy Implications and Recommendations

This study has drawn attention to some of the occupational risks experienced by some category of workers in the informal sector. On the basis of the effects of occupational hazards on employees, employers, society and the nation at large, the following policy recommendations are proposed. First of all, we join the growing call for the formulation and review of comprehensive National OHS Policy. Although some policy attempt was started as far back as 2000, very little is known on the stage of this document as of yet. The formulation of a comprehensive National OHS policy will render policy makers and all OHS institutions and stakeholders in setting minimum standards as well as giving a sense of direction in their service delivery. This should be done to safeguard the health of workers not only in the formal sector but informal sector as well. There is also the need to review the Factories, Offices and Shops Act and ensure its strict adherence to deter non compliance to its provisions. Second, we recommend for strengthened collaboration among the various institutions charged with ensuring OHS and particularly a more clear delineation of their roles and responsibilities. All OHS institutions should initiate a concerted effort to address the health and safety hazards and the risks of occupational illness and injury that are associated with the informal sector to reduce the risks to an acceptable level. They should also develop a multidisciplinary approach to occupational health and safety that permits the continuing evaluation of potential workplace hazards and the best way to mitigate the causes and effects of these hazards. Third, we recommend for awareness raising initiatives and training of stakeholders in the informal sectors including employers and employees to equip them with practical understanding of OHS principles and concepts. This can be done through awareness creation using advertisements, radio and television talk shows as well as drama. This could be supported by employers or OHS institutions, non-governmental organizations and civil societies. Fifth, we call on employers to provide PPE's for their employees at all times replacing them as and when they wear out as these are proactive ways of reducing hazards which has the potential of reducing productivity. In addition, employers should also train employees on the appropriate use of PPEs as the wrong use of these PPEs can also serve as potential occupational hazards. Similar, to ensure adoption and utilization of PPEs, employers should punish employees who do not use the PPEs and provide incentive packages for those who use them. They should also insist that employees register under the National Health Insurance Scheme to safeguard their health in cases

of accidents.

For employees, they should place their safety above their work and insist their employers provide them with PPE. They also should co-operate with their employers in the health and safety measures they put in place and also work safely to protect themselves and others from injury. They should also endeavour to report all cases of occupational hazards so that corrective and preemptive measures can be put in place to avoid future disasters. Above all, employees must also endeavour to register under the National Health Insurance Scheme. Lastly, we also recommend to the various Associations to set rules and regulations that insist on the usage of PPEs by all members and encourage as well as enforce their implementation at the workplace. They should also monitor activities of members and penalize employers whose employees go contrary to the set rules and regulations.

## 7. Conclusion

The contribution of the informal sector to employment in countries is growing rapidly. Yet, many of the workers in this sector operate under precarious situations. This study sought to systematically identify some of the major occupational risks and hazards faced by workers in the informal service sector. The study has identified range of physical, ergonomic, chemical and psycho-social hazards among different categories of workers—which could be a starting point for policies on occupational health safety, employment and general social policies. It was however surprising to us to know that as many of 56.2% of the respondents have not registered under the National Health Insurance Scheme (NHIS) which can cushion them for paying high medical bills in case of injuries or diseases. The paper consequently recommends that an OHS Policy is formulated and intensive education through the mass media, undertaken to sensitize workers on their work environment and the level of risk exposure. We have argued for the implication of this research and offer a number of recommendations which we believe could be reconsidered in giving policy attention to the informal service sector.

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