**A TECHNICAL REPORT ON STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)**

**TAPROBANE MEDICAL CENTER, LOKOGOMA ABUJA**

**BY BRAIDE DIVINE**

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**SUPERVISOR: DR. AKINLUYI TOLA**

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**DEDICATION**

I give thanks to Almighty God in heaven for His mercy over my life. I also want to dedicate this to my parents for their support and strong believe in me. And I dedicate this to all my pharmacology lecturers for their effort over the knowledge that I am still acquiring and will acquire.

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My sincere appreciation goes to all the lecturers in the College of Medicine and Health Sciences and the Department of Pharmacology of Afe Babalola University, Ado Ekiti (ABUAD).

I say a very big thank you to Taprobane Medical Center for giving me a placement in the company and also my supervisors.

Lastly, my profound gratitude goes to my Parents: Mr. & Mrs. Braide, may God in His infinite mercies see you both through all your endeavors as you climb the ladder of life and continue to reap the fruits of your labour.

ABSTRACT

The student industrial work experience scheme established by the Federal Government of Nigeria is aimed at exposing students of higher institutions to acquire industrial skills and practical experience in their approved courses of study and also to prepare the students for the work situation which they are likely to meet after graduation. This report is based on the experiences gained during my three months of industrial training at Taprobane medical center, Lokogoma, Abuja. This report contains chapters stating everything learnt and the challenges faced during the period of attachment.

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1. **INTRODUCTION**

The Student Industrial Work Experience Scheme (SIWES) was initiated in 1973 by the Industrial Training Fund (ITF). This was to update practical knowledge of students in the Universities, Polytechnics and Colleges of Technology.

It is aimed at bridging the gap between the theoretical knowledge acquired in classes and technical knowledge in the industry by providing students with the opportunities to apply their educational knowledge in real work situations. Over the years, SIWES has contributed immensely to building the common pool of technical and allied skills available in the Nigeria economy which are needed for the nation’s industrial development.

Furthermore, the place and relevance of SIWES is underscored by the fact that the Scheme contributes to improving the quality of technical skills generally available in the pool from which employer’s source technical manpower. It gives students the opportunity to blend the theoretical knowledge acquired in the classroom and with practical hands-on application of knowledge required to perform work in the industry. Also, it prepares students for employment and makes the transition from school to the world of work easier after graduation.

I undertook my SIWES at Taprobane Medical Center (Pharmacy Department) which is located at EFAB Estate Lokogoma, Abuja Nigeria from July to September 2019.

**Pharmacy** is the science and technique of preparing and dispensing drugs. It is a health profession that links health sciences with chemical sciences and aims to ensure the safe and effective use of pharmaceutical drugs. The scope of pharmacy practice includes more traditional roles such as compounding and dispensing medications, and it also includes more modern services related to health care, including clinical services, reviewing medications for safety and efficacy, and providing drug information. Pharmacists, therefore, are the experts on drug therapy and are the primary health professionals who optimize the use of medication for the benefit of the patients.

**Pharmacology** is the study of drugs. Drugs are chemicals that produce therapeutically useful effects. They modify functions of living organisms, and are generally given to prevent, diagnose or cure diseases. Drugs are an essential part of patient care and safe usage of drugs requires a sound knowledge of their; mode of action, side effect, toxicity, range of dosage, rate and route of excretion and interactions with other drugs. Broadly speaking, the study of drugs may be divided into two;

1)Pharmacodynamics, which is the study of drug actions and mode of action, and

2)Pharmacokinetics, which is the study of the fate of drugs in the body right from the time they enter the body until they, or their by-products, are eliminated from the body, or movement of drugs in the body. In other words, this includes absorption, distribution, metabolism and excretion of drugs. Pharmacology has a wide scope, and derives from various other disciplines like physiology, microbiology, pathology, biochemistry and various clinical specialties.

# **1.2 BRIEF OVERVIEW OF TAPROBANE MEDICAL CENTER**

Taprobane Medical Center prides itself in providing a standard, affordable and accessible healthcare for everyone from babies to elderly.it was established by Dr Abimbola Silvia Daramola in the year 2004. It provides basic health care as well as specialized medical care for patients. It is a tertiary health institution which is made up of several departments: Internal Medicine, Obstetrics and Gynecology, Dentistry, Pediatrics, Oncology, Radiodiagnosis, Surgery, Laboratory Medicine and Allied services (Medical Social services, Nursing services, pharmacy, Physiotherapy).

**ABOUT THE HOSPITAL**

The **Vision** of the Medical Centre is Providing Excellent services of International standard in patient care, training and research. The **Mission** is to develop professional skilled and Motivated staff to provide excellent services, training and research using appropriate technology through partnership with the private sector and other stakeholders, in an environment-friendly manner. One of our **Core Values** is summarized in a slogan Prevention Is Better Than Costly Cure. Hence, we conduct regular awareness programs, screenings and vaccinations to reduce health risks by partnering with other institutions to bring the best of preventive services to our clients. To make healthcare accessible and affordable, we continually negotiate with renowned pharmaceutical companies, diagnostic firms as well as medical suppliers and specialists to obtain the best products and services at the best rates.

* 1. **PHARMACY DEPARTMENT**

The Pharmacy Department is distributed into several units across Taprobane. It is primarily responsible for the proper supply of medicines alongside proper storage and distribution throughout the hospital. The Pharmacists mostly work alongside the Physicians and Nurses in the Wards in giving the right medications, right dose and also provide drug counselling to the right patients. The majority of hospital Pharmacists are involved in patient Pharmaceutical Care which is the responsible for the provision of drug therapy for the purpose of achieving positive outcomes that improves a patient’s quality of life. These outcomes are the cure of diseases, elimination or reduction of a patient’s symptomatology, arresting or slowing of a disease process or preventing a disease. They also involve in dispensary management, medicine information, aseptic compounding and medication safety.

# Pharmacy units in Taprobane

* EMERGENCY UNITS
* Accident and Emergency Units
* Children Emergency Units
* In-Patient Pharmacy Unit
* IPP Unit
* Staff Clinic Pharmacy Unit
* Out-Patient Pharmacy Unit
* Pharmacy main store

# **2.0 TRAINING PROGRAMME**

# **2.1 DESCRIPTION OF TRAINING EXPERIENCES**

During my SIWES training at Taprobane pharmacy, I carried out my training program in one pharmacy department. i.e. Children Emergency Pharmacy.

# CHILDREN EMERGENCY PHARMACY

I resumed work at the Children Emergency Pharmacy Department on the1st of July, 2019. On the first day, I was introduced to the operations and activities in the Unit. Before the end of the day, I got familiarized with the Unit and Drugs present in the Pharmacy. The Children Emergency Unit deals with child patients in Wards. They attend to Patients in the ward by dealing with their treatment sheet which contains their profile and the drugs prescribed by the physician. These Treatment sheets are sent to the pharmacy for review and dispensary of the drugs prescribed to respective patients in the ward. I learnt about the proper routine of attending to Prescriptions (Interpretation, Assessment and Dispensing and Counseling). I went through most of the Prescriptions to check for completeness and accuracy. On a daily basis, I learnt extensively about the component of drugs while carrying out desk work activities in the Unit. I was also allowed to Assess, Dispense and counsel some patients, all under the supervision of the pharmacist-in-charge.

During my training period in this department, I learnt how to carry out actual drug compounding, initially by checking for the drug suitability/stability in Syrup in the Official Drug Book, how to calculate the required number of tablets and volume of syrup to be used for the formulation, and also the various compounding ethics and labelling.

***No of Tablet = Prescribed drug strength × Daily dosing × (Duration of use + 1)***

***Available drug strength***

***Volume of Syrup = 2.5ml × Daily dosing × (Duration of use + 1)***

***Where; Duration of use is usually 2 weeks(14days) and the +1 is for calculation in excess for spillage, Prescribed drug strength is the amount in mg of the drug prescribed by the doctor, Available drug strength is the amount in mg in which the drug usually comes as, Daily dosing is the frequency of drug usage in one day.***

On the first working day of each month, the Unit visits the wards to carry out the headcount of the patients currently in the ward, while recording and updating their Data and their diagnosis as well as monitor the doses of the medications given, which are obtained from their case file. During my stay at the hospital I was privileged to learn about the basic pharmacology of some drugs like anti-malaria, anti-fungi, anti-bacterial, anti-ulcer, anti-diabetic, anti-hypertensive and so much more. I learnt about their mechanism of action, their dosage as well as the different types. At the End of the month, I assisted the Pharmacists to take stock of all the drugs in the unit which is an end-of-the-month routine in the pharmacy. At the end of my Internship Program in Taprobane, I was privileged to join the medical students who were led by Consultant for a ward-round in Taprobane ward, where I was able to learn new medical knowledge such as the SOAP format used for documentation, drug-drug interaction, adverse effects and also intervened and contributed in the process of learning. I was also assigned the job of inputting the patient’s data and prescription records into the system for record purposes which enabled me to learn the importance of documentation in Pharmacy and as a result, I got familiarized with the classes of Drugs present in the Unit day by day.

During my three months stay at the hospital I was able to carry out adequate pharmaceutical care and resolve drug therapy problems, also counselled several patients on how and when to use their medications, I was able to appreciate Pharmaceutical care after we visited the patient’s ward on ward-round with consultant.

**Experience Gained**

My SIWES experience gave me the opportunity to gain skills which can be divided into two different types: Soft and Cognitive skills.

Soft skills:

1. Communication.
2. Time management
3. Team work.
4. Critical thinking
5. Research and analysis

# Cognitive skills

1. Critical Thinking.
2. Research and Analysis.
3. Initiative.

# **3.0 OBSERVATIONS AND CONTRIBUTIONS**

# **3.1 OBSERVATIONS**

As a student, my first observation was the cognition of the difference between the “school environment and its activities” and the “Work Environment and Activities”, as it is a different ball game entirely. I observed that a hospital environment is completely different from that of a classroom in the sense that the Hospital environment gave me the opportunity to apply the knowledge gained in the classroom. It is where I had the opportunity to learn while delivering services to the patients in relation to unusual clinical problems, uncommon drug interactions and side effects.

I also observed that a hospital environment is the ideal place to gain a vast knowledge of many disease cases and their different pharmacological approach of treatment, interacting with patients and having their drug profile and history assessable to the pharmacist. Furthermore, drug companies come around to present on their new development of drugs and indication of their products, their interactions, side effects and superiority over other products which helps to improve learning and awareness of their products.

# **3.2 CONTRIBUTIONS**

My contributions were shown in my work done and services as a SIWES student. I was able to maximize the Job efficiency and work output in my Units by assisting in carrying out the various activities in the pharmacy such as aiding the work rate of the pharmacists by assessing, dispensing prescriptions and counselling patients under supervision, stock counting and compounding of drugs into liquid formulation thereby speeding up the job completion process and reducing the workload of the working Pharmacist in the units. I also assisted in putting into the hospital records, the patient’s data and their drug information.

# **3.3 CHALLENGES ENCOUNTERED**

One of the challenges I encountered during my SIWES was obtaining of industrial placement. It is quite difficult to get accepted for industrial attachment in proper organizations due to congestion and bureaucracy in such organizations, and the lack of formidable existing industry partnerships between the university and key industry players.

Another challenge faced was the fact that situations that warrant high tasking knowledge capacity were not coming forth.

There was also a distinct hierarchical emphasis rather than equal human emphasis in the employees’ relationship phase.

# **CONCULSION AND RECOMMENDATION**

# **4.1 CONCLUSION**

My three-month experience, although short, was intensive and enlightening as I was exposed to various pharmaceutical structures and a more practical learning. I appreciate being given the opportunity to learn and I also commend the department in charge of this experience. I benefited a lot in the industrial attachment in the sense that I was able to apply the theoretical knowledge gained from the university into practice through the many activities, tasks, assignments I was given. I got different ideas from the employees and interns at the organization and this contributed a lot on the experience gained. Finally, my internship was highly educational and therefore I would encourage that the school continues to give students this opportunity.

# **4.2 RECOMMENDATIONS**

To SIWES Office

1. Job enlargement: The management should see to it that they carry out job enlargement and enrichment such that it mitigates the conflict amongst employees for roles and tasks. This will ensure good industrial relations between the supervisors and subordinates at the organization.
2. There should be opportunities for students to go to for field trip.
3. Serious supervision to the students: The organization should increase and ensure more supervision over the student.

To University:

1. Constant supervision of students: I recommend the university to carry out constant supervision and monitoring of students during the internship training so as to encourage them to perform the duties fully and also accurately. This will also put a close link between the academic supervisors and the field supervisors so as to foster appropriate assessment of what interns are doing in the field.
2. Provide internship placement for student: The University should provide internship positions or recommendations for student according to their respective programs undertaken at the University in order to ease their training periods and also avoid the pain gotten by students in search of internship placements.