

**STUDENTS INDUSTRIAL WORK
EXPERIENCE SCHEME
(SIWES)
TECHNICAL REPORT**

BY

**BASSEY EMEDIIONG DAVID
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**FACULTY OF PHARMACOLOGY,
AFE BABALOLA UNIVERSITY**

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1.0 Introduction

1.1 Purpose of Training

In 1973 the Industrial Research Fund (ITF) launched the Student Industrial Work Experience Scheme (SIWES). This was to upgrade students' practical awareness in the Universities, Polytechnics and Technology Schools.

It sought to close the gap between the theoretical knowledge gained in classes and the industry's technical knowledge by giving students the opportunity to apply their educational knowledge in real work situations. Over the years, SIWES has made an enormous contribution to building the popular pool of technical and allied skills available in the Nigerian economy required for the industrial development of the country.

However, the position and importance of SIWES is demonstrated by the fact that the scheme leads to the enhancement of the standard of the technical skills commonly available in the pool through which the employer's source of technical skills provides the student the opportunity to combine the theoretical knowledge gained in the classroom with the practical implementation of the information needed for the execution of the work. It also prepares students for employment, and after graduation makes the transition from school to the world of work easier.

I undertook my SIWES at Kubwa General Hospital, Abuja (Pharmacy Department) which is located at Kubwa, Abuja Nigeria from June to September 2019.

Pharmacy is the science and technology by which medicines are manufactured and distributed. It is a health career that combines health sciences with chemical sciences and aims at ensuring the safe and efficient use of drugs.

The scope of pharmacy practice includes more traditional positions, such as drug compounding and dispensing, and it also includes more modern health care services, including clinical services, safety and effectiveness evaluation of medications, and the provision of drug information. Therefore, pharmacists are the drug therapy specialists and are the key health practitioners who maximize medication usage for the good of the patients.

1.2 Brief History of General Hospital, Kubwa

Brief overview of General Hospital, Kubwa: Kubwa General Hospital is a secondary health care system developed by the Municipal Area Council, Abuja. This is a secondary health facility since the health care services are operated by, for example, medical practitioners, dental practitioners and other health professionals who do not generally have direct contact with the patients: cardiologists, pharmacists in the hospitals. It needs medical care: treatment is needed for a short period for a brief but serious illness, injury or other health condition such as in a hospital emergency room.

It is a tertiary health institution that consists of many departments: Internal Medicine, Psychiatry, Obstetrics and Gynecology, Dentistry, Pediatrics, Oncology, Radiodiagnosis, Surgery, Forensic Medicine and Allied Services (Medical Social Care, Nursing Care, pharmacy, and Physiotherapy).

About the Ministry:

VISION: "To achieve excellence in the provision of healthcare services by applying best practices at all levels of care" MISSION: "To provide qualitative, accessible and sustainable healthcare services to people using appropriate technology through highly motivated workers" HIM's Special Advisor on Wellbeing and the Permanent Supports the Commissioner.

1.3 Pharmacy Department

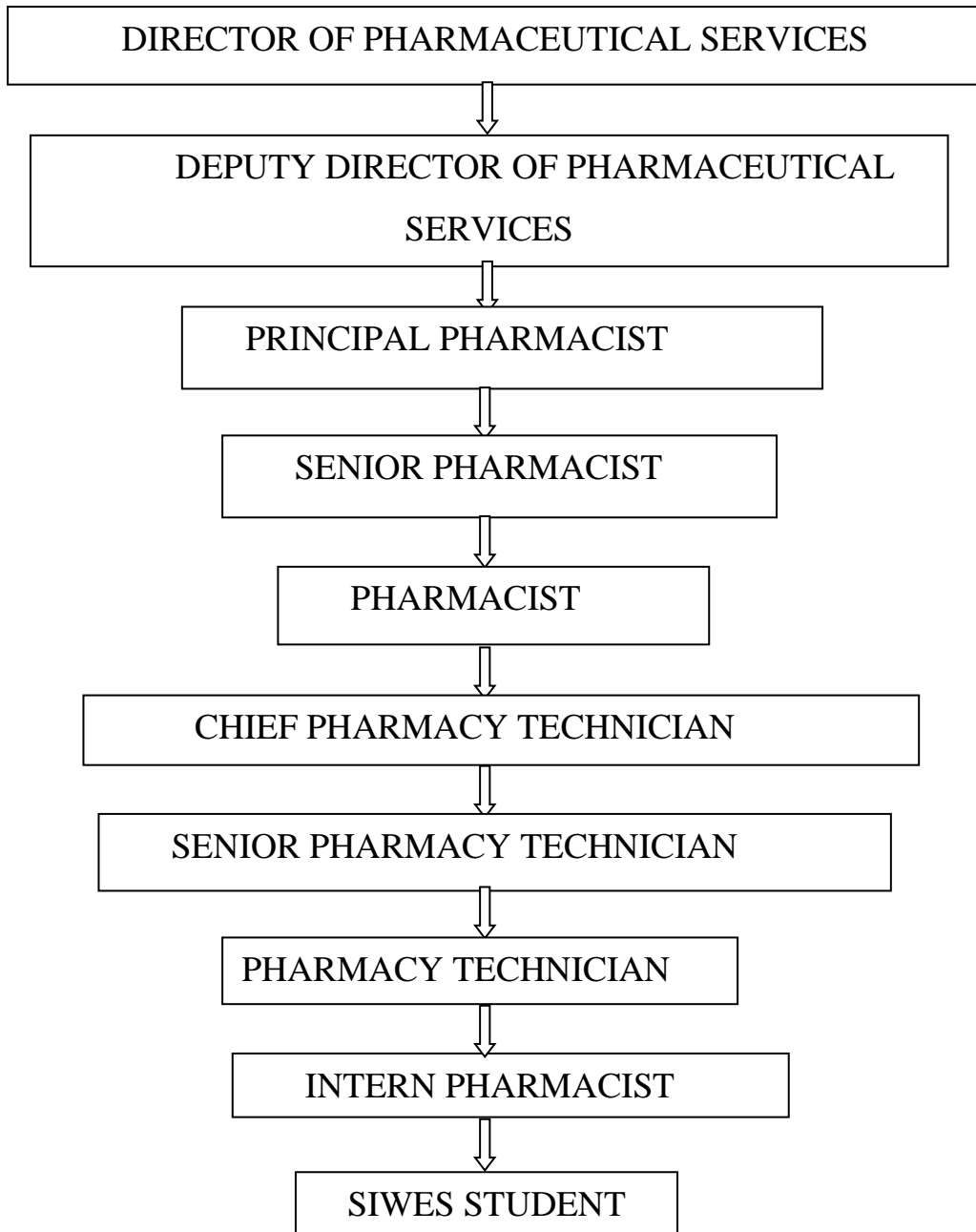
The Department of Pharmacy is divided around General Hospital, Kubwa, Abuja into several units. Alongside proper storage and distribution throughout the hospital, it is primarily responsible for the proper supply of medicines. We (pharmacist) work mainly with the doctors and the patients' nurses to advise the right patients about the right medications, the right dosage and the right drug therapy.

Most hospital pharmacists are interested with clinical treatment for patients, and is responsible for delivering medication therapy to achieve definite results that increase the quality of life of a patient. These findings are the cure of illnesses, the reversal or reduction of the symptomatology of a condition, the arrest or slowing down of a disease cycle or the prevention of a disease. They often include supervision of the dispensary, details on drugs, aseptic compounding and health of medication.

1.4 Services Offered

- Pharmaceutical
- Administrative Services
- Education and Training Services
- Accident and Emergency Services
- Out Patient Services
- In Patient Services
- Pharmaceutical storage & management Services

Organogram of the Pharmacy Department



1.5 Core Values

- Offering effective and reliable medicines that are carefully picked, procured, accessible and at all times.
- To include responsible and successful clinical ward rounds, monitoring of medicinal medications, monitoring of adverse drug reactions and treatment of patients for optimal patient satisfaction;
- To provide patients with adequate medical treatment by collaborating with other health care services in and outside the hospital.

1.6 Objectives

- Consider programs covering pharmacy services, training, research, and social responsibility that will support patients.
- Develop a program to make drugs available, accessible and affordable at all times to the patient.
- Drug revolving fund financing program.
- To promote fair use of pharmaceutical products by health care professionals and patients.

2.0 Training Programme

During my SIWES, I carried out my training program in various pharmacy departments namely:

- Free Health
- Fee-paying
- Store

2.1 Free Health Section

On day one, I was introduced to the hospital pharmacy operations. I've been given guidance on the various parts and their specific activities. I engaged in the tallying of the prescriptions attended in the section under the guidance of senior pharmacists and filing the prescriptions into various registers. Opened registers were:

- 0-12 years old(served and unserved)
- 60+ years old(served and unserved)
- Eko malaria and Free Health
- National Malaria
- Staff/Destitute (served and unserved)
- Tally Register

I often engaged in the balancing of BIN cards, where the amount of drugs taken from the pharmacy (depending on their package) and the amount dispensed at the end of the regular change.

Under this section, the HIV clinic is also run every Wednesday (though patients are handled as they arrive). I was given basic guidelines for treating HIV by the WHO. I also got acquainted with the groups of antiretroviral drugs, examples widely used in clinical practice that are typically mixed according to the recommendations of the WHO and their specific side effects. I also learned about the antiretroviral combination theory. Under a senior pharmacist's guidance, I filled out the prescription for HIV patients in the registers of ARVs

(pharmaceutical care service and adult pharmacy order form). I also learned how to advise patients on the basis of the medications issued. I also learned about the basic guidelines on the treatment of HIV-positive pregnant women to prevent transmission from mother to child. Example of a combination of fixed dose antiretrovirals used is: Lamivudine + Tenofovir + Efavirenz. I have heard about medications for prophylaxis of opportunistic infections offered to patients, for example. Isoniazide and Trimethoprim-sulfamethoxazole (also known as cotrimoxazole).

The pharmacists work together to deliver medications to staff and patients with national health insurance. (Both Primary and Secondary).

Every Friday in this unit the weekly pharmacist intervention meeting and the monthly departmental meeting were also held. Presentations are made on their products and various subjects by Pharmaceutical Companies and Pharmacists respectively. I've learned how to present.

2.2 The Fee Paying Section

I began my pharmacy fee training by going through the department. The pharmacy is divided into the costing section, the dispensing section and the counseling section. I learned how to view medications and link their specific brand names to the generics. The drugs given here are grouped according to their specific groups, i.e. antimalarials, antihypertensives, antibiotics, pain relievers, etc. I also learned how to balance the bin card's daily stocks.

For In-Patients

- Offer admitted patients medicine and prescription treatment.
- Inspect and monitor the use and distribution of medications in all areas of treatment;
- In-patients consultation services on medicines.
- Pharmacy consultant to patients and healthcare professionals.

I also got familiar with the consumables in the poison section such as cannula, catheter, plaster, intravenous fluids, injectables and medications. I've even learned how to treat and dispense poisons. I've also discovered the value of pharmacy documentation.

Summary of work done at the fee paying department



2.3 Store:

A principal pharmacist and a pharmacy technician run daily to assist in this section of the pharmacy. I was brought around the store and learned about the conditions for proper storage of drugs, the criteria used, for example, to maintain / monitor the rooms where the drugs are kept; room temperature is measured regularly and reported in the temperature map. Under the supervision of a senior pharmacist, I took part in the filling of a requisition book where drugs are written out of stock at the pharmacy to be supplied either by the store or by external suppliers, i.e. drug manufacturers. I have also learned how to treat the medicines supplied, allowing their entry into the applicable databases and Ledger. I also learned the importance of documentation, which is important for transparency, in keeping store records. I also took part in ward rounds and health talk given to patients in the various wards that are normally led by the matrons. I gave a presentation on analgesics, with a focus on non-steroidal anti-inflammatory drugs and opioid analgesics, their action mechanisms, examples and differences.

3.1 Relation of Experience of Work to Theory Learnt in School.

3.1.1 With Respect to theory learnt in school:

- I was able to connect the compounding technique learned in the pharmaceutical industry with the compounding of drugs I used in Children's Emergency Pharmacy. In which I learned new methods of compounding from calculation.
- I was able to carry out sufficient health treatment and fix issues with medication therapy, and counseled many patients about how and when to use their medicines.
- I was able to understand more clinical care after visiting the wardrobes of the patient with experts, i.e. inspecting them, reviewing their treatment sheets and interfering in their prescription where appropriate.
- Based on what I studied in Clinical Pharmacy and Pharmacology, I was able to understand more about drug-drug interaction and drug-food interactions and the side effects of drugs.

4.0 Observations and Contributions

4.1 Observations

My first impression as a student was the understanding of the disparity between the "learning atmosphere and its activities" and the "employment atmosphere and activities," because it is quite a different ball game. I found that a pharmacy at the hospital doesn't look like a classroom setting in which lectures are offered. It is a place where in the classroom one learns what he / she has learned. Often, a place where you have the ability to learn about rare health conditions, abnormal medication interactions and side effects when providing care to patients.

Also found that a hospital pharmacy practice is one of the best pharmacy fields where one can have detailed knowledge of several disease cases and their specific pharmacological approach to care, understanding patients and getting a pharmacist's drug profile and background. Drug developers also come around to discuss their new drug discovery and product definition, their reactions, adverse effects and dominance over other drugs that serve to enhance their product understanding and knowledge.

4.2 Contributions

My achievements as a SIWES student have been seen in my work done and services. I was able to improve job productivity and task performance in my Posted Units by helping to carry out the pharmacy's desk work activities such as assisting pharmacists' work levels by reviewing, distributing medications, and advising patients under supervision, stock counting, and liquid formulation compounding. This would speed up the job completion process and the the workload of the Pharmacist working in the units. Often, helped with bringing the details of the patient and their prescription history into the hospital records.

4.3 Challenges Encountered during period of Training

Some of the obstacles I came up against during my SIWES program are:

- Costing and filling the prescriptions but as time went by, I was able to get used to the method, the rates and estimates of the amount of pills that the patient would be using for a defined period.

- Short number of pharmacists available, resulting in a substantially higher workload on the individual pharmacist, slowing down the patient service delivery process. This could lead to disappointment on both ends
- Prescription shortages and sluggish delivery of "out-of-stock" drugs and so in these situations I had to write out the patient's outstanding medications so they could shop outdoors.
- Knowing the handwriting of certain doctors was another problem I faced but with the aid of pharmacists I was able to overcome this problem.
- Costing mistakes due to abrupt shifts in medication costs, incorrect dose, intensity etc.
- Attitude and impatience when coping with challenging patients. I was able to deal with this with a good attitude towards the job.

5.0 Conclusion and Recommendations

5.1 Conclusion

My Three-month internship at the Kubwa General Hospital, Abuja (Pharmacy Unit) as a Pharmacy Student was a big success and a wonderful opportunity to learn knowledge and skills. It introduced a more realistic approach to pharmacy awareness and was a look into the world of hospital pharmacy practice including their positions, primarily obligation in the health care system. Through my research, I was able to appreciate my chosen study course (Pharmacy) even more because I had the opportunity to combine the theoretical knowledge acquired from school with the practical application of the knowledge learned here to engage in patient-related clinical problems that contributed to my organizational effectiveness in a way. My training here has given me a broader understanding of the importance and relevance of pharmacy in the local community and hospital, as I look forward now to joining my future colleagues in improving the pharmacy profession positively after graduation. Drug Reactions and Pharmacy Treatment have acquired a wide range of perspectives in relation to medication definitions & evaluations and dispensary.

I was also able to improve my communication and presentation skills and developed a good relationship with pharmacists and interns in the workplace and with patients in particular. I was also able to appreciate the link between my course of study and other health-related disciplines in achieving a common goal of interest for the patient.

5.2 Recommendations

With Respect to Challenges stated above:

I use the means to make the recommendations the follow.

First of all, I propose that technology be greatly improved in the area of storing the medical records of patients present in the wards, and also that the software "HospiPharm" used in the assessment and costing of medications be regularly modified in other software to obtain the patterns of drugs available in the hospital and their current prices.

Also, I recommend also that the government hire more trained pharmacists to make research simpler, cheaper, and more effective than others. They don't have enough or no time at all to adequately supervise and instruct trainees. I also propose that the government have accountants or financial experts in charge of paying prescription expenses and even the patient bill as a full-time job so that the pharmacist can focus exclusively on patient drug

treatment and pharmaceutical services to increase the quality of health care and life in general.

During the programme, allowances should be provided to students just like NYSC and not after. It will significantly help them deal with any financial problems during their training course.

References

- Students industrial work experience scheme guide to successful participation in SIWES by Olusegun A.T. Mafe.
- EMDEX; The complete drug formulary for Nigeria's Health Professionals. 2018-2019 edition
- BNF for Children: British National Formulary 2018-2019 edition