Legal Requirements for Health and Safety in Laboratory Practice

¹Khaleel A. A., ²Abiola T.

¹Legal Department, Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria;

²Department of Medical Services, Federal Neuro-Psychiatric Hospital, Barnawa-Kaduna.

Corresponding author:

Khaleel A. A. Legal Department, Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria. Email:

mails4khalil@gmail.com

Abstract

Background: Laboratory is built and used for specialized services, research, teaching and learning. Commonly, laboratory often leads to health hazards to human and/or the environment from inappropriate use. To limit and avoid the possibility of hazards, laboratory are designed to operate under some legal requirements. This paper will give the legal requirement preconditions needed to facilitate the wellbeing, welfare and protection of the employees.

Methods/Results: The paper explores the existing laws in Nigeria and identified, as relevant those amended in the 1999 constitution, hinging on the Factories Act 1987, now Cap F 1 LFN 2004 and Employees Compensation Act 2010. It gave the safety rules that employer and employee must observe in addition to the duties expected for the health and safety of both. It discusses what constitutes criminal breech and possible compensation that should be given out should the need arise.

Conclusion: In conclusion, it is important for health workers to obtain and renew their practicing licence as at and when due. .

Key words: Laboratory, Legal Requirements, Health, Safety.

Introduction

Laboratory is a place built and used for specialized services, research, teaching and learning. In addition to these purposes, laboratory might also predispose workers to health hazards to humans and/or the environment from inappropriate use. Due to possibility of hazards, laboratories are designed to operate under some legal requirements to ensure and promote health and safety within it and in the practice. The

legal requirement by definition refers to mandated law that compels and demands that certain preconditions must be met before the commencement of laboratory activities. When such needs are pivoted on the wellbeing, welfare and protection of the employees, then it is striving to ensure their health and safety.

A brief history of health and safety in the laboratory

The health safety principles that this paper will be exploring can be inferred from the World Steel Association maxim that: "Nothing is more important than the safety and health of the people who work in the iron and steel industry." Thus, the research on health and safety in laboratory practice which started in 1921, benefitted immensely from such ambitious goal. Subsequently, an office for this goal was established in Harpur Hill Buxton in 1924. Following this was the expanded research work in to the safety of mining and laboratory practice, in Sheffield in 1928. Later, the Occupational Medicine Laboratory (OML) was established in London in 1995. The OML status was raised to that of an Agency in $2015.^{2}$

Methodology/Results

This paper explores the existing laws in Nigeria and identified, as relevant the amended parts in the 1999 constitution, hinging on the Factories Act 1987, now Cap F 1 LFN 2004 and **Employees** Compensation Act 2010. It gave the safety rules that employer and employee must observe in addition to the duties expected for the health and safety of both. It discusses what constitute criminal breech and possible compensation should the need arise.

Application of health and safety at work place

The application of health and safety at work place is being regulated in Nigeria by the following Laws and as amended in the 1999 Constitution:

- Factories Act 1987, now Cap F 1 LFN 2004
- 2. Employees Compensation Act 2010

Section 34 (1) (2) of 1999 Constitution as amended provides for the dignity and respect of persons unconditionally.³ Equally, part III of the Factories Act 1987 provides for the general safety of employees. From section 14 (Prime movers) up to section 57 (Power to extend application) dwelled on the Health and safety at work place.

Section 1 (a) of the Employee's Compensation Act provides: "to provide for an open and fair system of guaranteed and adequate compensation for all employees or their dependents for any death, injury, disease or disability arising out of or in the course of employment". And from section 1 up to section 74 all talked and emphasized for compensation to employee in the case of accident that result to death, injury or disability.

In summary, the Nigerian Legal Framework is very rich and all-encompassing but the major problem is enforcement of the rules. The following are some of the expected attitudes and habits that should govern the employer and/or the employee. In other words, for the health and safety of all as related to working within the laboratory, the following rules and duties must be adhere to and practice:

a. <u>Safety Rules that Employer and</u> Employees should observe

Safety rules are only helpful when they are enforced. A strong laboratory management is very important and necessary. The safety rules are many, and varying depending on the types of laboratory you operate, but some of the general safety rules are as follows:

- Be sure to read all alarms and safety signs and follow the instructions in case of emergencies.
- ii. Be aware of your facility's evacuation procedures.
- iii. Make sure you know where your laboratory safety equipment are (First aid kit, fire extinguishers, eye wash stations, safety showers etc)
- iv. Know local emergency numbers to call in case of emergency (list them)
- v. Laboratory areas containing dangerous substances and equipment should be properly labelled with warnings.
- vi. Always work in properly ventilated areas.
- vii. Do not chew gum, drink or eat in the laboratory.
- viii. Laboratory glassware should never be utilized as food or beverages containers.
- ix. Never use laboratory equipment that you are not approved or trained to use.
- x. Do not work alone in the laboratory.

- xi. Never leave an ongoing experiment unattended.
- xii. Never lift any glassware, solutions and apparatus above eye level. ⁶

b. <u>Duties of Employer for Health and Safety.</u>

- i. Provision of safe and decent working environment.
- ii. Provision of safety and protective equipment.
- iii. Compliance with standards and regulations.
- iv. Treatment/payment of compensation to employees.
- v. Employment of only competent and qualified personnel.

c. <u>Duties of Employees for Health and Safety</u>

- Take reasonable care for health and safety of themselves and others.
- ii. Cooperate with employers on Health and Safety matters.
- iii. Proper use of equipment for safety.
- iv. Report hazards and defects observed in work place.
- v. Take instruction from employer or superiors. ⁷

Criminal breaches at work place

A lot of criminal offences are committed at work place. Some of the offences are committed by the employers while others are committed by the employees. Some of these offences are as follows:

• Industrial manslaughter.

- Theft and burglary.
- Falsification of record.
- Breach of confidentiality.
- Faking by practitioners and clients.
- Practicing without valid certificate or license.

For any of the above, the law stipulates punishment ranging from suspension/cancellation of licence, prohibition notice, fine, imprisonment etc. Even though the Nigerian criminal law system is weak in punishing most of the above offences, but it is enough disgrace and cause embracement for any professional to be convicted or indicted of any offence not to talk of professionals dealing with matters of precisions that determine life and death.

Compensation for employees

Under the Employee's Compensation Act 2010 employees are entitled to compensation for the following:

- Compensation for death or disability in the course of work.
- Compensation for injury (depending on the degree)
- Compensation for contracting occupational disease(s)
- Compensation for mental stress.
- Compensation for hearing impairment.

It is important to note that compensation for an employee can never be waived under the law.⁵

Conclusion and recommendations

In conclusion, please remember the following parting rules: obtain and renew

your license as at and when due; and never forget the first rule above. Also ensure to observe the following recommendations:

- a. Professional bodies should make case for decent working environment, safety and wellbeing of employees. (Members and non-members).
- b. Basic working equipment and protective devices should be provided by all stake holders.
- c. Only evidently qualified and licensed professionals should be allowed to work in government and private institutions (zero tolerance for quackery)
- d. Employees should spare time to read what concern them and their work on Health and safety matters.
- e. Working in unsafe and unhealthy environment/conditions should be legally challenged.

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