



**A TECHNICAL REPORT ON  
STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME[SIWES]**

**Held at  
UNIVERSITY OF ILORIN TEACHING HOSPITAL**

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## **DEDICATION**

I dedicate this technical report to the Almighty God, the giver of knowledge, wisdom and who is rich in mercy.

## ACKNOWLEDGEMENT

I take this opportunity to express my profound gratitude and deep regards to the creator of heaven and earth, the one who knows the beginning and the end, the alpha and the omega, the Almighty God and also to my guides **Mr and Mrs OYETOLA**, and to all those who has helped me during my SIWES programme. The blessings, help and guidance given by them, time to time has carry me so this far and shall carry on the journey of life on which I am about to embark. I also take this opportunity to express a deep sense of gratitude to compliment my mentor for his cordial support valuable information and guidance which helped me in completing my SIWES through various stages.

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## **CHAPTER ONE**

### **1.1 INTRODUCTION TO SIWES**

Students Industrial Work Experience Scheme (SIWES) is a Skills Training Program designed to prepare and expose Students of Universities, Polytechnics, Colleges of Technology, Colleges of Agriculture and Colleges of Education for the Industrial Work situation they are likely to meet after graduation. The Scheme affords Students the opportunity of familiarizing and exposing themselves handling equipment and machinery that are usually not available in their institutions.

### **1.2 HISTORY OF SIWES**

The Students' Industrial Work Experience Scheme (SIWES) was initiated in 1973 by the Federal Government of Nigeria under the Industrial Training Fund (ITF) to bridge the gap between theory and practice among products of our tertiary Institutions. It was designed to provide practical training that will expose and prepare students of Universities, Polytechnics, and Colleges of Education for work situation they are likely to meet after graduation.

Before the establishment of the scheme, there was a growing concern among the industrialists that graduates of institutions of higher learning lacked adequate practical background studies preparatory for employment in industries. Thus the employers were of the opinion that the theoretical education going on in higher institutions was not responsive to the needs of the employers of labour.

As a result of the increasing number of students' enrolment in higher institutions of learning, the administration of this function of funding the scheme became enormous, hence ITF withdrew from the scheme in 1978 and was taken over by the Federal Government and handed to National Universities commission (NUC), National Board for Technical Education (NBTE) and National Commission for Colleges of Education (NCCE). In

1984, the Federal Government reverted back to ITF which took over the scheme officially in 1985 with funding provided by the Federal Government.

### **1.3 OBJECTIVES OF THE PROGRAMME**

The specific objectives of SIWES are to:

- Provide placements in industries for students of higher institutions of learning approved by relevant regulatory authorities (NUC, NBTE, NCCE) to acquire work experience and skills relevant to their course of study
- Prepare students for real work situation they will meet after graduation.
- Expose students to work methods and techniques in the handling of equipment and machinery that may not be available in schools.
- Make transition from school to the labour market smooth and enhance students' conduct for later job placement
- Provide students with the opportunity to apply their knowledge in real life work situation thereby bridging the gap between theory and practice
- Strengthen employer involvement in the entire educational process and prepare students for employment in industry

Promote the desired technological know how required for the advancement of the nation.

### **1.4 OBJECTIVES OF ESTABLISHMENT**

- To provide optimum and individual care to patients.
- To develop recognition for patients needs for privacy and preservation of dignity.
- To maintain good relationship with patients, relations and the community through health education.
- To carry out diagnosis and intervention.

- To provide training for students.
  - To maintain sufficient hospital supply of equipment and promote their utilization and maintenance.
- To treat and control diseases.



## **CHAPTER TWO**

### **2.1 LOCATION AND BRIEF HISTORY OF UNIVERSITY OF ILORIN TEACHING HOSPITAL**

The University of Ilorin Teaching Hospital belongs to the second (2nd) generation of Teaching Hospitals in the country. The Hospital came into existence on 2nd of May 1980 along with five other hospitals located in Jos, Calabar, Sokoto, Maiduguri and Port Harcourt. Temporary Site and Lease Agreement The University of Ilorin Teaching Hospital took off in July 1980 and started its operations using as its temporary site, the Ilorin General and Maternity hospitals, which were owned by the Kwara State Government. The formal release of the two hospitals to the Management Board of this Teaching Hospital was done on 1st September 1981 when a lease agreement was signed between the Federal Ministry of Health and the Kwara State Government. The University of Ilorin Teaching Hospital remained in these two old sites (General Wing was built in 1955 and Maternity Hospital Wing was built in 1937) till early 2009 when gradual relocation to the Permanent Site commenced. Full movement to the Permanent site from the General Hospital Wing was completed in mid 2010. However the training Schools of the Hospital are presently occupying the Maternity wing.

**PERMANENT SITE OF THE HOSPITAL** The contract for the construction of the 13 phased Permanent Site of the hospital was awarded by the Federal Government in 1981. The contract commenced on the 13th of April 1981 but the project was abandoned when it reached only 33% completion stage on 20th December 1985. In August 2000, construction work resumed at the Permanent Site and Building One (1) was constructed then. This Hospital is privileged to be one of the 8 Teaching Hospitals in the country to have benefitted from \$8 million VAMED Engineering Co. Ltd. Medical Equipment supply which was a key health

project of the Obasanjo Administration. To this end, building six (6) comprising the Radiology Department and the main Theatre became the next priority. This is because the VAMED project required that physical infrastructures should be put in place before the installation of various equipment. The Federal Government also, approved contracts for the pre-installation works to be carried out at the Permanent Site of the Hospital. This involved the completion of the space required and the provision of mechanical and electrical services for Building six built to house Radiology complex, 8 operating theatres, and an ICU. Through the VAMED Project, UITH became a recipient of state-of-the-art Radio-diagnostic, Surgical, Medical and laboratory equipment.

## **2.2 Objective Of University Of Ilorin Teaching Hospital**

The objectives for which the Hospital was set up are:

- i. To Train Medical and Paramedical Personnel
- ii. To deliver Health Care Services
- iii. To serve as referral Centre for other Hospitals around and
- iv. To conduct researches

## 2.3 Organization Structure



## **CHAPTER THREE**

### **3.1 Constipation**

Constipation is a problem with passing stool. Constipation generally means passing fewer than three stools a week or having a difficult time passing stool.

Constipation is fairly common. A lack of dietary fiber, fluids and exercise can cause constipation. But other medical conditions or certain medicines may be the cause.

Constipation is usually treated with changes in diet and exercise or with nonprescription medicines. Constipation may require medicines, changes in medicines or other treatments prescribed by a health care professional.

### **3.2 Symptoms of Constipation**

Symptoms of constipation include:

1. Fewer than three stools a week.
2. Hard, dry or lumpy stools.
3. Straining or pain when passing stools.
4. A feeling that not all stool has passed.
5. A feeling that the rectum is blocked.
6. The need to use a finger to pass stool.

Chronic constipation is having two or more of these symptoms for three months or longer.

### **3.3 Causes of Constipation**

Patterns of bowel movements vary from one person to another. The typical range is three times a day to three times a week. In general, constipation occurs when stool moves too slowly through the large intestine, also called the colon. If the stool moves slowly, the body absorbs too much water from the stool. The stool can become hard, dry and difficult to pass.

### **3.4 Lifestyle causes of Constipation**

Slow stool movement may happen when a person does not:

1. Drink enough fluids.
2. Eat enough dietary fiber.
3. Exercise regularly.
4. Use the toilet when there's an urge to pass stool.

### **3.5 Medicines of Constipation**

Constipation may be a side effect of some medicines, particularly opioid pain relievers. Other medicines that may cause constipation include some that treat the following conditions:

1. Pain.
2. High blood pressure.
3. Seizures.
4. Depression.
5. Disorders of the nervous system.
6. Allergies.

### **3.6 Prevention of Constipation**

The following tips can help you avoid developing constipation.

1. Eat lots of high-fiber foods, including vegetables, fruits, beans and whole-grain foods.
2. Eat fewer foods with low amounts of fiber such as processed foods, dairy and meats.
3. Drink plenty of fluids.
4. Stay active and exercise regularly.
5. Don't ignore the urge to pass stool.
6. Create a regular schedule for passing stool, especially after a meal.

### **3.7 Types of constipation**

Constipation is a medical term that can refer to either a reduction in the number of bowel movements each week or pain or difficulty passing

stools. The two main types of constipation are primary and secondary constipation.

Primary or functional constipation either stems directly from a problem with the colon or has no clear cause.

Secondary constipation occurs as a result of lifestyle factors or an underlying illness.

Constipation can also be acute or chronic. Acute constipation is short term and may result from dietary or lifestyle changes or the temporary use of some medications. Chronic constipation is an ongoing problem.

### **Primary constipation**



Doctors sometimes refer to primary constipation as “functional” or “idiopathic” constipation. These terms acknowledge that the constipation is the primary medical problem rather than a symptom of another underlying medical issue.

### **Three different types of primary constipation**

#### **Normal transit constipation**

In normal transit constipation a person feels constipated, but the consistency of their stools is normal, and the stools move through the digestive tract at a regular pace.

People with normal transit constipation may report experiencing symptoms such as abdominal bloating and pain.

### **Slow transit constipation**

Slow transit constipation is rare and usually affects Trusted Source females in middle age. People with slow transit constipation do not experience the normal stimulation of the bowels, called peristalsis, after eating. Therefore, food moves through the digestive tract more slowly than usual, and stools take longer to pass through the colon.

As stool sits in the intestines for longer, these individuals will have less frequent bowel movements.

### **Outlet constipation**

Outlet constipation occurs as a result of damage to the pelvic floor muscles. These muscles support the bowel and bladder, as well as the uterus in females.

In outlet constipation, damage to the pelvic floor muscles or nerves makes it difficult for a person to pass stools. This damage can occur for various reasons, including pregnancy and childbirth.

Some possible symptoms of outlet constipation include:

- straining to empty the bowels
- delaying bowel movements due to pain
- needing to use the hands to assist bowel movements

### **Secondary constipation**

Secondary constipation is constipation that occurs as a result of an underlying health issue or a side effect of medication use. The most common causes of secondary constipation include:

- hypothyroidism
- diabetes
- diseases that affect the brain or blood vessels, such as dementia
- depression

- the use of certain medications, such as opioids and chemotherapy
- irritable bowel syndrome (IBS)
- inflammatory bowel disease, such as Crohn's and ulcerative colitis

Less common causes of secondary constipation include:

- vitamin and mineral deficiencies
- anal fissures, which are small tears in the anal tissue
- nerve damage
- spinal cord injuries
- diseases that affect the nervous system, such as Parkinson's disease and multiple sclerosis
- colon cancer

## **Treatments**

The treatment options for constipation vary among the different types.

### **Primary constipation**

The most effective treatment will depend on whether a person has normal or slow transit constipation or outlet constipation.

### **Normal and slow transit constipation**

Normal and slow transit constipation often respond well to changes to everyday routines, such as:

- increasing fiber intake by eating more fruits, vegetables, and whole grains
- drinking enough water
- getting more exercise
- doing yoga for constipation

### **Outlet constipation**

A person with pelvic floor damage may require targeted physical therapy to help strengthen their pelvic floor muscles. People who have pelvic floor nerve damage may benefit from a type of behavioral therapy called biofeedback therapy.



In biofeedback therapy, a trained therapist inserts a probe into the anal sphincter. The therapist then gives visual or verbal feedback about how the person is using their pelvic floor muscles and anal sphincter during bowel movements. This information helps the person retrain the pelvic floor muscles to improve their coordination.

### **Secondary constipation**

The treatment for secondary constipation begins with identifying and treating the cause. For example, uncontrolled diabetes increases the risk of nerve damage that can lead to constipation. In this case, a person would need to manage their diabetes to treat the constipation.

While dietary and exercise changes will not treat the underlying cause of secondary constipation, they can prevent constipation from worsening while doctors treat the primary cause. These changes may include:

- increasing physical activity
- eating more fiber
- drinking more fluids

In some cases, a person with secondary constipation may need surgery to repair or remove a dysfunctional part of their colon.

## **CHAPTER FOUR**

### **4.1 Malnutrition**

Malnutrition is an imbalance between the nutrient the body needs to function and the nutrients it gets. It encompasses nutrient deficiencies which can either be in shortage or in excess. The body needs varieties of nutrients and in certain amounts to maintain its tissues and its many functions, but when the nutrients ingested isn't sufficient or in excess can lead to serious health consequences.

### **4.2 Types Of Malnutrition**

Under nutrition: it occurs when there's insufficient or deficiency of nutrients in the body. It can be subdivided into

- Macronutrients under nutrition
- Micronutrients under nutrition

**MACRONUTRIENTS UNDERNUTRITION:** macronutrients under nutrition can also be called protein energy under nutrition or protein energy malnutrition (PEM). This is the deficiency of macronutrients like protein, carbohydrates, and fats.

Macronutrients are known as the body building blocks of diet because the body rely on them to produce energy. Without them or even one of them the body will begin to fall apart, breaking down tissues and shutting down non-essential functions to conserve its low energy.

### **MICRONUTRIENTS UNDERNUTRITION**

Micronutrients includes vitamins and minerals. Even if it is in small quantity but the body needs it for all types of functions. Many people are madly deficient in certain amounts of vitamin and minerals from lack of variety in their diet.

Examples of under nutrition deficiency

- Marasmus
- Kwashiorkor

- Poor cognitive function
- Blurred vision due to lack of vitamin A(Retinol

Osteomalacia i.e soft bones due to lack of vitamin D which aid in the absorption of calcium

### **4.3 Overnutrition**

According to WHO it can be defined as the form of malnutrition in which intake of nutrients are over supplied. It also include the toxicity that can result from overdosing some specific micronutrients. It can subdivided into

#### **MACRONUTRIENTS OVERNUTRITION**

When the body has excess of carbohydrates, protein and fat calories to use,it stores them away in the adipose tissue. When your body runs out of tissue for storage the fat cells themselves have to grow. Large fat cells are associated with chronic inflammation and with a host of metabolic disorder which can lead to non-communicable disease like diabetes mellitus, coronary artery diseases and stroke.

#### **MICRONUTRIENTS OVERNUTRITION**

It is uncommon and doesn't occur from diet alone. It can also have toxic effects

Examples of Micronutrients over nutrition

- Hyper vitaminosis i.e excess of vitamin
- Hypercalodemia i.e excess of calcium
- Siderosis i.e excess of iron in the body
- Hemochromatosis i.e excess of iron

### **4.4 Causes Of Undernutrition**

- Poor low income
- Chronically ill
- Anearosia i.e lack of appetite

- Lack of nutrition education
- Negligence
- Alcohol
- Certain medication

### **CAUSES OF OVERNUTRITION**

- Alcohol
- Sedentary lifestyle
- Poor dietary choices
- Genetic predisposition
- Lack of nutrition education

### **SIGNS AND SYMPTOMS OF UNDERNUTRITION**

- Low body weight
- Edema ( swelling in the legs,ankles,face and hand)
- Stunted growth
- Weakness, faintness and fatigue
- Low body temperature
- Low heart rate and blood pressure

### **SIGNS AND SYMPTOMS OF OVERNUTRITION**

- Obesity
- High blood pressure
- Insulin resistance
- Heart disease

### **COMPLICATIONS OF UNDERNUTRITION**

- Hypoglycemia (Low blood sugar)
- Hypothermia (low body temperature)
- Dehydration
- Electrolyte imbalance (A condition where the essential electrolytes in the body are disrupted)

- Initial refeeding

## **COMPLICATIONS OF OVERNUTRITION**

- Obesity
- Certain cancers
- Digestive problems
- Cardiovascular disease
- Nutrient imbalance
- Mental health issues
- Osteoarthritis

### **4.5 Prevention Of Malnutrition**

1. Consume a balanced diet that includes varieties of whole foods, fruits, vegetables and whole grains
2. Breastfeed infant exclusively for the first six months of life and continue breastfeeding along with other food until two years and beyond
3. Educate individuals families and communities about healthy eating habits, meal planning and food preparation
4. Regularly monitor and evaluate nutrition program to identify areas for improvements

## **MANAGEMENT AND TREATMENT**

1. Evaluate the individual nutritional status, health and social situation.
2. Provide personalized dietary advice to ensure adequate nutrients intake
3. Offer supplement such as vitamins, minerals or protein powder as needed
4. Provide food support like meal replacement or snacks to ensure adequate energy and nutrients intake

5. Regularly monitor progress adjusting the treatment plans as needed
6. Ensure regular follow up appointments to monitor progress and prevent relapse
7. Implement community based programs like nutrition education and food assistance

#### **4.6 Kidney**

kidney" refers to a pair of organs that play a crucial role in filtering waste products from the blood, regulating fluid balance, and maintaining proper levels of electrolytes and minerals in the body, making their function highly important when considering dietary needs, especially for individuals with kidney disease where specific dietary restrictions may be necessary to manage their condition.

Points about **kidneys in nutrition**

##### **Waste removal:**

The primary function of the kidneys is to filter waste products from the blood, which are then excreted as urine.

##### **Fluid balance:**

Kidneys regulate the body's fluid levels by adjusting how much water is reabsorbed back into the bloodstream.

##### **Electrolyte control:**

They also control the balance of important minerals like sodium, potassium, and calcium.

##### **Blood pressure regulation:**

Kidneys play a role in regulating blood pressure by producing hormones like renin.

##### **Nutritional implications:**

When kidney function is impaired, dietary adjustments are often necessary to manage levels of protein, sodium, potassium, and

phosphorus, as the body may not be able to efficiently filter these substances.

#### **4.7 Kidney Disease**

shuttling waste materials to your bladder to be removed. The filtered blood is then sent back out to circulate in your body. If the kidneys aren't working well, they don't filter blood properly, which means harmful substances can build up in your blood.

#### **4.8 Types and Causes of Kidney Disorders**

Kidney disorders generally fall into one of two categories: acute or chronic.

**Acute kidney injury is often a complication of:**

- ❖ Kidney stones
- ❖ Severe blood loss
- ❖ An injury or trauma
- ❖ Overuse of pain medications

Other organ failures

Acute kidney injury can lead to a permanent loss of kidney function. However, if the kidneys have not been badly damaged, they can often return to normal health.

The most common causes of chronic kidney disease are nutrition related: poorly controlled diabetes and high blood pressure.

#### **4.9 Symptoms of Kidney Disease**

Usually there are no symptoms for early stages of kidney disease, but symptoms may appear as the disease progresses. Symptoms include:

- ❖ Nausea and vomiting
- ❖ Diminished appetite
- ❖ High blood pressure
- ❖ Urinating less or more frequently
- ❖ Feeling tired or drowsy

- ❖ Swelling of hands or feet
- ❖ Puffiness around eyes
- ❖ Muscle cramps (especially at night)
- ❖ Dry, itchy skin

### **Way to Lower Risk for Kidney Disease**

The two most common causes of chronic kidney disease are diabetes and high blood pressure. Nutrition can help manage both of these as well as reduce your risk of developing other conditions. Consider the following nutrition and lifestyle tips to help you take care of your kidneys:

1. **Control Your Blood Sugar.** Over time, high blood sugar can damage the kidneys. If you've been diagnosed with diabetes, prediabetes or metabolic syndrome, manage your blood sugar as instructed by your physician.
2. **Know and Control Your Blood Pressure.** One in three adults has high blood pressure, also called hypertension, yet many do not have it under control. Keep sodium intake to less than 2,300 milligrams per day. Adults with prehypertension and hypertension are encouraged to reduce their intake further to 1,500 mg per day. Have your blood pressure checked every time you visit the doctor or at least once a year.
3. **Stay Physically Fit.** Exercise improves blood flow through your body and improves muscle function, both of which help your kidneys. Exercise also lowers blood pressure, helps keep blood sugar levels in control and helps you maintain a healthy weight.
4. **Eat Well.** A well-balanced eating plan, such as the Dietary Approaches to Stop Hypertension, or DASH diet, focuses on nutrient-dense foods — vegetables, fruits, whole grains, fat-free or low-fat dairy products, and lean protein foods, including poultry, seafood, eggs, beans, nuts and seeds. These foods provide nutrients that have



helped lower blood pressure and reduce the risk of other chronic diseases.

5. Use Pain Medication Only as Directed. High doses of pain medication over time may lead to kidney damage or injury. Take medicines the way your doctor or healthcare provider tells you to.

## **CHAPTER FIVE**

### **5.1 SUMMARY, CHALLENGES ENCOUNTERED, AND CONCLUSION RECOMMENDATION**

#### **5.2 CHALLENGES ENCOUNTERED**

The main problems encountered were getting placement and transportation. It was quite challenging for me that live in far place to get to the organisation every working day. I was not given any remuneration or allowance, other problems encountered during the training was attending to different people with different personalities at the reception.

#### **5.3 CONCLUSION**

My four months industrial attachment with University of Ilorin Teaching Hospital has been one of the most interesting , productive, instructive and educative experience in my life. Through this training, I have gained new insight and more comprehensive understanding about the real industrial working condition and practice and also improved my soft and functional skills.

All these valuable experiences and knowledge that I have gained were not only acquired through the direct involvement in task but also through other aspects of the training such as: work observation, supervision, interaction with colleagues, supervisors, superior and other people related to the field. It also exposed me to some certain things about medical environment. And from what I have undergone, I am sure that the industrial training programme has achieved its primary objective.

As a result of the programme, I am now more confident to build my future career which I have already started with University of Ilorin Teaching Hospital .

#### **5.4 RECOMMENDATION**

I recommend that all institutions or bodies involve in Student Industrial Working Experience Scheme, should provide places for industrial attachment for Student Industrial Training Fund and also pay some allowances to students and the company should provide more safety equipments to prevent further environmental and health hazards.

Also, to students that are to undergo the training, I recommend that they should take it very seriously, because it is one of the most important parts of their studies which will help them build a very significant and effective meaning in their career pursuit.