**SUPJECT: MEDICAL CASE STURDY.**

**NAME : MOHAMED ADAN ALI.**

**COLL NO: D/NURS/15039/031.**

**SCHOOL: MKN MTC**

**CLASS: SEPTEMBER 2014**

**INDEX NUMBER: 86646**

**INTRODUCTION TO MEDICAL CASE STURDY**

It is a care given to an individual who is suffering from a disease and it is goal oriented.

On admission the individual is given immediate management and followed by subsequent management which is done when he or she is in ward or at home.

After discharge the individual is visited at home so as to monitor his progress and give comprehensive health education to enhance the wellbeing of the individual.

**HOW I FIRST MET MY CLIENT**

I met my client on 11th July 2016 when she was brought to pediatric ward by her grandmother through casualty with complain of difficulty in breathing and coughing.

I admitted her to the ward and gave her the start dose medication written for her in the treatment sheet by the physician. I then gave abed in the ward and administered oxygen via nasal prongs.

After the child has stabilized I explained to her my interest of taking her granddaughter to be my client of my medical case study and she accepted. I thanked for the cooperation and acceptance.

After managing a week the child in the hospital recovery was evidenced and the physician saw the need to discharge and she was discharged and I planned with the grandmother to visit them on July 24, 2016. Finally I wished them the best and escorted then the gate.

**BIODATA OF MY CLIENT**

Name: Elizabeth Karvina.

Sex: Female.

Age: 9 months.

Religion: Christian (Catholic.)

County: Makueni.

Location: Waiya.

Sub location: Sakai.

Village: Thongoni.

Chief: Mr. Kimuyu.

Sub chief: Mr. Mutua.

Next of kin: Grandmother.

Contact: 071117055.

Date of first encounter: 11th July 2016.

**HISTORY OF THE PRESENT ILLNESS**

Elezabeth was brought to the hospital by her grandmother with complain of difficulty in breathing and cough which have started at 3 AM on 11th July 2016 and was there until she was brought to the hospital in the morning.

Vital signs on admission

Pulse: 90 beat per minute.

Respiration: 26 beat per minute.

Temperature: 38 degrees Celsius.

**PAST MEDICAL AND SURGICAL HISTORY**

Elezabeth have history of previous hospitalization due pneumonia complication when she was 8 month old. There is no history of surgical operation done on her.

**FAMILY AND SOCIAL ECONOMIC HISTORY**

Elezabeth is the first, she lives with her grandmother and both her parent are student. There is no history of chronic illness in the family of Elezabeth.

**ANTENATAL HISTORY**

The mother of Doreen attended all her 4 antenatal clinics in Mbumbuni dispensary where she got all her antenatal needs.

**INTRAPARTUM HISTORY**

Elezabeth was born in Makueni referral hospital at gestation of 38 weeks. Her birth weight was 3.2 kilogram, had no birth complication during birth.

**POSTANATAL HISTORY**

Elezabeth got all her immunization schedule up to now as per Kenyan program, her nutritional status is normal and her growth development as per her age is normal.

**ADMISSION**

Elezabeth was admitted as inpatient in pediatric ward. She was sick looking in general and had difficulty in breathing coupled with coughing.

**REACTION TO HOSPITILIZATION**

Elezabeth was brought to the hospital by her grandmother and her reaction to hospitalization was not that stressing as she had previous admission to ward with her granddaughter with severe pneumonia and she was familiar with hospitalization.

My immediate management for Elezabeth was giving the start dose medication written for her in the treatment sheet. I then took her vital signs and recorded as follows

Pulse: 90 beat per minute.

Respiration: 26 beat per minute.

Temperature: 38 degrees Celsius.

Finally I performed physical examination on the baby and recorded as follows

**HEAD**

Hair was well distributed, no scars, lice or any fungal infection.

**EYES**

She was seeing well, there was no discharge from the eyes and there was movement of the eye ball, eye lid and eye borrows. Pupils were reacting to light and were of equal size.

**EARS**

Elezabeth was hearing well, there was neither discharge nor ear deformities.

**NOSE**

No epistaxis, no congenital abnormalities and no sores on the nostrils.

**MOUTH**

There was no mouth sores, the lips were moist and there was no bad breath. There was no gum sores and bleeding, no dental carries and there was no pallor on tongue inspection.

**NECK**

There were no scars or swelling on inspection. There was no swollen lymph node and no distended jugular vein on palpation.

**UPPER LIMP**

On inspection both lower limps were of equal size, there was no finger clubbing and pallor on finger nails. Capillary refill took less than two second and the nails were short and clean.

**ABDOMEN**

On inspection there was no contour, the umbilicus mark was present. There were neither visible veins nor hernia. There was no tenderness on touch.

**GENITALIA**

There was no swollen lymph node on the inguinal region. There were no warts on the external genitalia and there was no discharge.

**LOWER LIMBS**

No deformities were present; both limbs were of equal length and size. There were no signs of varicose vein and deep venous thrombosis. Oedema was not present on the tibia, pedal and ankle.

**INVESTIGATION DONE**

Full haemogram

White blood cell: 12.5

Red blood cell: 5.76.

Haemoglobin: 13.2 gram per deciliter.

**MEDICAL DIAGNOSIS: PNEUMONIA.**

**HEALTH EDUCATION**

I advised the grandmother of my client to maintain good hygiene for the child so as to reduce health hazard caused by poor hygiene.

Secondly I taught the grandmother the importance of giving balanced diet to the child so as boost her immunity to fight the germs that causes pneumonia infection.

The infection was causing some degree of febrility I therefore advised the grandmother to reduce clothing when the child is febrile.

**DRUGS USED IN THE TREATMENT**

**BENZYLPENICILLIN**

**CLASSIFICATION:** is an antibiotic.

**MODE OF ACTION:** is bacterial static in low dosage and bacterial cidal in high dosage.

**DOSSAGE:** 365000 IU 6hourly daily for five days.

**ROUTE OF ADMNISTRATION:** intramuscular and intravenous.

**INDICATION:** pneumonia, gonorrhea, tetanus and septicaemia.

**CONTRAIDICATION:** Allergy to the drug.

**SIDE EFFECT:** hypersensitivity, nausea and vomiting, pain at injection site and inflammation of the vein.

**NURSING RESPONSIBILITY**: The nurse should enquire if the patient is allergic to penicillin. The nurse should ensure the drug is given to the right patient at the right time in the right dose and at the right route. The nurse shall teach the patient on the side effect of the drug so as report if encountered.

**GENTAMICIN**

**CLASSIFICATION:** Is aminoglycoside antibiotic.

**MODE OF ACTION:** bacterial cidal.

**DOSAGE:** 20 mg once per day.

**ROUTE OF ADMINISTRATION**: intravenous or intramuscular

**INDICATION:** infection of staphylococci like pneumonia.

**CONTRAINDICATION**: Allergy to gentamicin.

**SIDE EFFECTS:** Allergy, nausea, vomiting and nephrotoxicity.

**NURSE RESPONSIBILITY:** The nurse should enquire if the patient is allergic to gentamicin. The nurse should ensure the drug is given to the right patient at the right time in the right dose and at the right route. The nurse shall teach the patient the side effect of the drugs so as report if encountered.

**PARACETAMOL**

**CLASSIFICATION:** is an antipyretic and analgesic.

**MODE OF ACTION:** it inhibits production of cyclooxygenase which prevent metabolism of arachidonic to prostaglandin H2 which responsible for pain. The same inhibition also reduces concentration of prostaglandin E 2 which reduces fever.

**DOSSAGE:**  5 mills 8 hourly per day.

**ROUTE OF ADMNISTRATION:** Per oral and intravenous.

**INDICATION:**  pyrexia, analgesic for patient allergic to aspirin, rheumatic fever, arthritic disorder of skeletal muscle, common cold and flu

**CONTRAIDICATION:** Allergy to the drug.

**SIDE EFFECT:** hypersensitivity, nausea and vomiting, hepartotoxicity.

**NURSING RESPONSIBILITY**: The nurse should enquire if the patient is allergic to paracetamol. The nurse should ensure the drug is given to the right patient at the right time in the right dose and at the right route. The nurse shall teach the patient on the side effect of the drug so as report if encountered.

**NURSING CARE PLAN**

**NAME: ELIZABETH KAVINYA.**

**IP NO: 0020109.**

**SEX: FEMALE.**

**MEDICAL DIAGNOSIS: PNEUMONIA.**

**DATE: 15th JULY 2016.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Assessment | Nursing Diagnosis | Goal/ expected out come | Nursing intervention | Rationale  | Implementation | Evaluation | Name |
|  Breathing. Gas exchange  Pain  | Ineffective airway clearance related to inflammation as evidenced by patient not breathing well. Impaired gas exchange related change in alveolar capillary membrane evidenced by patient gasping for air.Pain related to inflammation evidenced by patient verbalizing it. | Effective airway for the patient to breathe well within one hour.Improved ventilation for optimal gaseous exchangeRelief pain . | Give a comfortable position (Fowler’s) that the patient breathe wellPosition the patient in fowler position.Administer pain killer to relief pain in 30 minutes. | For effective airway.To enhance optimal gaseous exchangeTo relief pain from the patient. | Patient positioned in fowler’s positionPatient positioned in semi fowler position.Give paracetamol 5 mills. | After one hour the patient was breathing well.After thirty minutes the patient gasses exchanged improved.After thirty minutes pain was relieved. | MohaaMohaaMohaa  |

**LITERATURE REVIEW OF PNEUMONIA**

Pneumonia is a potentially fatal infection and inflammation of the lower respiratory tract which is caused by various microorganism including bacteria, fungi and viruses.

**CLINICAL FEATURES**

The illness is frequently characterized by high fevers, shortness of breath, rapid breathing, sharp chest pain and productive cough with phlegm.

**TYPES OF PNEUMONIA**

Pneumonia that develops outside the hospital setup is called community acquired pneumonia.

 Pneumonia that develops after admission to hospital is called nosocomial or hospital acquired pneumonia.

Pneumonia that arises from entry of exogenous and endogenous substance in lower respiratory tract is aspiration pneumonia.

**PATHOPHISIOLOGY**

Invading microorganism gains access in to lower respiratory tract it illicit exuberant immune response and the capillaries in the lungs goes in to spasm and becomes leaky leading to seeping of protein rich fluid in the alveoli. This causes less functional area for oxygen carbon dioxide exchange and the individual becomes relatively oxygen deprived while retaining potentially damaging carbon dioxide. The inflammation also increases and the leaky capillaries might tint the mucus with blood and this further deteriorates the efficiency of gaseous exchange.

**MEDICAL MANAGEMENT**

In the management of pneumonia it involves curing the infection and preventing complication. In the medical management it includes administering antibiotics like amoxicillin, azithromycin, ciprofloxacin; ceftriaxone and ceftazidime. Also antipyretic like paracetamol are give to relieve fever caused by the infection from the microorganism.

**SPECIFIC MANAGEMENT**

The patient should maintain and take the drug at the prescribed time for effectiveness of it activity. Clothing also should be reduce when the individual fevers is high

**HEALTH EDUCATION ON DISCHARGE**

The individual is advised to take balanced diet so as to enhance and boot immunity.

The individual is advised to take a lot of fluid to reduce chances of dehydration due to the condition.

The individual is advised to maintain high level of hygiene so as prevent infection proliferation in the patient.

If the person is discharge with oral medication the individual is advised to strictly take the drugs at correct time told by the physician.

 **HOME VISITS TO MY CLIENT**

**FIRST HOME VISIT**

**OBJECTIVES**

* To introduce and familiarize myself with my client family.
* To assess home environment.
* To assess the improvement of the client from the condition.

**LESSON PLAN FOR THE FIRST HOME VISIT**

* Date: 24th July 2016.
* Time: 3.00 pm.
* Venue: client’s home.
* Audience: client and her family.
* Presenter: Mohamed Adan Ali.
* Duration: 30 minutes.

**LESSON PLAN FOR THE FIRST HOME VISIT**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Time** | **Specific objectives** | **Content** | **Teaching method** | **Learning activity** | **Teaching activity** | **Teaching aid** | **evaluation** | Teaching aid |
| **3min** | Introduction to the rest of the family. | Creating good rapport with client family and explaining the aim of the visit. Introduce yourself and your friend to the client family and ask them to do the same.  | Discussion. | Listening and answering. | Explaining. | Name tag. | Client and family understood well. |  |
| **7min** | Assess client home environment | Go round the compound with the client grandmother and assess the building structures of the family. Asses how where they dispose their waste and the type of latrine they use in their home setup. | Explain and listen. | Listening and answering question. | Explaining. | Name tag | Client understood well. |  |
| **15min** | Asses the improvement of the client from condition. | Assess the general condition of the client by inspecting the client if there is no paleness, cyanosis and jaundice. I assessed the breathing pattern of my client and found out she was breathing and there was no cough which was the presenting complain of my client when she was brought to the hospital. | Discussion. | Listening and answering | Explaining and answering | Charts | Client understood well. |  |
| **5min** | Summary of the visit | Thank and appreciate the client and the family for their cooperation throughout the home visit. Schedule and plan with the client for the next visit to the family for convenience. | discussion | Listening | explaining |  | Client understood |  |

**REPORT OF THE FIRST HOME VISIT**

**DATE: 24/7/2016**

It was on 24th July 2016 when I visited my client at her home in Kaumoni in the company of my colleague. On arrival we found my client with her grandmother waiting for us. The grandmother welcomed us warmly to their home .I begun introducing my colleague and myself to my family members of my client and they also introduced themselves. They then gave me go ahead to continue with objectives of home visits

I begun by assessing their home and their compound at large, they live in a house made of clay bricks at Kaumoni. It was two roomed house with toilet and bathroom that are clean. There kitchen was well ventilated and their houses were generally clean. The water they use is from tap and is treated with water guard for drinking. They dispose their waste properly.

On general examination of my client condition was good. She had no cyanosis, no oedema and no jaundice. I explained to the grandmother of my client the importance of giving balanced diet which contains carbohydrates, protein and vitamins so as to promote healthy state and facilitate optimal growth of the child.

Finally I invited question and attended to them. I then informed them my next visit will be on 10th August 2016 and they accepted. I thanked them all for the cooperation and we left our client house feeling contented that I have met my objectives.

**SECOND HOME VISIT**

**OBJECTIVES**

* Review of first visit objectives.
* Assess child condition.
* Share health education on predisposing factors of the pneumonia.
* Summarize the visit

**LESSON PLAN FOR THE FIRST HOME VISIT**

* Date: 10th August 2016.
* Time: 3.00 pm.
* Venue: client’s home.
* Audience: client and her family.
* Presenter: Mohamed Adan Ali.
* Duration: 30 minutes.

**LESSON PLAN FOR THE SECOND HOME VISIT**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Time** | **Specific objectives** | **Content** | **Teaching method** | **Learning activity** | **Teaching activity** | **Teaching aid** | **evaluation** | Teaching aid |
| **3min** | Review first visit objectives. |  Assess whether the previous discussion was implemented like maintaining good hygiene of their home environment. | Discussion. | Listening and answering. | Explaining. | Name tag. | Client and family understood well. |  |
| **7min** | Assess child condition. |  Assess the general condition of the child if the child is weak or strong. Assess if the child has no jaundice, pallor and dehydration.  | Explain and listen. | Listening and answering question. | Explaining. | Name tag | Client understood well. |  |
| **15min** | Share health talk on predisposing factors of pneumonia. | Highlight the predisposing factors which include low birth weight, not breastfeeding well, incomplete vaccination status and exposing the baby to cold.  | Discussion. | Listening and answering | Explaining and answering | Charts | Client understood well. |  |
| **5min** | Summary of the visit | Thank and appreciate the client and the family for their cooperation throughout the home visit. Schedule and plan with the client for the next visit to the family for convenience. | discussion | listening | explaining |  | Client understood |  |

**REPORT OF THE SECOND HOME VISIT**

**DATE: 10/8/2016**

I undertook my second home visit on 10th August 2016 with the company of colleuge. We found her waiting for us in the sitting room and she welcomed us warmly. After relaxing for a couple of minutes I went ahead to fulfill my objectives.

 I started assessing the child condition by assessing condition if the child is weak or strong, if the child has jaundice, pallor and dehydration. I found out the child general condition was well and had no pallor, jaundice or dehydration.

After that I discussed with the grandmother of my client about the predisposing factors of pneumonia which include low birth weight, not breastfeeding well, incomplete vaccination status and exposing the baby to cold. I shared with her the importance of preventing these from the baby.

Finally I invited question and attended to them. I then informed them my next visit will be on 28th August 2016 and they accepted. I thanked them all for the cooperation and we left our client house feeling contented that I have met my objectives.

**THIRD HOME VISIT**

**OBJECTIVES**

* Review of second visit objectives.
* Assess child condition.
* Share health education on preventive measures of pneumonia.
* Summarize the visit

**LESSON PLAN FOR THE THIRD HOME VISIT**

* Date: 28th August 2016.
* Time: 3.00 pm.
* Venue: client’s home.
* Audience: client and her family.
* Presenter: Mohamed Adan Ali.
* Duration: 30 minutes.

**LESSON PLAN FOR THE THIRD HOME VISIT**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Time** | **Specific objectives** | **Content** | **Teaching method** | **Learning activity** | **Teaching activity** | **Teaching aid** | **evaluation** | Teaching aid |
| **3min** | Review first visit objectives. |  Assess whether the previous discussion was implemented like preventing the child from contacting the predisposing factors. | Discussion. | Listening and answering. | Explaining. | Name tag. | Client and family understood well. |  |
| **7min** | Assess child condition. |  Assess the general condition of the child if the child is weak or strong. Assess if the child has no jaundice, pallor and dehydration.  | Explain and listen. | Listening and answering question. | Explaining. | Name tag | Client understood well. |  |
| **15min** | Share health talk on preventive measures of pneumonia. | Preventive measures of pneumonia include vaccinating every child who is below five years as pneumococcal pneumoniae is the bacteria that causes pneumonia. Being aware of your general health as immune compromised individual is easily susceptible to pneumonia infection. Smocking as it damages lungs reducing the ability to fight infection. | Discussion. | Listening and answering | Explaining and answering | Charts | Client understood well. |  |
| **5min** | Summary of the visit | Thank and appreciate the client and the family for their cooperation throughout the home visit. Terminate the visit and thanks for their support throughout the case sturdy. | Discussion | listening | explaining |  | Client understood |  |

**REPORT OF THE THIRD HOME VISIT**

**DATE: 28/8/2016**

I undertook my third home visit on 28th August 2016 with the company of colleuge. We found her waiting for us in the sitting room and she welcomed us warmly. After relaxing for a couple of minutes I went ahead to fulfill my objectives.

 I started assessing the child condition by assessing condition if the child is weak or strong, if the child has jaundice, pallor and dehydration. I found out the child general condition was well and had no pallor, jaundice or dehydration.

After that I discussed with the grandmother of my client about the preventive measures of pneumonia which include vaccinating every child who is below five years as pneumococcal pneumoniae is the bacteria that causes pneumonia. Being aware of your general health as immune compromised individual is easily susceptible to pneumonia infection. Smocking as it damages lungs reducing the ability to fight infection

Finally I invited question and attended to them. I then informed them that this is my last visit and advised them to follow all that I have taught them. I thanked them all for the cooperation and we left our client house feeling contented that I have met my objectives. Lastly I told them they can call me any time they need my help.

 **SUMMARY OF THE CASE STUDY**

I first met my client on 11th July 2016 when she was brought to pediatric ward by her grandmother through casualty with complain of difficulty in breathing and coughing.

I admitted her to the ward and gave her the start dose medication written for her in the treatment sheet by the physician. I then gave abed in the ward and administered oxygen via nasal prongs.

After the child has stabilized I explained to her my interest of taking her granddaughter to be my client of my medical case study and she accepted. I thanked for the cooperation and acceptance.

After managing her a week in the hospital recovery was evidenced and the physician saw the need to discharge and she was discharged and I planned with the grandmother to visit them on July 24, 2016. Finally I wished them the best and escorted then the gate.

I did my first home visit on 24th July 2016 where I visited my client at her home in Kaumoni in the company of my colleague. On arrival we found my client with her grandmother waiting for us. The grandmother welcomed us warmly to their home .I begun introducing my colleague and myself to my family members of my client and they also introduced themselves. They then gave me go ahead to continue with objectives of home visits

I begun by assessing their home and their compound at large, they live in a house made of sandy bricks at Kaumoni. It was two roomed house with toilet and bathroom that are clean. There kitchen was well ventilated and their houses were generally clean. The water they use is from tap and is treated with water guard for drinking. They dispose their waste properly.

On general examination of my client condition was good. She had no cyanosis, no oedema and no jaundice. I explained to the grandmother of my client the importance of giving balanced diet so as to promote healthy state and facilitate optimal growth of the child.

I undertook my second home visit on 10th August 2016 with the company of colleuge. We found her waiting for us in the sitting room and she welcomed us warmly. After relaxing for a couple of minutes I went ahead to fulfill my objectives.

 I started assessing the child condition by assessing condition if the child is weak or strong, if the child has jaundice, pallor and dehydration. I found out the child general condition was well and had no pallor, jaundice or dehydration.

After that I discussed with the grandmother of my client about the predisposing factors of pneumonia which include low birth weight, not breastfeeding well, incomplete vaccination status and exposing the baby to cold. I shared with her the importance of preventing these from the baby.

 My third home visit happened on 28th August 2016 with the company of colleuge and the reception was overwhelming.

After assessing the child condition I found out the child was normal and had no problem in any system of it is body. I then discussed with the grandmother of my client about the preventive measures of pneumonia which include vaccinating every child who is below five years as pneumococcal pneumoniae is the bacteria that causes pneumonia. Being aware of your general health as immune compromised individual is easily susceptible to pneumonia infection. Smocking as it damages lungs reducing the ability to fight infection

**CONCLUSSION**

Finally I concluded my case study by inviting question and attended to them all. I then informed them that this is my last visit and advised them to follow all that I have taught them. I thanked them all for the cooperation and I left my client house feeling contented that I have met all my objectives. Lastly I told them they can call me any time they need my help.

**RECOMMENDATION**

Children to be immunized against pneumococcal bacteria that cause pneumonia infection.

Immune compromised children to be given special care so as not to contact pneumonia as opportunistic infection

**BIBLIOGRAPHY**

Medical surgical textbook.

Pharmacology text book for nurses.

**AKNOWLEDGEMENT**

I would like to take this opportunity to thank the Almighty God for the strength he has given me to complete this case sturdy. I also want to thank my tutor Mrs. Jenifer Muoki for the guidance she gave in the cause of my case study.

 Special thank to my client and her family for their support throughout the case study. I thank my colleuge who has been accompanying me the entire home visit to my client.

Lastly I thank all the staff of Makueni referral hospital pediatric unit for the support they gave to my client during her stay in pediatric ward.