

REPUBLIQUE DU CAMEROUN

PAIX-TRAVAIL-PATTIE

MINISTERE DE L'ENSEIGNEMENT SUPERIEUR

DIRECTION DE L'ENSEIGNEMENT SUPERIEUR
PRIVE

REPUBLIC OF CAMEROON

PEACE-WORK-FATHERLAND

MINISTRY OF HIGHER EDUCATION

DEPARTMENT OF PRIVATE
EDUCATION

CAPITOL HIGHER INSTITUTE OF HEALTH

SCIENCES AND BEAUTY THERAPIES

P.O BOX: 875, BAMENDA.
MOTTO: HOPE IS THE KEY

**A CASE STUDY REPORT ON PREECLAMPSIA CARRIED OUT AT
THE REGIONAL HOSPITAL BAMENDA FROM 27 SEPTEMBER TO
29 OCTOBER 2016**

**SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE AWARDS OF HIGHER DIPLOMA (HND) IN NURSING**

**PRESENTED BY:
NGUFI CYNTHIA**

**SUPERVISED BY:
Dr MFONFU DANIEL**

April 2017

Certification

This is to certify that this piece of work was done by Ngufi Cynthia, a student of Capitol Higher Institute of Health Sciences and Beauty Therapies, carried out at the Bamenda Regional Hospital from 27 September to 29 October 2016, in partial fulfilment to obtain the HND in nursing.

Name of student; Ngufi Cynthia Ngegong	Date 25 April 2017	Signature-
Name of supervisor Dr Mfonfu Daniel	Date 25 April 2017	Signature
Dean of studies Dr Mfonfu Daniel	Date 25 April 2017	Signature-
President of jury Dr Mfonfu Daniel	Date 25 April 2017	Signature-

DEDICATION

This work is dedicated to my family members especially my mum Mrs Awemo Veronica, my friends and relatives and most particularly to my proprietor Mr Ngala Edward.

ACKNOWLEDGEMENT

I thank God almighty for his enormous blessings, guidance and protection throughout my Internship period.

LIST OF ABBREVIATIONS

- BT Bleeding time
- CT Clotting Time
- ANC Antenatal clinic
- BP Blood pressure
- Hb Haematocrit
- IV Intravenous
- IM Intramuscular
- IVD Intravenous Direct
- PO orally or by mouth
- Tabs Tablet
- SC Subcutaneous
- FIG Figure
- A Ampoule
- HND Higher National Diploma
- WHO World Health organization
- CS Caesarean Section
- MgSO₄ Magnesium sulphate

LIST OF FIGURES

FIG 1 - Diagrammatic representation of the hospital

FIG2- Organigram of the hospital

LIST OF TABLES

- Table 1, Daily drug chart
- Table 2, Pre –operative nursing care plan
- Table 3, Post-operative nursing care plan
- Table 4, Daily evolution of the patient

TABLE OF CONTENTS

Certification -----	2
DEDICATION -----	3
ACKNOWLEDGEMENT -----	4
LIST OF ABBREVIATIONS -----	5
LIST OF FIGURES -----	6
LIST OF TABLES -----	7
TABLE OF CONTENTS -----	8
<u>CHAPTER ONE - INTRODUCTION</u> -----	9
CHAPTER TWO - REVIEW OF LITERATURE ON PREECLAMPSIA -----	12
CHAPTER THREE – PRESENTATION OF CASE -----	18
CHAPTER FOUR: REVIEW OF MEDICATIONS -----	29
CHAPTER FIVE: DISCHARGE SUMMARY -----	34
<u>CHAPTER SIX: CONCLUSIONS</u> -----	36
REFERENCES -----	37

CHAPTER ONE - INTRODUCTION

1.1 Introduction

Training for HND in nursing consists of theoretical and practical sessions. After the theoretical session, the HND13 students of CAPITOL Higher Institute of Health Sciences and Beauty Therapies were sent to go and carryout a case study internship at the Bamenda Regional hospital.

A case study internship is one where students go into the field with one or more of them having a disease condition or disorder that they follow up. This is by taking into consideration the causes of the disease, the signs and symptoms, diagnosis, treatment/management, complications and preventions.

My case study internship started on the 27th of September to the 29th of October 2016 at the Bamenda Regional Hospital. My own case study topic was Pre-eclampsia. This is a condition in pregnancy that is usually common in women from the 38th week of pregnancy characterized by; hypertension that is diastolic pressure is greater than 90mmHg and the systolic pressure greater than 160mmHg, oedema, and protein in urine. Hyperpyrexia, headache, visual symptoms like blurring, fetal signs like; oligohydramnios intrauterine growth restrictions are some of the signs and symptoms of pre-eclampsia.

At the field, I was sent to the F-Ward (Gynaecological and Neurological ward). But the case that I was following up was at the post natal.

1.2. Motivation for the case

What made me to choose this topic pre-eclampsia is because I had a neighbour who was pregnant and had her legs were swollen to the extend that she could not walk well. Beside she did not leke sitting amongst people who talk in a loud tone because she use to complain that loud noise produces a sharp pain in her heart. So I was wondering if they were other symptoms of pregnancy, until when she finally collapsed one day and was taken to the hospital. There, the doctor diagnosed it to be pre-eclampsia.

Nevertheless I was still very interested to know the causes, signs and symptoms, diagnosis, treatment, complications and the prevention.

1.3. General Objectives

Successfully managed the case of Mrs. X as a member of the medical and nursing team and to submit the report of this case study in partial fulfilment to obtain the HND in nursing.

1.4. Specific objectives

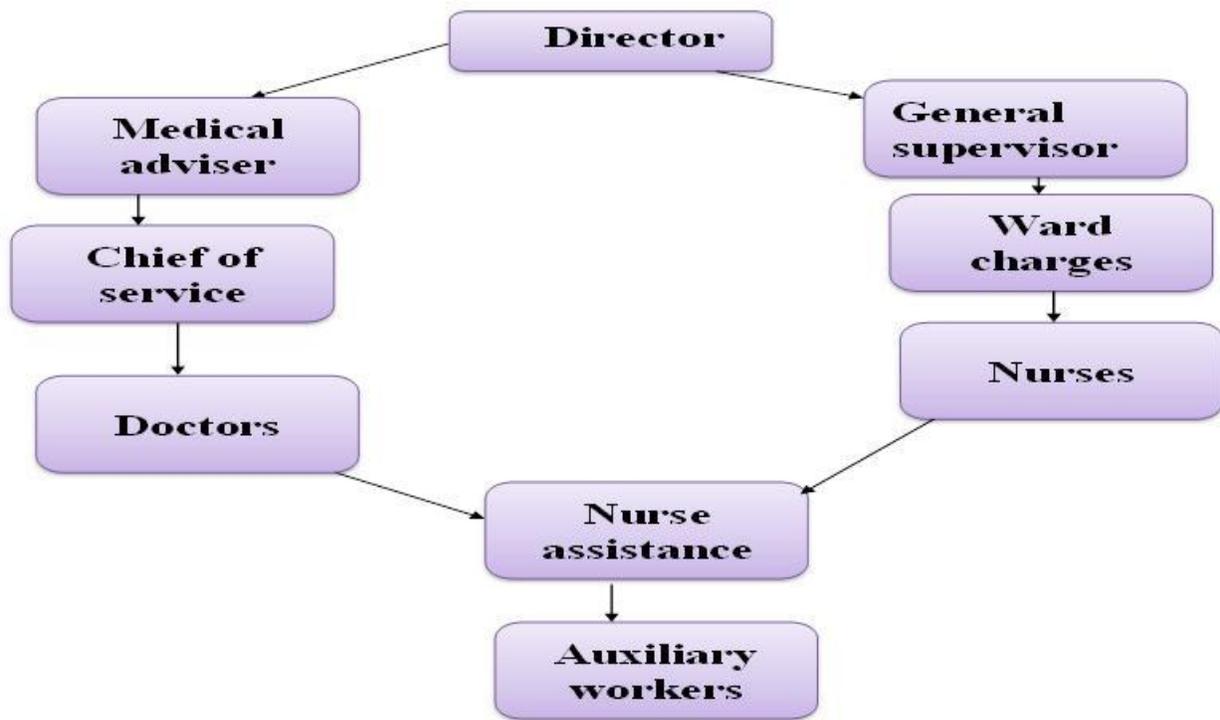
- Description of place of study(diagram or picture)
- Give a brief description of internship and source
- Fig; organigram of place of internship and source
- Identify the patient
- Describe the circumstances of arrival of the patient
- Admit the patient
- State the provisional diagnosis on admission, state source
- Administer any emergency medications
- Clerk/assess the patient
- Administer the medications prescribed by the medical officer, monitor and record side effects on the patient
- Establish daily drug chart
- State results of confirmatory diagnostic tests
- Develop and implement nursing care plans
- Describe the evolution of the patient and vital signs
- Review the medications administered
- Write the discharged summary
- Identify positive findings, weaknesses; make recommendations; make conclusions
- Describe the nurses responsibilities in drug administration

1.5 Description of the hospital

The Bamenda Regional hospital is about 2km as you leave from hospital round-about moving to the right. The hospital has two gates, one main gate which faces hospital round-about directly as you leave food market and the other one a smaller gate as you leave gerdamerie coming towards round-about. The regional hospital is made up of six wards, TB centre/unit, hemodialysis centre, two laboratories, two pharmacies and imagery centre. The six wards are A ward(female medical), the B ward(the paediatric ward), C ward(male medical), D ward(female surgical ward), E ward(male surgical) and the F ward(neurological and gynaecological ward). Then we have the maternity, reanimation centre, a theatre and a mortuary at the extreme end of the hospital.

1.6 Shift system

There exist 2 shifts at the F and post natal wards. The first shift begins from 8am and end at 5:30pm .The second shift usually begin from 6pm to 7:30am in the morning.



Source: General supervisor

Figure1: organigram of the hospital

CHAPTER TWO - REVIEW OF LITERATURE ON PREECLAMPSIA

2.0. Definition of preeclampsia

Pre-eclampsia or preeclampsia (PE) is a disorder of pregnancy characterized by high blood pressure and a large amount of protein in the urine.

(<http://en.wikipedia.org/wiki/Pre-eclampsia>)

Classification of Preeclampsia (*The women's the royal women's hospital*)

Classification	Blood Pressure Range	
Mild	140-149 mmHg systolic	90-99 mmHg diastolic
Moderate	150-159 mmHg systolic	100-109 mmHg diastolic
Severe	>160 mmHg systolic	>110 diastolic

Blood pressure is defined in the above table: measured on at least two occasions over several hours, combined with proteinuria >300 mg total protein in a 24-hour urine collection, or ratio of protein to creatinine >30 mg/mmol

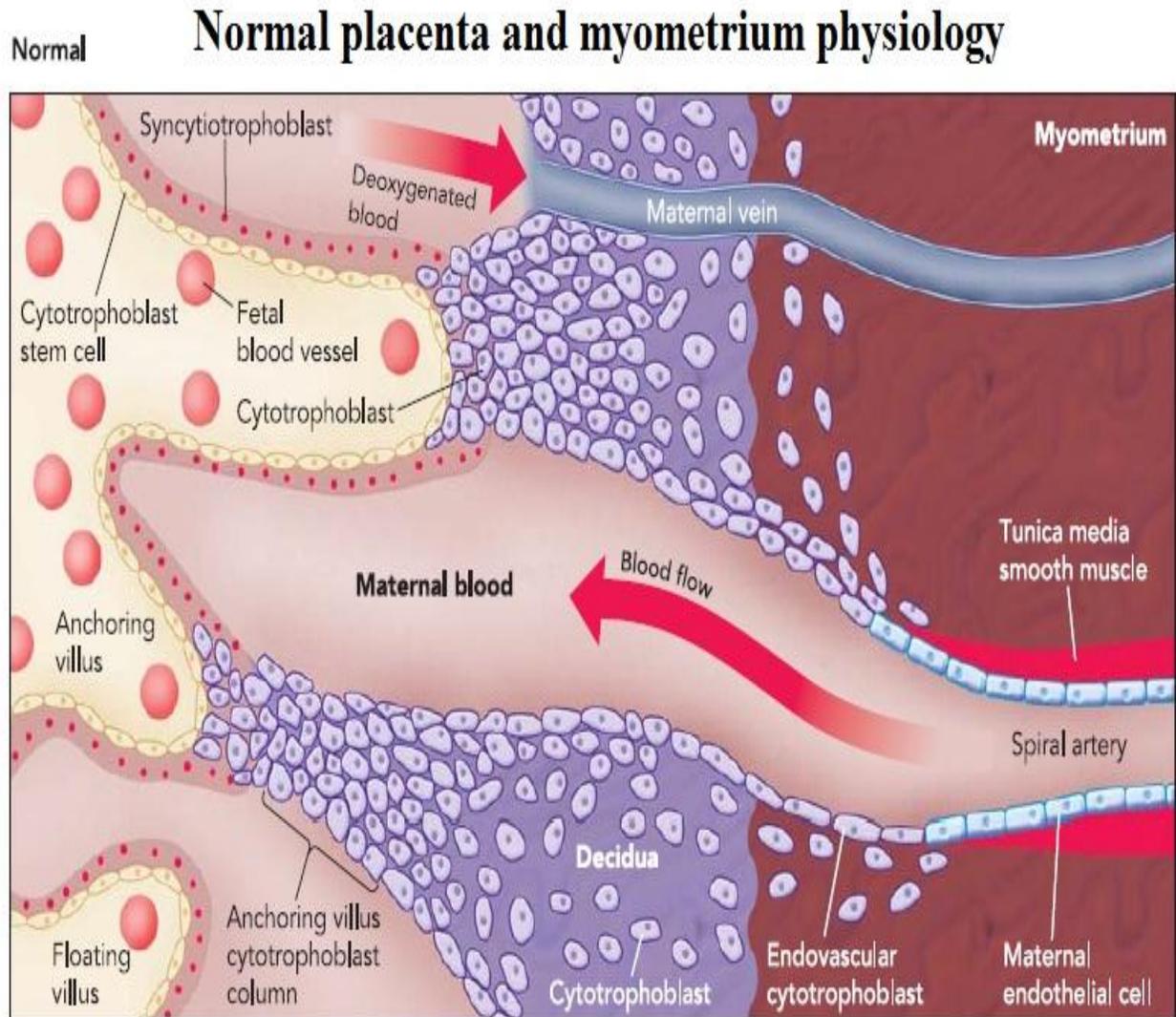
2.1 Causes (Mayo clinic)

Some causative factors include:

- Abnormal placentation (formation and development of the placenta)
- Immunologic factors
- Preexisting hypertension,
- Obesity,
- Dietary factors, e.g. low calcium in the body
- Environmental factor, e.g. air pollution

2.2 Pathophysiology

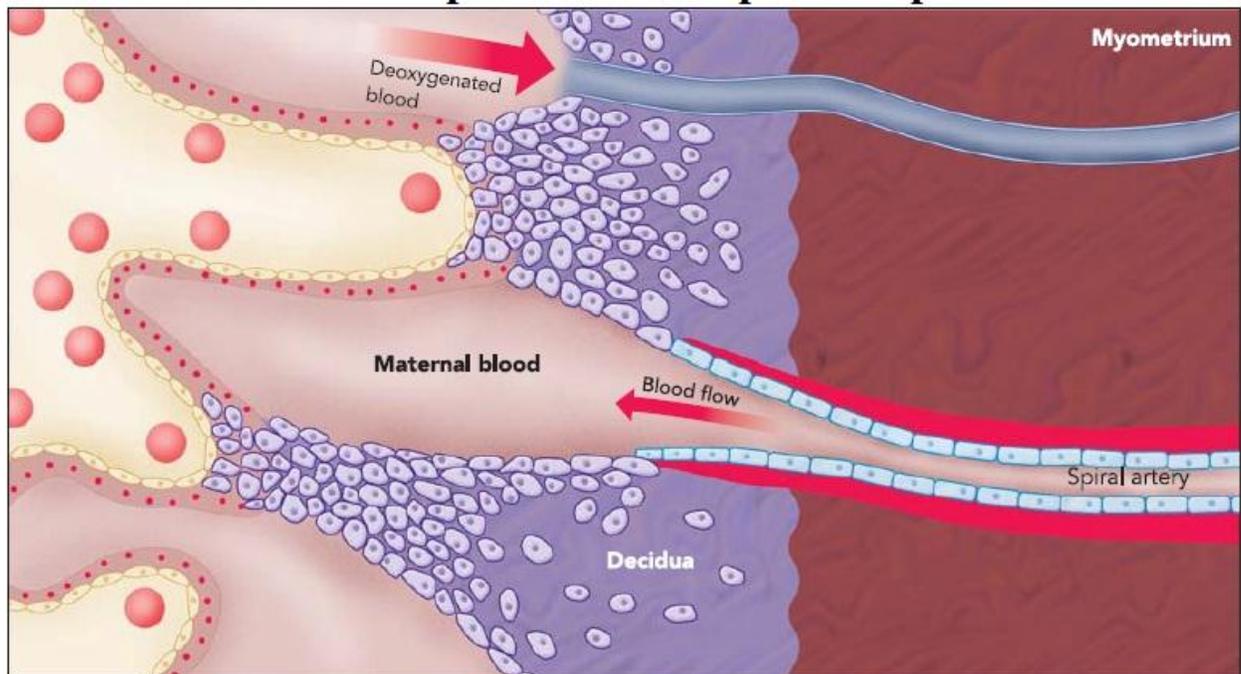
During normal pregnancy, the placenta undergoes process of vascularization to



PHYSIOLOGY • Volume 24 • June 2009 • www.physiologyonline.org

allow for blood flow between the mother and fetus
(<http://en.wikipedia.org/wiki/Pre-eclampsia>)

Abnormal placentation in preeclampsia



PHYSIOLOGY • Volume 24 • June 2009 • www.physiologyonline.org

Abnormal development of the placenta leads to poor placental perfusion. The placenta of women with preeclampsia is abnormal and characterized by poor trophoblastic invasion. It is thought that this results in oxidative stress, hypoxia, and release of factors that promote endothelial dysfunction, inflammation, and other possible reactions. The clinical manifestations of preeclampsia are associated with general endothelial dysfunction, including vasoconstriction and end-organ ischemia (<http://en.wikipedia.org/wiki/Pre-eclampsia>)

2.3 Risk factors (By Mayo Clinic Staff)

Known risk factors for preeclampsia include:

- First pregnancy
- Diabetes mellitus
- Kidney disease
- Chronic hypertension
- Prior history of preeclampsia
- Family history of preeclampsia
- Advanced maternal age (>35 years)

- Obesity
- Multiple gestation
- Having donated a kidney.
- New paternity

2.4 Complications (*By Mayo Clinic Staff*)

Complications of preeclampsia may include:

- **Lack of blood flow to the placenta.** Preeclampsia affects the arteries carrying blood to the placenta. If the placenta doesn't get enough blood, the baby may receive less oxygen and fewer nutrients. This can lead to slow growth, low birth weight or preterm birth.
- **Placental abruption.** Preeclampsia increases the risk of placental abruption, in which the placenta separates from the inner wall of your uterus before delivery. Severe abruption can cause heavy bleeding and damage to the placenta, which can be life-threatening for both the mother and the baby.
- **HELLP syndrome.** HELLP — which stands for hemolysis (the destruction of red blood cells), elevated liver enzymes and low platelet count — syndrome can rapidly become life-threatening for both you and your baby. Symptoms of HELLP syndrome include nausea and vomiting, headache, and upper right abdominal pain. HELLP syndrome is particularly dangerous because it represents damage to several organ systems. On occasion, it may develop suddenly, even before high blood pressure is detected.
- **Eclampsia.** When preeclampsia isn't controlled, eclampsia — which is essentially preeclampsia plus seizures — can develop.
- **Cardiovascular disease.** Having preeclampsia may increase your risk of future heart and blood vessel (cardiovascular) disease.

2.5 Signs and symptoms (*By Mayo Clinic Staff*)

- i. Sudden weight gain and swelling (pitting edema)
- ii. Blood pressure that is 140/90 millimeters of mercury (mm Hg) or greater — documented on two occasions, at least four hours apart — is abnormal
- iii. Headaches

- iv. Changes in vision, including temporary loss of vision, blurred vision or light sensitivity
- v. Upper abdominal pain, usually under your ribs on the right side
- vi. Nausea or vomiting
- vii. Decreased urine output
- viii. shortness of breath, caused by fluid in the lungs

2.6 Diagnosis

It is diagnosed from the above signs and symptoms. It can also be diagnosed in the laboratory by carrying out the following tests:

- a) Excess protein in urine (proteinuria)
- b) Decreased levels of platelets in the blood (thrombocytopenia)
- c) Impaired liver function

2.7 Treatments (*Denis Palmer et al*)

- Strict bed rest/admit. Encourage patient to lie on the left side.
- If foetus is viable, cervix ripe, head down, pelvis adequate, induce.
- If foetus viable, cervix not ripe, pelvis inadequate, do CS.
- If foetus not viable, mother stable or improving, monitor.
- If foetus not viable, mother deteriorating, deliver anyway.
- Administer MgSO₄ 5g stat IM.
- Continue MgSO₄ 24hours after delivery
- Drug of choice for hypertension should be administer if available(Labetalol and Hydralazine).
- IV fluids at 60 -150ml/hr unless there are excessive losses of fluids or blood.

2.7Prognosis

If not treated preeclampsia can lead to eclampsia that may result in the death of mother or the baby, or both

2.8 Preventions

- Frequent prenatal visit
- Encourage the woman to attend ANC regularly for frequent monitoring of her weight, BP and urine testing.

- Encourage the woman to do light sport
- Encourage the woman to avoid excessive salts intake
- Encourage the woman to eat a well-balanced diet and much vegetable.

2.9 Definition of nursing care plan

A nursing care plan outlines the nursing care to be provided to an individual, family and the community.

It is a set of action that the nurse will implement to resolve and support nursing process. It guides in the ongoing provision of nursing care and assists in the evaluation of the care W.H.O (3 November, 2015).

2.10 Nurses' responsibilities in the administration of drug

1. The nurse must respect the seven rights of drug administration also known as the seven rules.
 - The right patient
 - The right drug
 - The right dose
 - The right time
 - The right route
 - The right procedure
 - The right documentation

CHAPTER THREE – PRESENTATION OF CASE

3.1 The demographic identity of the patient on admission

- Name: Mrs. x
- Sex: female
- Address: Meta quarter
- Occupation: Business
- Nationality: Cameroonian
- Religion: Catholic
- Ward: First in Prenatal ward then to Post natal ward to prepare for surgery
- Bed Number: Private room 1 bed 1
- Blood group: AB Rh
- Date of Admission: 04/10/2016

3.2 Condition of Arrival of the patient at the hospital/ward

This patient came to the hospital on the 4 October 2016 to see the doctor for an appointment that she always had with him on each Tuesday after two weeks. So that day, the doctor examined her and told her that she needed an operation because the pre-eclampsia had become severe. Her vital signs were monitored, the doctor ordered for a urine lab test: the result was albumin 18g/L. Her BP was 173/113 mmHg. She had severe generalized oedema.

3.3 Provisional diagnosis by medical doctor

Severe pre-eclampsia

3.4 Table 1: Preliminary laboratory results:

TESTS	QUANTITY	RESULTS
Haematology	Bleeding time	5Mins
Haematology	Clotting time	4mins 49secs
Haematology	Haematocrit	36%
Haematology	Whole	12.0g/dl
Urinalysis: protein	1 Litre	positive 100mg/dl
Glucose	1 litre	1.0g/l

3.5 Medical prescription and treatment on admission by doctor

- MgSO₄ Protocol
- Celestine injection: 12mg 12hourly(2 doses)
- Loxen 20mg; 1tab for 31days

3.6 Patient clerking

Chief complains: patient came to see her doctor for an appointment they usually had every Tuesday in two weeks.

History of presenting illness: Patient was 28 weeks pregnant when the doctor told her to come for visit on Tuesday every after two weeks until birth. She did not know she was developing a serious disorder of that sort. She came on 4 October following the appointment and on examination, the doctor saw that she had severe pre-eclampsia that needed immediate CS or it could be harmful to both her and her baby. She is married with 4 children

- Auto medication: Nil

- Past medial history: she had once suffered from malaria and was admitted upon

- Past surgical history: Nil

- Family history: Minor ailment present with no hypertension common

- Social history: She does not smoke, she drinks alcohol, she loves music

-Last menstrual period: 02/03/2016

-Physical assessment: BP 173/113, Pulse 92b/m, temperature 37, weight 85kg, respiration 18c/m, bowel 1, urine 1000cc, and vomitus was nil, intake was 1litre

3.7 Systemic review

-Reproductive system: She was 32 weeks pregnant

-Nervous system: Nil

-Cardiovascular system: High blood pressure

-Respiratory system: Nil

-Urinary system: Urine produced contains protein

-Skeletal system: Her spinal cord curved inward due to the pregnancy

-Digestive system: Nil

-Endocrine system: Nil

Muscular system: Enlargement of the glutei muscle

-Integumentary system: The skin was looking light and shinny

-Physical examination: She was looking very weak with generalized oedema, an enlarged abdomen due to the pregnancy

-Lab investigation: BT,CT,Hb, Albumin dip stick test

-Diagnosis by Dr: Severe pre-eclampsia

The doctor recommended for immediate CS

Nursing management

-We monitored her vital signs

- We administered medications as prescribed

Medical management

Patient was put on the following drugs:

-MgSO₄ 5mg to 4mg 4hrly for 5days

-Celestine 2mg IVD 12hrly

- Steritax 0.75mg 2A IVD stat
- Novalgin 2A IVD for 2 weeks
- Loxen 1cc IVD 1hrly
- Ampicillin 1g IVD 8hrly
- Paracetamol Infusion IVD
- Antagex 1tab bid
- Rapiclav 1tab bid
- Trandate 1tab tid

DESCRIPTION OF THE PROCESS OF CAESAREAN SECTION THAT WAS CARRIED OUT:

The nurses educated the patient on the surgical procedure she was to undergo. She then signed the consent form for the operation.

She was prepared for the CS

- Cleaning of the supra pubic area, vulva
- Shaving of the hair
- The patient was driven on a wheel chair to the theatre
- In the theatre the anaesthetist administered general anaesthesia to her and monitored the vital signs continuously until after the CS.
- The lower abdomen was cleaned with povidone iodine

CS IN THE THEATRE

- The surgeon then made a Pfannenstiel incision on the abdomen. Opening of the abdominal cavity in layers. A Cephalic extraction of male baby was done with APGAR 8. Manual removal of placental was done; Closure of uterus and abdominal cavity was done in layers. The baby had a weight of 1.8kg. The procedure was well tolerated. This information was taken from the patient's file.

The baby was nursed in the nursery.

3.8 Table 2: Daily drug chart (the patient continued receiving the medications prescribed before the CS)

Date	Time	Drug	Dose	Route	Frequency	Remark	Name of nurses
4/10/16	3:45pm	MgSO4	5g	IM	Loading dose	served	A and C
	3:50pm	Celestine	2mg	IVD	12hrly	served	C
	8pm	MgSO4	4g	IM	6hrly	served	A
5/10/16	1am	MgSO4	4g	IM	4hrly	served	DAPPD
	4am	MgSO4	4g	IM	4hrly	served	A
	5am	MgSO4	4g	IM	4hrly	served	DAPPD
	6am	Celestine	12mg	IM	12hrly	served	PA
6/10/16	8pm	Steritax	0.75mg	IVD	Stat	served	A
		Novalgine	2A	IVD	Stat	served	W
		Loxen	1cc	IVD	1hrly	served	N
	9pm	Loxen	1cc	IVD	1hrly	served	N
	10pm	Loxen	1cc	IVD	1hrly	served	N
	11pm	Loxen	1cc	IVD	1hrly	served	N
7/10/16	7am	Novalgine	1A	IVD	Stat	served	W
		Ampicillin	1g	IVD	8hrly	served	A
		Paracetamol	1Fl	IVD	8hrly	served	A and C
		Loxen	1cc	IVD	1hrly	served	N
	9am	Loxen	1cc	IVD	1hrly	served	N
	10am	Loxen	1cc	IVD	1hrly	served	N
	11am	Loxen	1cc	IVD	1hrly	served	N
8/10/16	10pm	Novalgine	1A	IVD	8hrly	served	W
		Ampicillin	1g	IVD	8hrly	served	A
	6am	Novalgine	1A	IVD	8hrly	served	W
		Ampicillin	1g	IVD	8hrly	served	A
9/10/16	6:30am	Antagex	1tab	PO	bid	served	AC
		Loxen	1tab	PO	bid	served	AC
		Rapiclav	1tab	PO	bid	served	AC
		Trandate	1tab	PO	tid	served	AC

Date	Time	Drug	Dose	Route	Frequency	Remark	Name of nurses
11/10/16	8:50am	Antagex	1tab	PO	daily	served	AC
		Loxen	1tab	PO	daily	served	AC
		Rapiclav	1tab	PO	daily	served	AC
		Trandate	1tab	PO	daily	served	AC
12/10/16		Antagex	1tab	PO	daily	served	AC
		Loxen	1tab	PO	daily	served	AC
		Rapiclav	1tab	PO	daily	served	AC
		Trandate	1tab	PO	daily	served	AC
15/10/16		Loxen	1tab	PO	daily	served	AC
		Trandate	1tab	PO	daily	served	AC

Table 3: Pre-operative nursing care plan 1: Date: 4/10/2016

Need: To keep the body clean

Nursing diagnosis: Potential for infection related to poor skin hygiene evidence as grown hair.

Objectives	Nursing intervention	Rationale	Evaluation
To prevent any infection within 10mins of care	-we cleaned and shaved the pubic region using a shaving bit	-This was all done to fight against any infection during operation	Patient went into the theatre with all confidence of infection free
	-we administered antibiotic like steritax as prescribed with consent	-the same rationale	

Table 4 : Nursing care plan 2, Date 4/10/2016

Need: for the patient to be calm

Nursing diagnosis 2: Anxiety due to knowledge deficit

Objectives	Nursing intervention	Rationale	Evaluation
To do away with fear within 30mins of dialog	-We reassured the patient	Reassuring the patient gets her fear free which can help reduce her BP	Patient went into the theatre with little or no fear

Table 5 -- Post-operative nursing care plan 3- Date 05 10 2016

Need: To ensure a patent air way

Nursing diagnosis: Potential for respiratory distress related to secretions along the respiratory tract evidence as gagging breath.

Date: 4/10/2016

Objectives	Nursing interventions	Rationale	Evaluation
To ensure a free and clear respiratory tract of the patient	-We turned the head of the patient laterally with the patient still lying supine.	This was to let secretions flow out easily from the tract	Some secretions flew out through the mouth and respiration was improved
	-We monitored her vital signs regularly. That is every after 15mins for the first two hours, every after 30mins for the next two hours and every one hour for the next	This was to ensure that health is maximized and restored	All signs were monitored and charted within 8hours of care

Objectives	Nursing interventions	Rationale	Evaluation
	four hours		

Table 6: Nursing care plan 4-- Need: To maintain a balance in fluid input and output

Nursing diagnosis: Potential for dehydration related to unconsciousness evidence as inability to take foods by mouth.

Date: 5/10/2016

Objectives	Nursing intervention	Rationale	Evaluation
To ensure hydration throughout treatment	-We served IV fluids as prescribed		
	-Encourage enough consumption of fluids and fruits when the patient bowels sounds are heard	This was to ensure fluid and electrolyte balance in the body	Patient was not dehydrated till the end of treatment and discharge.

3.10 Table 7: Daily evolution of the patient

Date	Time	Observation	Identity of nurse
4/10/16	Morning 8:30am	Patient was edematous very weak and was 32weeks pregnant	Q and S
	Evening 5pm	Post operative,	A

Date	Time	Observation	Identity of nurse
		patient was conscious	
5/10/16	Morning 9am	Patient could take oral fluids with watery foods	A and S
	Evening 4:30pm	Patient was fit for ambulation	D and F
6/10/16	Morning 8am	Patient was improving with regards to treatment	A and S
	Evening 5pm	Patients condition was stable	A and Q
7/10/16	Morning 7am	Patient complaint of severe headache and was prescribed paracetamol tabs	Q and S
	Evening 6pm	Headache subsided totally	A
8/10/16 To 15/10/16	Morning and Evening	Patient was improving with no complain and was told to continue treatment	DAPPD,A,S,A.

3.11 Table 8: Vital sign chart

Date	Time	T(°c)	BP(M mHg)	Body weight(Kg)	Pulse(b /m)	RR(c/m)	Bowel	urin e	vomi tus	intake
4/10/	9:30a	38.2°c	173/12	85kg	122b/	24c/	1	2	0	2glass of

Date	Time	T(°c)	BP(M mHg)	Body weight(Kg)	Pulse(b /m)	RR(c/m)	Bowel	urine	vomitus	intake
16	m		3mmHg		m	m				water
5/10/16	6am	37.7oc	146/92 mmhg	73kg	97blm	22	0	500 cc	0	1litre
	8:30am	36.9	171/126	73	111	27	1	1000cc	0	1/2litre
	1:30pm	36.6	154/104	72	126	36	1	500cc	0	1.5litre
	4:30pm	36.6	163/107	72	94	24	1	1000cc	0	1litre
6/10/16	6am	38	165/104	70	114	29	0	500cc	0	1litre
	6pm	37	130/119	70	92	23	1	500cc	0	1litre
	7:45pm	37.1	153/119	70	63	16	1	100cc	0	1.5litre
	9pm	38.2	129/72	70	95	24	0	1000cc	0	1/2litre
	10pm	36.8	140/110	70	95	24	0	500cc	0	0
7/10/16	4am	36	165/104	70	114	29	1	500cc	0	1/2litre
	4:30pm	37.5	170/110	70	66	17	0	500cc	0	1litre
	5pm	37.3	165/110	70	67	18	1	500cc	0	1Litre
8/10/16	7am	37.7	149/103	70	109	28	0	500cc	0	1/2Litre
	3:30pm	36	144/110	70	107	27	1	500cc	0	1/2Litre
9/10/16	8am	38.2	135/11	70	100	25	1	100	0	1/2Litre

Date	Time	T(°c)	BP(M mHg)	Body weight(Kg)	Pulse(b /m)	RR(c/m)	Bowel	urin e	vomi tus	intake
16			2					0cc		
	4pm	26.2	150/10 2	70	114	29	0	500 cc	0	1litre
10/10 /16	6:30a m	37.1	142/10 0	70	115	30	0	500 cc	0	1/2litre
	3:pm	36.9	130/10 7	70	94	24	1	100 0cc	0	1litre
11/10 /16	6:30a m	37.4	147/11 4	70	83	21	1	500 cc	0	1/2litre
	2pm	36.8	130/10 0	70	90	22	0	500 cc	0	1/2litre
12/10 /16	7:30a m	36.8	130/99	70	101	25	1	100 0cc	0	1litre
13/10 /16	7am	36.5	129/10 0	70	111	27	1	100 0cc	0	1.5litre
14/10 /16	11:50 am	37.5	130/10 0	70	79	20	1	100 0	0	1litre

EVOLUTION OF PATIENT (MOTHER AND CHILD)

The mother and child evolve favourably under treatment. They got well and were discharged.

CHAPTER FOUR: REVIEW OF MEDICATIONS (Davis' drug guide for student nurses).

4.1 MEDICATION 1

-Trade name: no trade name

-Generic name: MgSO₄

-Mechanism of action: Acts both through a central depressant effect on acetylcholine

-Dose and mode of administration: 5gm loading dose IM then later 4gm

-Side effects: nausea, vomiting, headache.

-Contraindication: renal impairment, kidney failure, heart disease

-Precautions: do not take this drug alongside alcohol

-Side effects observed on administration: Nil

4.2 MEDICATION 2

-Generic name: Bethametasone

-Trade name: Celestine

-Mechanism of action: It is a corticosteroid hormone receptor agonist. Although its mechanism of action is unknown it is effective when applied topically to cortico-responsive inflammatory dermatomes'.

-Dose and mode of administration: 12gm IM

-Side effects: high blood sugar increases, chronic trouble sleeping less severe, condition of excess stomach acid secretion.

-Contraindication: should not be given to unpregnant women

-Precaution: should be given with caution to heart failure

-Side effects observed on administration: Nil

4.3 MEDICATION 3

-Generic name: Steritax

-Trade name: ceftriaxone sodium + sulbatan sodium

-Mechanism of action: ceftriaxone is a bactericidal in action. Sulbatan is a penicillanic acid sulphone with beta lactamase inhibitory properties

-Dose and mode of administration: 0.5mg 2A IVD

-Side effects: effects on ability to drive and use machines not applicable

-Contraindication: patient allergic to penicillin or cephalosporins or hypersensitive to sulbactan

-precautions: should be giving with caution to patient with gastrointestinal disease especially colitis.

-side effects observed on administration: itching around the area of injection

4.4 MEDICATION 4

-Generic name: Metamizole

-Trade name: Novalgin/analgin

-Mechanism of action: it is an ampyrone sulfonate analgesic, antispasmodic and antipyretic. Its precise mechanism is unknown

Dose and mode of administration: 2A IVD

-Side effects: exacerbation of dyspnoea cyanosis and respiratory arrest

-contraindication: should not be use in hypersensitivity to pyrazolones.

-precautions: should be use with patient having known history for hypersensitivity

-side effects observed during administration:NIL

4.5 MEDICATION 5

-Generic name:La oxen

-Trade name: ofloxacin

-Mechanism of action: they decrease blood pressure by preventing the release of noradrenalin thus causing relaxation of vascular smooth muscles

-Dose and mode of administration: 100cc IVD

-Side effects: orthostatic hypotension, headache, drowsiness and body weakness

-contraindication: renal impairment, heart failure

-precaution: should be administered with caution to smokers and excessive salts intake

4.6 MEDICATION 6

-Generic name :Ampicillin

-Trade name: Pricipen

-Mechanism of action: By binding to specific penicillin- binding proteins located inside the bacterial cell wall preventing cell replication.

- Side effects: sinophilia and rashes

-Contraindication: severe renal impairment, clostridium deficile colitis

-Precautions: serious and occasionally fatal, hypersensitivity (anaphylactoid reactions have been seen.

-Side effects observed on administration of drug: Nil

4.7 MEDICATION 7

-Generic name: Paracetamol

-Trade name: Doliprane

-Mechanism of action: it has minimal anti inflammatory effects but its precise mechanism of action is unknown

-Dose and mode of administration: 2tabs PO

-Side effects: allergic rash, constipation.

-Contraindication: no contraindication in both breast feeding and pregnant women

-Precautions: beware of over dosage because it causes renal impairment

-Side effect on administration: constipation

4.8 MEDICATION 8

-Generic name: Antagex

-Trade name: Atarax /Hydroxyzine

-Mechanism of action: it is a potent H1 receptor agonist and an anti histamine

-Dose and mode of administration: 1tab bid PO

-Side effects: nausea, dizziness, drowsiness, vomiting

-Contraindication: heart failure, renal failure, kidney disease.

-Precaution: before taking this drug, tell your doctor if you are allergic to it or not.

-Side effects observed during administration: dizziness

4.9 MEDICATION 9

-Generic name: Rapiclav

-Trade name: Amoxicillin.

-Mechanism of action: it is a bactericidal which binds to bacterial cell wall and prevent cell replication.

-Dose and mode of administration: 1tab bid PO

-Side effects: nausea, vomiting, dizziness, hypersensitivity, rashes, anaphylaxis, renal impairment.

-Precautions: should be administered with caution to patient with hypersensitivity to penicillin.

-Side effect observed during administration: headache

4.10 MEDICATION 10

-Generic name: Trandate

-Trade name: Labetalol

-Mechanism of action: it inhibits cardiac response to the sympathetic nerve stimulation by blocking the beta receptors thereby reducing heart rate, cardiac output and blood pressure.

-Dose and mode of administration: 1tab bid PO.

-Side effects: brachycardia, sleep disturbance.

-Contraindication: complete heart block, sinus, severe low blood pressure bronchospasm, emphysema, severe liver disease, diabetes, kidney disease.

-Precautions: do not smoke during treatment, reduce salt intake.

-Side effects observed during drug administration: sleep disturbance.

CHAPTER FIVE: DISCHARGE SUMMARY

5.1 Date of admission - 4/10/2016

5.2 Date of discharge – 26/10/2016

5.3 Diagnosis on admission – severe preeclampsia

5.4 Diagnosis on discharge: CS with a life baby; successful managed case of pre-eclampsia.

5.5 Treatments received

The patient received the following treatments while at the hospital:

-MgSO₄

-Celestine

-Steritax

-Novalgin

-Loxen tab

-Ampicillin

-Paracetamol tabs

-Antagex tabs

-Rapiclav tabs

-Trandate tabs

5.4 Response to treatment

Patient and baby got well and were discharged on 26/10/16.

5.5 Condition on discharge

Patient left the hospital for home on the 26/10/16 with the wound on the operated side already healed, she had no complains. Her stay in the hospital was even because of her baby who was in the nursery.

5.6 Home treatment

She was prescribed ferrous sulphate tabs 1 daily for 1 month 2 weeks.

5.7 Advice on discharge

-She was advised to do little sports while at home to prevent oedema especially when pregnant.

-She was also told to eat food which does not contain too much salt.

-She was advised to eat well balanced meal with enough vegetables and consume much fluid.

-That she should avoid carrying out stressful activities and over thinking which may contribute to increase BP.

5.8 Appointment date

She had no appointment.

5.9 Follow up

Though she had no appointment, I still called to check on her and her baby's welfare. She told me they were doing very fine.

CHAPTER SIX: CONCLUSIONS

6.1 Positive findings

In the first place, I was able to achieve most of my specific and general objectives with the aid of the nursing and medical team

-The Bamenda regional hospital is an open place with variety of disease cases that can be studied.

-The staff there was welcoming and was ready to teach students whenever they come up to them for help.

- The hospital has well trained surgeons and doctors who are always outreached in case of an operation, emergencies and so on.

-The hospitals environment is very calm, clean and well ventilated which eases health restoration.

6.5 Conclusions

My case study internship which started on the 27 September to the 29 October 2016 at the Bamenda regional hospital was a successful one. During my study at the F ward and post natal ward, I realized that I greatly improved on my skills as well as was able to face more challenging cases. I was so happy because at the end of the internship, all my specific objectives were achieved. This internship was one of the best that I had ever had.

REFERENCES

1. Denis Palmer and Catherine E Wolf ; 2008, Handbook of Medicine in Developing countries
2. Davis' essential drug list for student nurses

3. **Alice Wang, Sarosh Rana and S. Ananth Karumanchi, Preeclampsia: The Role of Angiogenic Factors in Its Pathogenesis** *Physiology* 24:147-158, 2009. doi:10.1152/physiol.00043.2008 <http://www.the-aps.org/publications/physiol>
4. A. Metin Gülmezoglu and João Paulo Souza , WHO recommendations for **Prevention and treatment of pre-eclampsia and eclampsia**
5. By Mayo Clinic Staff, Definition preeclampsia; <http://www.mayoclinic.org/diseases-conditions/preeclampsia/basics/definition/con-20031644>
6. **Pre-eclampsia** <http://en.wikipedia.org/wiki/Pre-eclampsia>
7. The women's the royal women's hospital; **Guideline Pre-Eclampsia: Management**