Occupational Health Hazards and Safety Practices Among the Informal Sector Auto Mechanics

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Abstract

Rate of globalization has contributed to an increase in informal sector employment, usually characterized by flexibility, dangerous and insecure work which poses great risk to the well-being of workers. The study aimed at assessing occupational health and safety practices among informal sector auto mechanics in Sekyere East District of Ghana. About 70 auto mechanics were sampled through accidental sampling. A well-structured questionnaire and observation checklist were used for the data collection. It was found that, the informal sector auto mechanic was male dominated and young people between the ages of 17-35 constituted the majority (84.3%). Most of the apprentices had basic primary education (85.7%) and were engaged in the vocation through verbal negotiation with the master of the garage or shop. The workers were found to be exposed to physical hazards such as heat and burns, chemical hazards such as exposure to asbestos and fumes, biological hazards such as insect bites, and psycho-social hazards such as working under pressure. Most of the auto mechanics (74%) who got injured on the job did not enjoy any compensation and there seemed to be no regulatory body responsible for their health and safety. The study concluded that, despite the numerous hazards identified in the informal auto mechanic industry, occupational health and safety strategies in the country does not address the sector needs. Therefore government and stakeholders should establish occupational health and safety framework and support the informal sector auto mechanics to reduce the level of hazards associated with their work.

Key Words: Informal Sector, auto mechanics, occupational health and safety, hazards, Ghana

1. Introduction

Development all over the world revolves around competent, active, dynamic and healthy work force in the formal and the informal sectors of the economies. The growth of the informal sector economy is a worldwide phenomenon partly due to high population growth and limited employment opportunities in the formal sectors as well as the emergence of entrepreneurs. Rinehart (2004) indicated that micro and small enterprises and those in the informal economy account for the bulk of new employment and for the majority of the working poor. Hence, the informal sector has become the source of employment for the
youth and those readjusting to structural changes in Sub-Saharan Africa (ILO, 2002; Xaba, Horn, Motala, & Singh, 2002).

However, the unstructured nature of the sector makes the sector to suffer from policy and regulatory neglect (Osei-Boateng & Ampratwum, 2011). Besides, according to Osei-Boateng and Ampratwum (2011), the informal sector workers are either ignorant about safety issues in their field of work or they simply cannot afford protective gadgets that protect them from adverse environmental and other hazardous conditions that constitute threat to health and safety. This predisposes the sector to various occupational hazards at the world of work. Similarly, Ametepeh, Adei and Arhin (2013) indicated that informal sector workers were exposed to physical hazards such as noise, vibration, fire, filthy environment; chemical hazards including smoke, dust and inhalation of fume, ergonomic hazards such as poor posture; psychosocial hazards including stress and sexual abuse. The informal sector which was thought of as a safety net for those unable to find employment in the modern sector (Fox & Gaal, 2008) is characterized with low incomes, low skills and technology, limited job security and less social protection in many developing countries (Bacchetta, Ernst & Bustamante, 2009; Osei-Boateng & Ampratwum, 2011;).

Occupational health and safety are therefore important for the effective and efficient operation of informal sector workers. Hämäläinen, Takala and Saarela (2006) estimated that about 270 million workers became victims of occupational accidents and 160 million were inflicted by occupational diseases annually. Mock, Adjei, Acheampong, Deroo and Simpson (2005) reported that occupational injury rate was about 11.5 injuries/1,000 persons in the urban areas and 44.9/1,000 in the rural areas of the informal sector annually in Ghana. Informal sector auto mechanics are exposed to so many hazards within their work environment such as asbestos, mineral oils, solvents, paint pigments, anticrosive substances, and automobile exhaust (Brown, 1990). In fact, the increase in automobile technology has come along with more risky and fatal work place hazards. Therefore, strategies and mechanisms to proactively prevent and control occupationally related hazards will help to decrease the incidence of accidents and work related diseases among the informal sector workers. This will go a long way to improve the health and safety of workers, build the confidence and general morale of workers, increased workers efficiency and productivity, decrease fear and absenteeism from work and ensures workers are abreast with the use of new equipment and tools in their field of work.

To protect workers from exposure to occupational hazards, employers and employees use administrative, work practices and engineering controls as well as personals protective equipment which is the least desired option (Occupational Safety and Health Administration[OSHA], 2006). Personal protective clothing or equipment (PPE) are used to shield or isolate individuals from chemical, physical, and biologic hazards that may be encountered at the work site. This should be carefully selected to protect the respiratory system, skin, eyes, face, hands, feet, head, body, and hearing (Kleiner, Rabinovitz, Weitzman & Wiltshire, 1985). The success of PPEs to reduce hazards depends on the correct use and workers’ preparedness to use.

In Ghana, the informal sector keeps on growing decade after decade. The official records from Ghana Statistical Service (GSS) indicate that as at 2010, the informal sector employment for employed persons from 15-64years is about 8,364,649 out of a total of 9,782,655 employed persons (GSS, 2012). This implies the informal sector alone employs about 85.5 per cent of the working population. A considerable proportion of informal sector workers are involved in mining, manufacturing including woodwork, cement block moulding as well as batik and tie and dye making. Others work as salesmen; artisans like automobile repairers and welders, while others provide services, such as in catering, transport and the beauty industry (Clarke, 2005).

A study on the situational analysis of occupational exposure and health problems in small-scale industry workers in Dar es Salaam,Tanzania by Rongo, Barten, Msamanga, Heederik and Dolmans
(2004) concluded that workers have high levels of exposure to multiple health hazards but the use of protective equipment is poor. In Kaduna, a study on the awareness of occupational hazards and utilisation of safety measures among welders, by Sabitu, Iliyisu and Dauda (2009) indicated high level of awareness of occupational hazards but low utilization of protective measures against the hazards. Sambo, Idris and Shamang (2012) looked at the determinants of occupational health hazards among roadside automobile mechanics in Zaria in Nigeria and reported that the type of training, duration of training; years of experience and level of awareness of using protective devices are the major determinants of occupational hazards among roadside automobile mechanics. In their study, there was high level of awareness and low usage of protective devices. In Ghana, an assessment of occupational health hazards and Safety of the informal sector in the Sekondi-Takoradi Metropolitan Area by Ametepeh, Adei and Arhin (2013) showed that workers were exposed to a range of physical, ergonomic, chemical and psycho-social hazards. Limited work has been done on the occupational health hazards, working environment and safety practices among informal sector auto mechanics. Hence this study aims to contribute to understanding of the working environment, occupational health hazards associated with the work of informal sector auto mechanics and the safety practices adopted. It also examines possible interventions by government and other stakeholders to improve on occupational health and safety among this work force.

2. Theoretical framework

Hazards are physical situations or conditions that have the potential to cause human injury, damage to property and environment or combinations of them (Alli, 2008). It implies that occupational hazards are therefore hazards that are associated with the work one does for a living at any moment in time. These hazards include physical, chemical, biological, ergonomic and psychosocial factors that may have adverse effects on the health and well-being of workers. These conditions at the work place are unsafe and reduce workers’ safety. Therefore, unsafe conditions coupled with individual behaviour which is below acceptable standards (unsafe act) can contribute to risk of an accident at the work place. These conditions may be responsible for accidents among the informal sector mechanics. This indicates the relevance of the Heinrich’s “Domino theory” of causes of accident as the bases for this work.

According to Heinrich (1941), an “accident” is one factor in a sequence that may lead to an injury. He argued that accident is just an end product of a sequence of factors which can be viewed as a series of dominoes at the edges where they depend on each other such that a fall of one initiates a chain reaction till completion. Heinrich indicated that among the direct and proximate causes of industrial accidents: 88% are unsafe acts of persons; 10% are unsafe mechanical or physical conditions; and 2% are unpreventable which is normally referred to as an “act of God.” Heinrich identified five steps that lead to accidents as: Social Environment and Ancestry - which are characteristics such as recklessness, greed, and bad temper, are originated from either inheritance or social environment and contribute to fault of a person; Fault of Person - is the unpleasant behaviours or traits such as ignorance, recklessness, and bad temper can be innate or due to life environments contributing to unsafe Acts and/or unsafe conditions; Unsafe Acts or Unsafe Conditions -which are placed at the centre of the domino are the most significant factor to cause an accident, therefore to prevent accident one need to lift up this domino from the sequence as the best and most efficient option for accident prevention; Accident - are the undesirable and the unwanted events that occurs and causes injury or damage. Injury or damage – is the outcome of the accident (Hosseinian & Torghabeh, 2012; Sabet, Aadal, Jamshidi & Rad, 2013).

This theory has been discredited for viewing the causes of accident as one single act in a linear way and blames the individual mostly for any accident that occurs (Petersen, 1971). It was also criticised because it ignored the role of management and organization in accident prevention (Bird & Loftus, 1976). Therefore, Bird and Loftus (1974) gave an updated version of the “Dominoes theory” by adding the role of management into the sequence of accident causation. The new sequences included: Lack of control/management; Basic causes/origins (basic causes: personnel factors and job factors); Immediate causes/Symptoms (unsafe act and condition); Incident (the events which could cause harm to either
people or properties); and Loss (properties, people, processes). Some of the ideas are still fantastic to understand the occurrence of accident in auto mechanic workshops. Recently, Manuele, (2011) argued that professionals should stop using or promoting the premises that unsafe acts are the primary causes of accidents and that focusing on reducing accident frequency will equivalently reduce injury severity.

Despite these criticisms, Sabet et al. (2013) indicated that the Domino theory and its modified versions are relevant for understanding the cause of accidents in construction industry easily. The concept of unsafe act and unsafe conditions contributing to accidents is still valid and relevant to this work. This work does not address accident causation factors in the informal sector auto mechanics but looks at various hazards that make the working environment unsafe and behaviour of different auto mechanics towards good safety practices. Therefore, unsafe act and conditions becomes relevant in identifying hazards in working environment of auto mechanics. More so, the role of management in controlling, supervising and regulating activities to enhance safety practices among auto mechanics is underpinned by the “updated dominos theory.” In this case the workshop owners/masters, District Assemblies and Department of Factories Inspectorate should play the role of management by controlling and supervising these informal workers through regulations and policies.

The informal auto mechanics in this study are the group of entrepreneurs and apprentices who are into vehicle repairs, refurbishing and maintenance. They normally operate in small to medium workshops with apprentices as the main workforce. This group includes auto electricians, sprayers, welders and car maintenance workers, upholsterers, brake repairers, etc. who mostly works either in the same work area or near one another. They are located along roadsides where they normally find jobs. They provide quick and on the spot repair services to car owners and drivers. They normally charge low fees compared to the well-established garages and workshops in the formal sector. This helps them to attract more customers for services which increase the hazards in their working environment. According to ILO (2008) Occupational safety and health (OSH) is “the science of the anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers, taking into account the possible impact on the surrounding communities and the general environment.” In this study, occupational hazards are considered as the presence of conditions and products in the working environment of auto mechanics that can adversely affect health.

3. Methodology

The Sekyere East District, located in Ashanti Region of Ghana has Effiduase as the district capital with an estimated population of 62,172 (Ghana Statistical Service, 2012) and total land area of about 4,231.4sqkm. It lies approximately between latitude 6°455’-7°32’ north and longitude 0°22 west. The district has a lot of economic potentials and opportunities due to its proximity to Kumasi, the Ashanti regional capital. The main occupation of the people in the Sekyere East District is farming and with some informal sector works like hair dressing, tailoring, carpentry, blacksmithing, and automobile repairs and many more. About 66 per cent of the labour force are employed in the informal agricultural sector, 18 per cent are into commerce, 5% in the service sector and 19 per cent and 11 per cent are into manufacturing and others respectively (GSS, 2012). There are fourteen health facilities in the District which provides the healthcare needs of the people.

The study used a cross-sectional survey and descriptive design that focused on mechanic workshops which were engaged in automobile, motor bike and brake repairs, transmission technicians, tune-up technicians, and car-body maintenance or welders. A total of five auto mechanic workshops or garages were accidentally sampled from two communities (Effiduase the district capital and Asokore) in the district. Shops where the master agreed to be part of the study were involved in the study. The respondents were assured of their privacy and confidentiality of information provided and whenever they
felt uncomfortable they were free to decline response. A structured questionnaire was used to collect the desired data. A total of 70 informal sector mechanics were involved in the study. The sample size was based on the number of informal sector auto-mechanics in the two major towns in the district where a lot of mechanic shops could be identified and they agreed to be part of the study. The questionnaires were administered by the researcher who assisted the respondents to understand the questions to get more reliable information. The questionnaires were divided into four sections, section “A” contained questions that were meant to solicit demographic information, section “B” health hazards associated with work, section “C” was on safety practices and the last section was on mode of support to the auto mechanics. The data collected was cleaned, coded and analysed using Statistical Package for Social Sciences (SPSS) version 16.0 and results displayed in tables.

4. Results and Discussions

The research identified four groups of mechanics who performed different jobs at the same workshop. They included welders (7.4%), sprayers (21.4%), auto electricians (14.3%), and car maintenance mechanics (57.1%) as in Table 1. It was realised that all the respondents were males. This means that the auto mechanic job is a male dominated work, perhaps this may be due to the energy intensive nature of the work.

<table>
<thead>
<tr>
<th>Type of workers</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welders</td>
<td>5</td>
<td>7.1</td>
</tr>
<tr>
<td>Sprayers</td>
<td>15</td>
<td>21.4</td>
</tr>
<tr>
<td>Auto electricians</td>
<td>10</td>
<td>14.3</td>
</tr>
<tr>
<td>Car maintenance</td>
<td>40</td>
<td>57.1</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

Majority of the workers (85.7%) had basic education and only 1.4 per cent worker had secondary (SHS) education and nine workers representing 12.9 per cent did not have any form of formal education (Table 2). Therefore, most of the informal auto mechanics have had basic education which should prepare them to acquire some level of formal knowledge and aid them in their vocation. The educational attainment is higher than what was reported for educational level of employed people into service and sales (39.2%), craft and related trades workers (38.1%) and plant machine operators and assemblers (51.0%) (GSS, 2013). The finding in this study agrees with the study by Sambo et al. (2012) who reported that about 83 per cent of auto mechanics in Zaria, in Nigeria have had basic formal education. It however contradicts the findings of Sabitu et al. (2009) who reported that most welders (62.7%) in Kaduna Metropolis of Nigeria have had secondary education.

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>60</td>
<td>85.7</td>
</tr>
<tr>
<td>Secondary</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>None</td>
<td>9</td>
<td>12.9</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)
It was observed from the research that majority of the workers are youth between the ages of 17 - 35 which forms 84.3 per cent of the total workforce interviewed. In Ghana, people between the ages of 15-35 are youth (Ministry of Youth and Sports, 2010; National Population Council, 2011). The positions of this age group are usually ranked as junior and senior apprentices sometimes depending on the number of years one has spent in the work and the level of skills acquired. It was also observed that 15.7 per cent of the workers were above 35 years and ranked as chief apprentices and masters. The finding of the study is in line with Sambo et al. (2012) and Omokhodion (1999) who reported that 59.5 per cent and 50 per cent of auto mechanics in Zaria and Ibadan all in Nigeria were below the age of 35 years respectively.

It was also found that all the workers were engaged in the vocation through verbal negotiation with the masters of the workshops or garage. This negotiation is usually focused on the amount of money to be paid as an apprentice fee and 93 per cent of them paid this fee whereas 7 per cent did not pay because they were related in some way to the masters of the garage or workshop. Also, discussions are normally done on the expected behaviour and relationship of apprentice towards work and seniors at the workshop.

It was found that about 28.6 per cent of the workers were found to be at the workplace as early as 6:00 am, 45 per cent being the majority reported at 7:00 am and 24.3 per cent reported to work at 8:00 am. Those who normally came to work late were mainly masters or senior apprentices. All the workers however closed from work between 5:00 pm and 6:00 pm unless on special days where they left early to attend to other functions. It seemed that the sector did not have any specific time to go to work nor close from work. This is a characteristic of the informal sector workers. Usually, workshop masters decided on the time apprentices came to work. It was observed that apprentices went work earlier than their workshop masters to ensure that they have cleaned and prepared the workplace for the day’s operations.

It was discovered that workers at the various garages, did not follow any scheduled work-break periods in the day. Workers found any time available to rest and found food to eat. The break was normally not more than 30 minutes. One of them said, “depending on the available work to be done in the day we can have long time for rest or no time to rest.” About 75 per cent of the workers worked for more than eight hours. This means that they were more at risk if exposed to certain hazards for longer period of time. This finding confirms the study of Kumi-Kyereme (2012) that about 57 per cent of mechanics had less than an hour’s rest on the job. No employee (apart from the masters or senior apprentices) had more than 3 hours of rest. This also goes in line with the findings of Yankson, (1992) and Barwa, (1995) who reported long and poor working hours by workers in the informal sector.

<table>
<thead>
<tr>
<th>Time</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:00</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>6:00</td>
<td>20</td>
<td>28.6</td>
</tr>
<tr>
<td>7:00</td>
<td>32</td>
<td>45.0</td>
</tr>
<tr>
<td>8:00</td>
<td>17</td>
<td>24.3</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

From the research, 74 per cent of the mechanics did not enjoy any kind of compensation when injured on their job whilst 26 per cent received some kind of compensation when injured on the job. This was in a form of a small amount of money to buy drugs and few days break from work. Despite the countless injuries sustained by workers on duties, compensations are only a voluntary action by the responsible master. Observation and inspection made showed that the workshops did not have sanitary facilities but used available public toilets or available bush nearby. A study by Mamba (2006) in Mbabane also observed that a large number of mechanic establishment did not have sanitary facilities. It was also
observed that most of the working spaces at the workshops were inadequate and overcrowded with the exception of one fitting shop which had much bigger premises.

Type of perceived health hazards confronting the informal sector auto mechanics varied due to the various work tasks to be performed. It was observed that the welders were not using any nose mask or respiratory wear to protect themselves from exposure to fumes and gases from their work. This is likely to expose them to risk of contracting some respiratory and cardiovascular disorders. Furthermore, all welding activities were done in the open and this increased not only their exposure to gases and fumes but also other users of the workshop. They often assumed awkward posture when working under vehicles. According to Mamba (2006), substances found in gases and fumes such as smoke can affect the heart, lungs, kidney and the central nervous system. All the five welders interviewed did not use gloves, goggles and sleeves; three indicated they have them whilst two said they did not have. On the reasons for not using them they said it does not help to protect them in any way from any health hazards and it is expensive and not easily available. This indicates their level of understanding of safety issues with their work and the constraints confronting them. The remaining two did not have the gloves but had the sleeves. All the welders were not protected from eye injuries and this put them at a higher risk of eye injuries and other health problems.

Five welders were interviewed and it came up that they used electrical power in their operations. Conventionally, welders were supposed to use PPE such as safety boots, goggles, overall coat, gloves, helmets and nose mask. However, this was never an important issue as far as safety is concerned to them. From the five respondents, only two of them used safety boots and overall coat and said that the rest were not important to them. The remaining three used only safety boots and no one used goggles and gloves.

Table 4: Use of personal protective equipment among welders in the mechanic sector

<table>
<thead>
<tr>
<th>Personal Protective Equipment</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety boots and overall</td>
<td>2</td>
<td>40.0</td>
</tr>
<tr>
<td>Safety boots</td>
<td>3</td>
<td>60.0</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)

Out of the total of 40 car maintenance mechanics interviewed, 65 per cent and 90 per cent used overall coat and safety boots respectively whilst about 53 per cent used both overalls and safety boots (Table 5). It was found that none of the workers used hand gloves only and none of them used the overall coat, safety boots and hand gloves together, 25 per cent of the respondents did not use overall coats and 10 per cent did not use safety boots. This exposed them to hazards such as burns from hot vehicle parts, cuts, liquids such as oils and hot water from radiators and bruises especially on the hands. To ensure basic safety at the mechanical shop, PPEs such as overalls, safety boots and hand gloves must be used simultaneously.

Table 5: Personal protective equipment usage among car maintenance mechanics

<table>
<thead>
<tr>
<th>Personal Protective Equipment</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall coat</td>
<td>26</td>
<td>65.0</td>
</tr>
<tr>
<td>Safety boots</td>
<td>32</td>
<td>90.0</td>
</tr>
<tr>
<td>Hand gloves</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Overall coat and safety boots</td>
<td>21</td>
<td>52.5</td>
</tr>
<tr>
<td>Overall coat, safety boots and hand gloves</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Field Survey (2013)
It was observed that about 75 per cent of the car maintenance mechanics worked in awkward positions which can result in ergonomical hazards such as musculoskeletal and joint pains. Lifting of heavy loads such as engine blocks, gearbox, etc. manually which can lead to waist and body pains were observed. It was not surprising when about 78 per cent reported body and joint pains after working hours. Some of the tools used by the car maintenance mechanics were broken and are manually operated which leads to overexertion and application of more energy to get a simple work done. Another hazard identified to be associated with the car maintenance mechanics work was the twisting of jacks. They indicated that this is prevented by parking objects such as wood blocks, damaged mortars and cement blocks to raise the vehicles to support the jack. It was observed that those car maintenance mechanics working on brake pads did not use any protective wear which exposed them to particulate matter inhalation and toxic substance found in some vehicle brake pads. A study in Finland revealed that during an eight-hour workday, the estimated average asbestos exposure was 0.1 to 0.2 fibres/cm³ and 0.05 fibres/cm³ during repair of passenger car brakes (Mamba, 2006) which increases the risk of cancer among these workers.

Sprayers were group of mechanics using fillers and sprays of different colour to the cars after repairing some damages or just applying a new colour to the car and they constituted 21.42 per cent of the respondents. Their work involved using hazardous chemicals such as solvents, powders, acrylic lacquers, surface preparation products and rust removers. Physically the sprayers suffered scratches on hands and cuts when removing paints by rubbing the surfaces. It was observed that this group worked without using proper protective equipment but rather applied dusters to cover their nose to prevent inhalation of the dust sometimes. These chemicals and particulate materials could be inhaled, ingested or absorbed through dermal contact. The potential effects of these chemicals include irritant contact dermatitis, headaches, nausea and extremely serious conditions such as lung cancer, damage to the reproductive system and ‘painter’s syndrome’ (which affects the brain). The auto electricians were engaged in minor and general re-wiring of vehicles, checking alternators, refilling and charging of batteries, car lamps, fuses, sensors and control boards. Some of them (40 %) reported that they have experienced some corrosion of their cloths and boots after an exposure to the acid content of batteries. In fact, this shows that auto mechanics are at risk of skin contacts with corrosive substances and food contamination. Electricians also experienced minor shocks from ignition and are susceptible to fire outbreaks at the workplace. Generally, the informal sector auto mechanics did not take measures to protect themselves from the health hazards associated with their work. This may be due to the fact that they were not probably aware of the effects of hazards on their health. They might have not linked any health related events in their lives to the hazards of the work they do.

On whether the shops have been receiving support from the government in any way for their safety needs, the unanimous answer from the workshop masters was “no.” Some of the workshop masters said “the assembly only comes here only to collect from us business operating fees not our welfare.” A study by Kheni, (2008) revealed lack of skilled human resources, inadequate government support for regulatory institutions and inefficient institutional frameworks responsible for health and safety standards. This research agrees with Kheni (2008) findings because there were no written laws covering the activities of the mechanics. The only business that existed between the workers and the government was the collection of taxes from the use of the premises. As to whether they have received any support from Non-Governmental Organisations (NGO) on occupational health and safety, (education, supply of personal protective equipment, etc.) the answer was negative. This means that NGO activities do not cover this informal sector groups to reduce their vulnerability to health hazards associated with the work they do. Environmental Health Officers of the assembly do not visit their facilities for hygiene education at their shops making it a neglected group in the informal sector in the district.

5. Conclusion
The informal sector auto mechanics were exposed to various health related hazards which could be grouped as physical, biological, chemical and ergonomical. The physical hazards identified include cuts, bruises, heat, noise, smoke and burns; chemical hazards include asbestos, chemicals from smokes and fumes; biological hazards include bits from insects and ants due to poor environmental sanitation; and ergonomic hazards included awkward working positions or postures, lifting of engine blocks, gear boxes which have heavy weight. Most of the workers did not take their occupational health and safety serious. They did not see the need to use the personal protective equipment for their safety. This may contribute to high exposure to the identified hazards and subsequent diseases among the auto mechanics. This indicates high level of unsafe act or behaviour among the auto mechanics and the presence of unsafe conditions at their workshops. It is recommended that an epidemiological study among the informal sector auto mechanics be conducted to know the extent and type of diseases among them.

The absence of support from government and its agencies in ensuring that appropriate institutional framework for workers’ health and safety among the informal auto mechanics need to be addressed as a matter of urgency. Almost every car owner receives some services from the informal sector auto mechanics; therefore, they contribute to the economic development of the nation hence they should not be ignored on occupational health and safety framework, education and inspections. Non-governmental agencies and other stakeholders like technology based educational institutions, Institution of Engineers should extend their support to these workers to establish good safety practices in their working environment so that they can protect their life and provide their services to the society. Moreover, provision PPEs to the mechanics with user education will go a long way to reduce their exposure to the identified work hazards in the sector.

Acknowledgement

We are grateful to Mr. Jones Sachie for his support during the data entry, Dr Edward Wiafe and Mrs Mary Adu Kumi for their comments which shaped this work.

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