KWARA STATE POLYTECHNIC

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A TECHNICAL REPORT OF STUDENTS' INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES) REPORT

HELD AT:

AROWOLO CLINIC AND MATERNITY

(Zone C, NO 87, Amuyetola Street, Elekoyangan Ilorin, Kwara State)

PREPARED BY:

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ND/23/BAM/PT/0219

SUBMITTED TO:

DEPARTMENT OF BUSINESS ADMINISTRATION, INSTITUTE OF FINANCE AND MANAGEMENT STUDIES, KWARA STATE POLYTECHNIC, ILORIN.

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF NATIONAL DIPLOMA (ND).

FROM
AUGUST--NOVEMBER, 2024

PREFACE

This contain a written report of the work done by me during the four-month industrial attachment with one of the best Organization in Ilorin, which is Arowolo Clinic & Maternity.

This work goes further to share the experience I had in the station.

This summarize all the things I learnt and the problems encountered by me, my recommendation and conclusion of all my work.

CERTIFICATION

This is to certify that **ISIAKA SHAKIRAT OMOLARA** with Matriculation number **ND/23/BAM/PT/0219** of the Department of Business Administration, Kwara State Polytechnic Ilorin, Kwara State, has successfully completed his four months Student Industrial Work Experience Scheme (SIWES) which is conducted at Arowolo Clinic & Maternity.

_____ _____

Isiaka Shakirat Omolara Signature/Date

(**STUDENT**)

_____ _____

SIWES Supervisor Signature/Date

_____ _____

Departmental SIWES Coordinator Signature/Date

DEDICATION

This work is foremost dedicated to Almighty God for His unquenchable love and gift of life during the pleasant course of my SIWES program, and my Parent Mr. and Mrs. Isiaka and my beloved brother and sisters for their amble financial support and unseasonal advice toward my academic pursuit.

ACKNOWLEDGEMENTS

With an immense gratitude, I want to acknowledge the Almighty God (most superior) for His continuous love, grace and faithfulness, and his providence throughout the period of my SIWES programme. I want to acknowledge the effectual effort of my beloved parents Mr. and Mrs. Ayoola.

I also acknowledge all the staffs of Arowolo Clinic & Maternity (Organization Supervisor) alongside for their cordial tutorship of all I need to know about the administration.

I say thank you to you all for the opportunity and privilege granted to me to serve under your amicable organization.

Finally, this report will be incomplete if I failed to acknowledge my academic supervisor for their precious effort.

ABSTRACT

This report holds a review of the Student Industrial Work Experience Scheme (S.I.W.E.S), at Arowolo Clinic & Maternity. The nature of this report spans the duration and findings during the program, including duties of an administrative office, daily activities and procedures through which files are received, record and documentation.

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CHAPTER ONE

1.0 Introduction

The studens industrial work experience scheme(SIWES) is an accepted skill training programme which forms part of the approved minimum academic standards in the various degree programmes in Federal University Dutsin-ma and other universities as well.The scheme is organized to expose and prepare student of higher institutions of learning to the life of industrial work situation they are likely to meet after graduation.

The scheme prepares students for labor market. It has become an innovative phenomenon in human resources development and training in our country. A great deal of knowledge and tremendous skill of medical laboratory science and microbiology was imbibed on me during the six months of rigorous training I went through at Arowolo Clinic and Maternity, Ilorin Kwara State.

1.1 Historical background of SIWES

The student industrial work experiance scheme(SIWES) was iniatiated by the industrial training fund(ITF) in 1973.The programme was designed to close the existing gap between the theory and practical oriented course in tertiary intitutions.The scheme is also coordinated by industrial training fund(ITF). The ITF was established by the decree 47 of 1971 and charge with the responsibility to “promote and enlarge the acqusition of skills in industry and commerce with a view to generate a pool of indigenous trained man power sufficient to meet need of the economy”

1.2 Aim/ Objectives of SIWES

SIWES is usually undertaken for a minimum of six months and is being funded by ITF to exposed students to many practical aspects that are lacking in school.

The objectives of the unit is to ensure that students in science and technology based disciplines are made to acquire practical knowledge so that when they get employed on graduation, they become immediately productive with little or no further training in the field of specialization.

1. To provide an avenue for students in the university to acquire industrial skills and experience in their course of study.
2. To prepare students to the work situation they are to meet after graduation.
3. To expose students to work methods and techniques in handling equipment and machineries that may not be available in their institutions.
4. To make the transition from school to the world of work easier and enhanced students contacts for later job placement.
5. To provide students with an opportunity to apply their knowledge in real work situation thereby bridging the gap between theory and practical.
6. To enlist and strengthen employers involvement in the entire educational process of preparing university graduates for employment in industries.
7. To motive students to practice the right working attitudes and professionalism to increase their employability potential.
8. To facilitate students to potential employers.

CHAPTER TWO

2.0 HISTORY OF PLACE OF SIWES

2.1 Brief history of Arowolo Clinic and Maternity

Arowolo Clinic and Maternity was established on February 1, 2005 by Dr. Arowolo Olusesan, a dedicated physician with a vision to provide quality healthcare to the community. Initially focused on maternal and child health, the clinic quickly gained a reputation for its compassionate care and commitment to serving families. Over the years, Arowolo Clinic expanded its services to include general healthcare, immunizations, and family planning. In 2015, the clinic underwent management changes but continued its mission under the leadership of Dr. Arowolo Olusesan, who returned to ensure the clinic maintained its high standards. Located at No. 15 Eleko Yangan Road, Ilorin, the clinic remains a cornerstone of healthcare in the area, dedicated to improving the health and well-being of its patients through modern medical practices and community outreach programs.

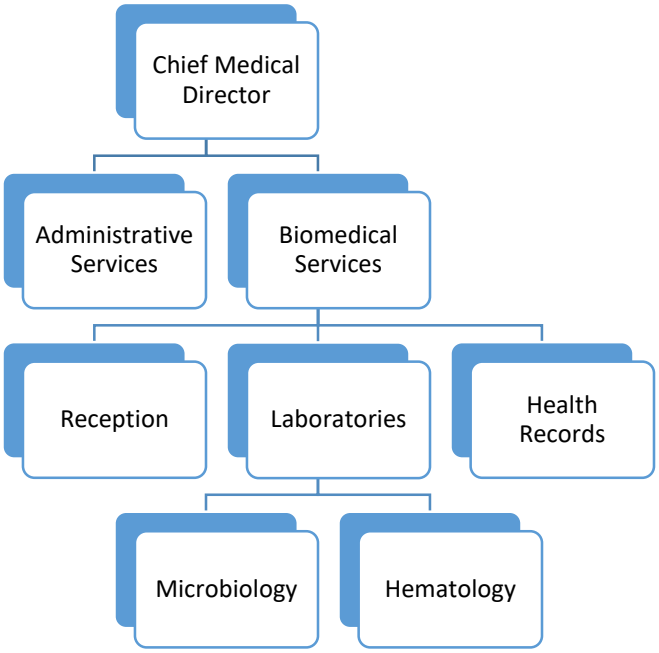
COMPANY'S VISION:

To be a world class human resource agency, ensuring the delivery of qualitative health care services for the people.

COMPANY'S MISSION:

To provide highly skilled and motivated staff with the right attitude to deliver efficient and effective health care to community.

ORGANISATION CHART OF AROWOLO CLINIC AND MATERNITY



2.2 Some medical laboratory materials and equipment and their uses.

- Microscope:- it's used to examine samples and to analyze their contents that are not visible to the naked eye.
- Centrifuging machine:- It is used for spinning specimens e.g urine to enable separation into components or constituents e.g blood into serum and plasma.
- Haematocrit centrifuge:-it is used to spin samples for the analysis of packed cell volume of blood sample.
- EDTA container (Ethylene Diamine Tetra Acetic acid):-EDTA is sometimes used to prevent cells clumping in fluid samples requiring cell counts to accompany a cytology evaluation but it does not actually 'fix' the cells.

- PCV standing rack.
- Test tube.
- Test tube holder.
- White tiles.
- Blood bag.
- Refrigerator.
- Slide and cover slide.
- Biological safety lab.
- Pipettes & access.
- Bunsen burner
- Lancet.
- Capillary tube.
- Universal bottles.
- Microhematocrit reader
- Tourniquet.
- Needle and syringe
- Glucometer
- Refrigerator :-provides suitable temperature for storage and preservation of reagents, blood samples e.t. c.

2.3 Safety precautions in the laboratory

1. Wear hand gloves while carrying out all laboratory procedures and discard after use. Whenever contaminated, wash your hands and wear new ones.
2. Do not touch exposed eyes, mouth or skin with gloved hands.
3. Do not leave the working place or work around the laboratory with gloved hands.
4. Wash your hands with water and soap on removal of gloves and alter the day's work.
5. Wear a laboratory coat when working in the laboratory.
6. The laboratory benches & floors must be kept clean, neat, and free of extraneous materials and blood spillage. Work surfaces should be disinfected when investigations are completed and at the end of each day's work.

2.4 Laboratory Hazard

The microbiology laboratory is a dangerous place, because it deals with many microorganisms (pathogens) from which one may acquire an infection. Microbiology laboratory is of very much concern by the fact that, many routine procedures can generate infection, certain microbial pathogens such as hepatitis B virus, HIV etc. can be transmitted when in contact with blood or by contact with traces of blood or blood serum in hypodermic syringe or syringe needle and Tuberculosis can be contacted by aerosols generation during smear. Therefore, care must be taken when working in the laboratory.

CHAPTER THREE

3.0 Reception/Hematology Unit

This is the place where samples first are received by the laboratory receptionist before being subjected to the actual required test(s). The samples to be collected depend on the type of test and as well the information written on the patient's card/form. These samples include; the urine, blood and body fluids, as well as possible infected tissue and many other body sites. The samples are collected inside the appropriate containers (e.g. EDTA and urine containers), labeled and tagged and then taken to the various departments where the actual test would be done.

Moreover, receipts and tellers are also verified. All necessary information about the patient, the test to be carried out and as well the results are often recorded and filed at the reception for reference purpose. The registers are grouped depending on the type of the test and as well the specific department that the test would be carried out.

3.1 Routine activities

There are certain routine procedures that are always employed irrespective of the department where the test will be done but depending on the type of test. These routine works include, but not limited to the followings:

1. Sample collection.
2. Stained blood smear.

3.2 Registration of Sample Specimen

Usually different kinds of sample are received daily, then to avoid errors certain details are observed to ensure accuracy in reporting. In this case when patient come for a test his/her name is registered and is given a number while the sample are collected from the patient and receipt will be issued unto him/her for proper identification.

The following are the basic information on the sample label and the laboratory request Form:

- ✓ Full name of patient:
- ✓ Age:
- ✓ Sex:
- ✓ Occupation (on form only)
- ✓ Date and time of sample collection Clinical details (on form only):
- ✓ Requested test:

3.3 Collection of Sample

3.3.1 Urine Sample Collection

Urine samples are collected in a wide mouthed glass or rubber bottles with tight fit caps and the patients are instructed on how to produce the sample without contamination and the volume required. In urine tests, early morning urine is the most prepared sample e.g. of urine tests include; pregnancy test, urine sugar, urine protein and urine analysis and microscopy.

Urine container.

3.3.2 Blood Sample Collection

There are two methods of blood collection in medical laboratory,

1. Venipuncture and
2. Capillary blood collection.

3.3.3 Venipuncture (Venous Blood Collection)

Patients were allowed to sit and their arms were tighten with a tourniquet and were asked to fold their palms, then the needle which is attached to syringe was injected into a suitable vein at an angle of about 30^0 after which the blood was withdrawn gently with the syringe.

A piece of cotton wool was placed where the needle was injected and the tourniquet was loosed before the needle was removed out, and the blood was transferred into an appropriate container.

The method is applicable in medical laboratory to obtain blood sample when large volume of blood is required.

3.3.4 Capillary Blood Collection

The area to be stabbed which is the side of the thumb was cleaned with 75% alcohol and allowed to dry, the aim is to sterilizes the skin and promotes a free flow of blood, a stab was made with a sterile lancet and little pressure was then applied to ensure a free flow of blood, the first drop of blood was wiped away, the blood was then filled into a heparinized capillary tube.

Capillary blood collection is of great value in children and adults with difficult veins, but large volume of blood cannot be obtained from capillary.

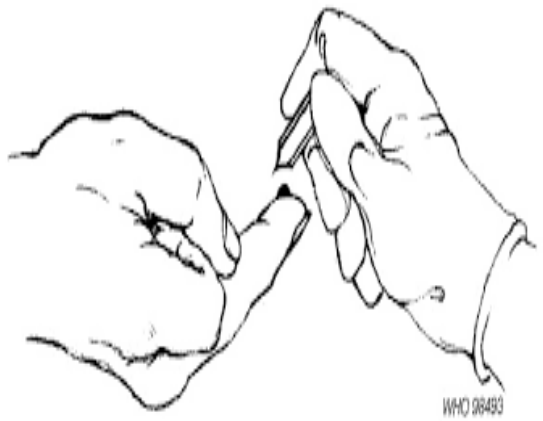


Illustration of capillary blood collection.

3.4 Hematology unit

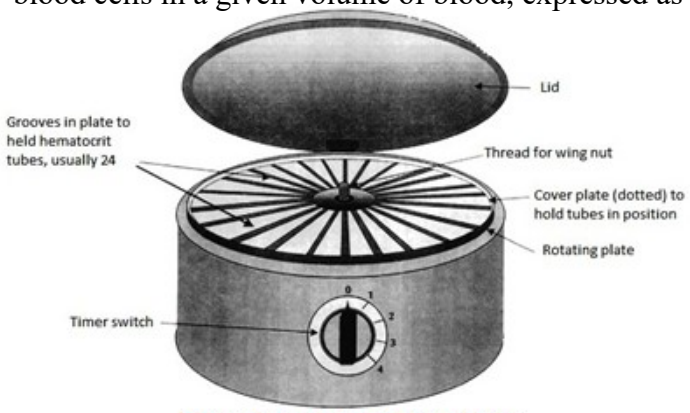
Hematology is the study of blood, blood forming organs and blood diseases. Hematology is also written as haematology. It also deals with etiology, diagnosis, treatment and prevention of blood diseases that affect the production of blood cells and its components such as hemoglobin, blood proteins and mechanism of agglutination (Henry *et al.,* 1974). Some of the tests carried out include: PCV, Blood grouping.

Anti-Sera for Blood Grouping

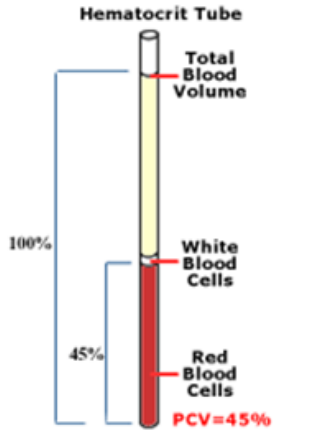
Diagram showing results for ABO blood grouping

3.4.1 Packed Cell Volume (PCV)

Definition: Haematocrit or packed cell volume is the compact volume occupied by the red blood cells in a given volume of blood, expressed as a percentage.



Micro Hematocrit Centrifuge



Centrifuged Hematorit Tube

Aim: To estimate the relative mass of red blood cells present in a blood sample in percentage volume.

Principle: blood is collected in capillary tube containing anticoagulant, and it's centrifuged at 30 min at 3000 rotations/min. The blood column height (H) and erythrocyte column height (h) are determined and calculated.

Materials: Heparinized capillary tubes (glass capillary tubes with a bore of about 1mm and a length of about 7 mm; the walls of this tubing are thin and it is easily sealed by the heat of a very small flame), centrifuge, needle, cotton, alcohol, sealer.

Procedure

i. Blood was drawn by way of a puncture in the finger after disinfecting the finger's surface with alcohol, making sure that the skin of the finger was perfectly dried.

ii. No alcohol or other antiseptic were permitted to dilute or hemolyze the blood.

iii. The first drop of blood was wiped away.

iv. One or two capillary tubes are filled to at least three quarter and the opposite end of the tube was filled (to flame or cement, clay).

v. The tubes were placed into a centrifuge and centrifuged for 5 mins, making sure that the tube was placed into the centrifuge with the sealed end against the ring of rubber at the circumference.

vi. The centrifuge was loaded with an even number of tubes, to properly balance the load.

vii. The proportion of RBC to the total blood volume was using a microhematocrit reader.

viii. The height of the column of RBCs is measured by placing the tube in the mechanical tube reader or using a ruler. The height of the column of RBCs is related to the height of the column of blood introduced initially into the tube.

Interpretation of Result

Normal values for venous haematocrit are between:

42-52% in men.

36-48% in women.

44-64% of newborn babies.

Precautions

i. Ensure that the centrifuge is not open when it's on motion.

ii. Ensure that the tube is sealed appropriately to avoid it being broken.

3.5 THE HIV, HBSAG, AND PT Rapid Diagnostic Tests (RDTs)

HIV Test

Principle

It is an immunochromatographic for the qualitative detection of HIV 1 and 11. The sample bind to the antigen selenium colloid conjugated to form a red line at the patient window site

Aim

To determine the HIV status of a patient using determination method.

Materials/Reagents

- HIV test kit strip - syringes

- Needle - Needle

- Serum sample - tourniquet

- Cotton wool - stop watch

Procedure

- Blood sample was collected from a patient with syringe and kept uprightly to determine the serum from the blood or by centrifuging for 5 minutes
- place 2 drops of the serum samples at the tip of the strip and allow to stay for 15 minutes.

Result/observation

2 lines positive

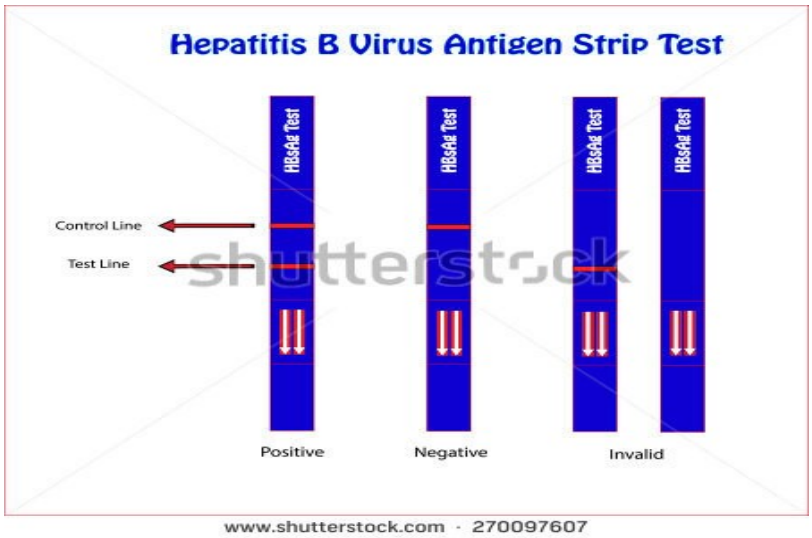
1 lines Negative

No lines Invalid

1 line at the patients control site – invalid

- Materials

Whole blood, plasma or serum (test samples), Stop watch or timer, RDTs complete test kit, Buffer solution, Plastic dropper/pipette, Lancet/syringe, EDTA capillary tube/container.



Hepatitis B strip

Procedure

The test strip was removed and placed on a clean, flat surface. The pipette dropper was filled with the specimen and about 30-50µL of the sample (depending on the kit) from the pipette or finger prick blood was dispensed onto the sample pad and a drop (about 30-50µL) of the sample diluents was then added immediately. The timer was set-up and the result was read in 15 minutes. Positive results could be visible as short as 1 minute.

- Results and Interpretation

If the antibodies to the suspected infection/disease are present in the sample, the antibodies bind to the antigen coated on the pads forming a red colored line/bar on the patient (P) window bar/test (T) band.

Conversely, if the suspected antibodies are absent, the sample flows past the patient window (T band) and No colored T band/line is formed and hence, only a single line is formed on the control (C) band.

- Interpretation of Assay Result

- **Negative Result (1 Band):** If only the C band developed, the test indicates that no detectable antibody found. Hence, the result is recorded as negative or non-reactive.
- **Positive Result (2 Bands):** if then both the C and T bands developed, the test indicates for the presence of the suspected antibody in the specimen. Hence, the result is recorded as positive or reactive.
- **Invalid Result (No Band):** if no C band is developed, the assay is invalid regardless of the color development on the T band. Hence, the assay is repeated with new device.

3.6 Microbiology/Parasitology Unit

3.6.1 Malaria/Parasite test

Malaria parasites is the causative organism of malaria which are protozoan organisms belonging to the genus plasmodium of the sub-class coccidia. Malaria is an acute febrile disease that can put more men out of action than battle casualties. It is one of the most widely prevalent diseases in the world before the advent of human immunodefiency virus (HIV) and had been described globally as the number is public health problem.

- Diagnosis

Laboratory diagnosis of malaria involves identification of malaria parasite or its antigens/products in the blood of the patient.

- Materials

Whole blood (test sample), Microscope, Glass Slide , Oil immersion Stain (Giemsa stain).

- Principle of the test

Malaria parasite test is a type of test that is carried out in diagnosing malaria, to monitor for relapse, and to determine drug susceptibility of the parasite(s) causing the infection. Malaria is an infectious disease caused by *Plasmodium* parasites, which are primarily spread by infected female anopheles mosquitoes.

The microscopic test procedure is the most commonly used method which involves identification of the malaria parasites under the microscope. Other non-microscopy test is:

- Rapid diagnostic test (antigen/dipstick or strip test)

- Procedure

Blood smear/film was made and allowed to dry (10 minutes for thick film). The film slide was placed on a staining rack over the sink, flooded with a stain/dye (e.g. Giemsa) and flooded with distilled water for few minutes (Giemsa stain; 10 minutes). It was allowed to air-dry. Finally, oil immersion was added on the stain and viewed under the 100X oil immersion objectives lens.

- Results and Interpretation

The result of MPs often appears as “ring-shaped RBCs” with a small lobe/head (Figure 3.4). These shapes may vary in their colors, sizes and shapes, depending on the type and stage of then specie present. The *P. falciparum* were often found present. The result of the thick and thin blood smear may show:

Normal: No parasite is present in the RBCs and hence recorded as Negative Result. The test will be repeated for 1-2 days if the malaria parasite is still suspected.

Abnormal: Malaria parasite(s) is/are found present. Hence, the infecting *Plasmodium spp.* is identified and also the percentage of the RBCs infected by the *Plasmodium parasite* (density) is determined and recorded using format given below.

The results were mostly interpreted and recorded using the “plus system’’-which is less precise as variation in the thickness of the film results in false variation in parasite count.

- Application of the test

The major application of the test is to diagnose Malaria which then monitor for relapse, and lastly to determine drug susceptibility of the malaria parasite(s) causing the infection.

A Microscope

Microscopy is a gold standard for laboratory confirmation of malaria. A drop of the patient blood is collected by finger prick, or from a larger venous blood specimen. It is then spread on a glass slide (blood smear) dipped in a reagent that strain the malaria parasite (Giemsa Stain), and examine under microscope at a 100× magnification. Malaria parasite is

recognizable by their physical features and by the appearance of red blood cells that they have infected

3.6.2 Rapid Test for Malaria (RDT)

Aim: To detect the presence of antigen *plasmodium falciparum.*

Materials: Disposable sample applicator, alcohol swab, test strip, lancet.

Principle of the Test: The malaria antigen *plasmodium falcifarum* test device contain a membrane strip, which is precoated with mouse monoclonal antibodies specific to Histidine rich protein II of plasmodium *falciparum* on the test line. The mouse monoclonal antibodies specific to *plasmodium falciparum* HRP-II conjugate with *plasmodium falciparum* antigen on the sample, they move along with the membrane chromatographically to the test line and form a visible line as antigen antibodies complex.

Procedure: The kit stored at a temperature less than 0, then removed from the foil punch and placed on a dry flat surface. Two drop of serum was applied to the sample port and to allow reacting, antibodies specific to *plasmodium falciparum* HRP-II will react with the linked antigen. The antibody complex move chromatographically along the membrane to the test and control region of the test device.

Interpretation of Result

Positive Result: The presences of two colored bands within the result window regardless of which band appear indicate positives result.

Negative Result: The presence of one colored bands within the result window indicate negative result.

Invalid Result: If the control line is not visible within the result window after performing the test, is considers as invalid.

Precaution

i. A disposable capillary pipette for each sample was used to avoid cross-contamination of sample, which could produce erroneous results.

ii. The lancet and alcohol swab if package is pierced or damage were discarded.

3.7 Widal Test

Aim: To investigate the presence of *Salmonella typhi* and *para typhi* in the serum of patient.

Introduction: This is a test for typhoid fever. It is the method used to detect the presence of *Salmonella species* which is the causative agent of typhoid. Anti stained antigen suspensions are the identification and quantitative determination of specific antibodies in human sera following infection with *Salmonella species.*

Materials: Cleaned dried tile**,** Widal reagents**,** Pipette, Stirrer. Blood/serum (test sample), Widal test kit, Centrifuge, Stop watch (optional)**,** EDTA container.

Principle: A patient suffering from typhoid fever develops antibodies specific to the infecting organism. Widal test is a test for presence of the antibodies in significant concentration. The bacterial suspension (antigen) is mixed with patient's serum in various dilutions. Appearance of agglutination in highest dilution determines the titre of the serum.

Procedure: One drop of serum to be tested was placed, and then one drop of widal antigen suspension was added appropriately to the reaction circle containing patients serum. Mixed contents of each circle uniformly over the entire circle with separate mixing stick, Rocked the slide gently back and forth, and observed for agglutination macroscopically at one minute, if agglutination is visible within in one minute with patients the proceed quantitative estimation.

Interpretation of Result

Agglutination is a positive test result and indicates presence of the corresponding antibodies in the patient serum. No agglutination is a negative test result and indicates absences of the corresponding antibodies in the patient serum.

Highly reactive…….1:320 (agglutination reaction before 60 seconds)

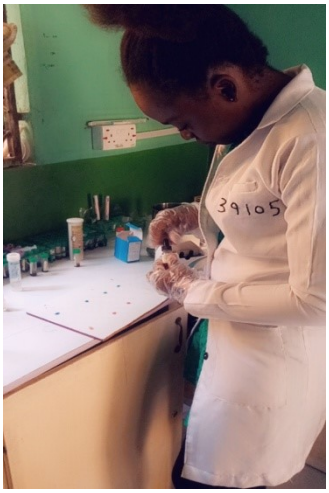
Very reactive…….1:160(agglutination reaction before 120 seconds)

Reactive ……1:80(agglutination reaction before 180 seconds)

Non significant……1:40

Non significant…….1:20

Nonreactive…….Nil



5: Widal slide test.

- Application of the test

- For quantitative estimation of antibodies in enteric fever.
- Causative *Salmonella* can be diagnosed i.e. the causative specie type.
- To enumerate the "H" and "O" *Salmonella* antigens.

Precautions:

- All the reagents were brought to room temperature before used.
- Cleaned and dried glassware were used.
- I made sure that the serum was cleared.

3.8 Blood Glucose Test

Aim: To quantify the amount of blood glucose.

Clinical Significance: When blood glucose level rises above 5.56mmol/L, the condition is hyperglycemia. A fasting blood glucose level which is less than 4.44mmol/L is known as hypoglycemia.

Two types of glucose test that were carried out which are;

3.8.1 Fasting Blood Sugar (Fbs):

This refers to blood collected after a period of no food intake. For adults, it is collected after 10 to 16 hours and children were after 6 hours.

3.8.2 Random Blood Sugar (Rbs):

This involved blood collected at any time regardless of food consumption used for prognosis.

3.8.3 Blood Sugar (Glucose) Test Using Glucometer

Materials: Blood (test sample), Glucometer, Lancet, Elastic band (tourniquet), Alcohol, Cotton wool.

Glucometer and strip.

Procedure: The blood sample was collected and the glucometer strip was inserted into the glucometer. A drop of the blood (1-7ml) was placed on the glucometer strip and the result was read after about 5-8 seconds

Purposes/Application:

i. To check for diabetes and or pre-diabetes.
ii. To monitor treatment for diabetes.
iii. To check for diabetes that occurs during pregnancy (gestational diabetes).

Precautions:

i. The glucometer was ensured to be operated as directed by the manufacturer.
ii. The strip and memory used were ensured to be compatible with the glucometer.
iii. Other Standard Operation Procedures were adhered.

Normal Range:

Fasting Blood Sugar: 3.8-6 mmol/L (70 – 110mg/dL)

Random Blood Sugar: .2 – 7.8 mmol/L (75 – 115mg/dL)

Interpretation of Test Results:

A raised blood glucose levels (above normal) is known as hyperglycemia.

Decreased blood sugar (below normal) is called hypoglycemia.

CHAPTER FOUR

4.0 SUMMARY, CONCLUSION AND RECOMMENDATION

4.1 Summary

There are many tests that are been carried out in the laboratory as already stated earlier. These tests are categorized into different groups and in different units such as: - Chemical pathology unit, Microbiology unit, Hematology unit, and Parasitology unit.

In spite of all the experience gathered during the training, I recommended that the university/government should be paying allowances to the SIWES students to enable them cover their transport, feeding and other things during the SIWES, this will make the SIWES period more conducive, easy and interest. I also recommend that the SIWES period should be extended to enable the students acquire enough practical knowledge.

4.2 Conclusions:

At the end of my industrial training (SIWES) I can able to conduct various tests practically and theoretically. These tests include malaria parasites (MPs) test, ABO/Rhesus blood grouping, pack cell volume (PCV) estimation, fasting and random blood sugar (FBS & RBS), HIV screening as well as Hepatitis B Surface screening(HBSAG).

The tests are being conducted in a different unit/department in laboratory such as microbiology, Hematology, Parasitology, blood transfusion and chemical pathology.

Conclusively the industrial training came to an end with achieving the aims [i.e. gaining an experience both practical aspect and theoretical aspect of my study].

4.3 Recommendation

1) I would like to use this opportunity to call the attention again, of the federal government to inform the ministry of health and medical laboratory association to stop rejecting students from conducting their industrial training in the hospital.
2) I would also like to recommend that the student industrial working experience scheme's (SIWES) calls the attention of government particularly Industrial Trust Fund (ITF) to put more effort on payment allowance to the students during industrial training, because most of the students are facing financial problem during the exercise.
3) The government should improve the standards of such important organizations in structures, equipment and facilities to enable them carry their services effectively.
4) The government should ensure adequate supply of training facilities to schools for the students to be conversant with the use of equipment and other instruments.

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