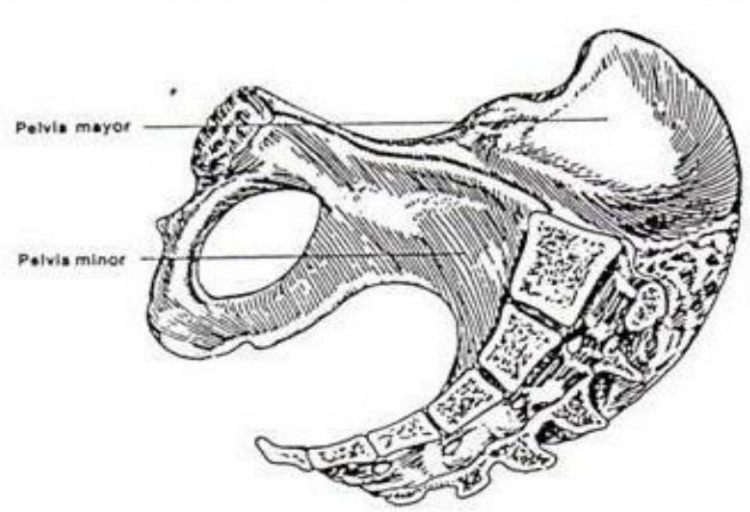
CHAPTER 2
THEORETICAL BACKGROUND

2.1 **Concept of Disease**

2.1.1 Anatomy of Physiology pelvic

2.1.1.1 Pelvic Bones



Picture 2.1 sagittal pelvis, showing the major and minor pelvis (Sarwono, 2010)

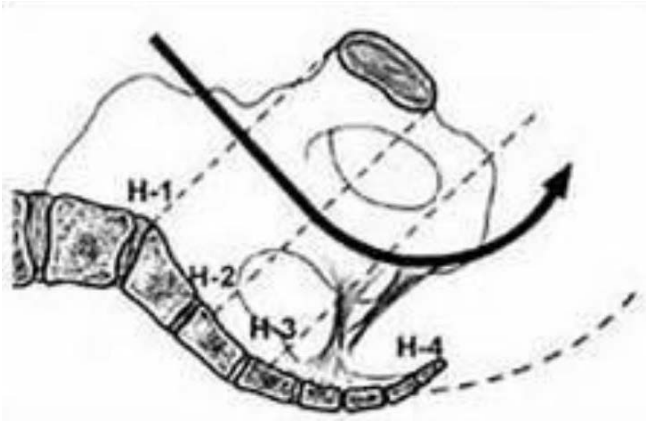
According to Sarwono Prawirohardjo (2010) the pelvic bones include:

a. Pelvis Major

Major pelvis is the pelvis which is located above the linea terminalis, also called a false pelvis. The section located below the linea terminalis is called pelvis minor or true pelvis. This final section is a part that has an important role in obstetrics and should be able to be recognized and assessed as best as possible to predict whether or not a baby can pass through it.

b. Minor pelvis

This minor pelvic shape resembles a channel with a forward axis (Carus's axis). This axis is classically a line connecting the point of association between the transverse diameter and the vera conjugate at the top of the pelvis with similar points in Hodge II, III, and IV. Up near the Hodge III the axis is straight, parallel to the sacrum, for the next curved forward, corresponding to the curvature of the sacrum. It is important to know when to end the birth with a cunam for the direction of withdrawal of cunam was adjusted with the direction of the axis of the birth canal.



Picture 2.2 axis of the pelvis (Sarwono, 2010)

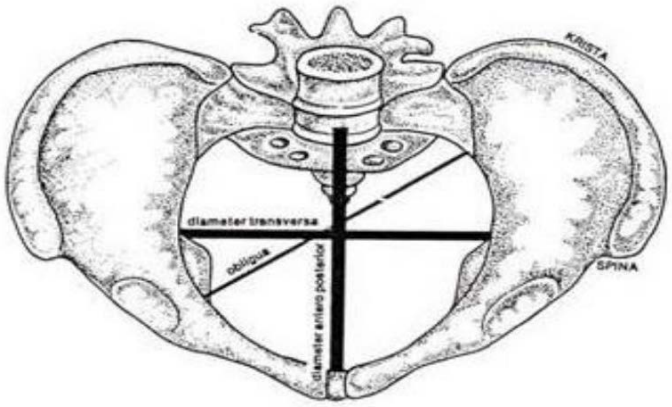
Between these two doors there is a pelvic cavity. The size of the pelvic space above and below is not the same. The pelvic floor has the widest size under the pelvic upper door, then narrows to the pelvis middle, and then become a little wider at the bottom. The narrowing is centered, and then becomes slightly wider at the bottom. The narrowing of the middle shoulder is as high as the ischial spine, the distance between the two ischial spines (interspinarum dyspneum) is normally ± 10.5 cm.

c. Hodge field

These Hodge fields are studied to determine to what extent the lowest part of the fetus descends in the pelvis in labor:

1) Hodge I: is a flat plane that passes through the top of the symphysis and montorium. This field is formed in the circle of the pelvic top door.
2) Field Hodge II: is a plane parallel to the Hodge I Field, which is located as high as the bottom of the symphysis.
3) Field Hodge III: is a plane parallel to the I and II Hodge Fields located as high as the right and left ischial spines. In other references, the Hodge III field is also called the O field. The head above 1 cm is called (-1) or vice versa.
4) Hodge IV Field: is a plane parallel to the Hodge I, II, III plane, located at the level of the coccyx os.

2.1.1.2 Upper Pelvis Door



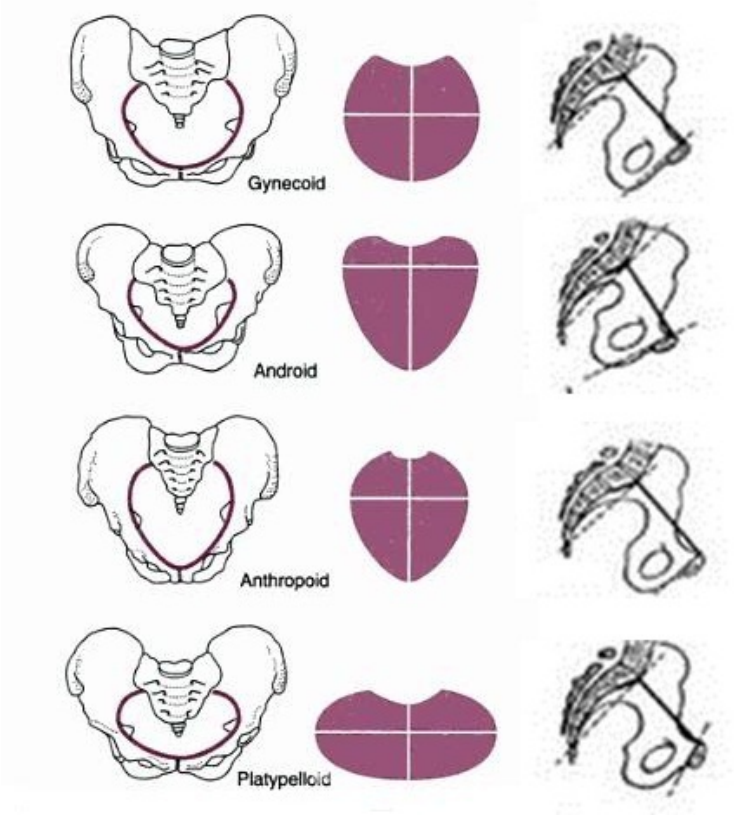
Picture 2.3 Door over the pelvis with conjugate vera, transverse diameter and oblique diameter (Sarwono, 2010)

The upper pelvic door is a plane formed by the promontory of the sacra vertebral body 1, linea innominata (terminalis), and the edge of the symphysis. There are 4 diameters on the pelvic top door, namely anteroposterior diameter, transverse diameter, and 2 meters oblique (Saifuddin, 2008).

The distance from the edge of the symphysis to the promontorium is approximately 11 cm, called konjugata vera. The farthest distance of the transverse line on the pelvic top door is approximately 12.5-13 cm, called the transverse diameter and konjugata vera and is passed to linea innominata, a diameter called oblique diameter is approximately 13 cm (Saifuddin, 2008).

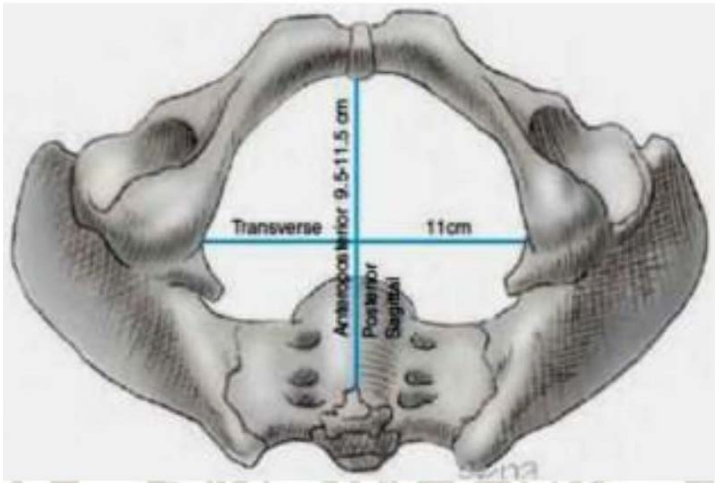
In the obstetrics are known four types of pelvis (division of Caldwell and Moloy, 2009), which features the following pelvic floor features:

a. Type Gynecoid : pelvis is best for women. The shape of the upper pelvic area door is almost round. The length of the antero-posterior diameter is approximately equal to the transverse diameter. This species is found in 45% of women.
b. Type Android : the shape of the top door of the pelvis is almost triangular. Generally men have this type. The length of the anteroposterior diameter is almost the same as the transverse diameter, but the latter is much closer to the sacrum. Thus, the back is short and flattened, while the front narrows forward. This species is found in 15% of women.
c. Type Anthropoid : the shape of the top of the pelvis slightly oval, like eggs. The length of the antero-posterior diameter is greater than the transversal diameter. This species is found in 35% of women.
d. Type Platypelloid : actually this type is a type of gynecoid that narrows in the direction of the back face. The transverse size is much larger than the size of the rear face. This species is found in 5% of women.



Picture 2.4 Type of Pelvic

2.1.1.3 Pelvic Bottom Door



Picture 2.5 Pelvic Bottom Door (Sarwono, 2010)

The underside of the pelvis is not a plane, but is composed of two flat planes, each of which is triangular, the plane formed by the line between the two tubes os iskii with the tip of the os of the sacrum and the other triangle whose base

is also the line between the two tubers os iskii with the bottom of the symphysis. The lower edge of the symphysis. The lower edge of the symphysis has a downward curve and is an angle called the pubic arch. Under normal circumstances the angle is ± 90°, or slightly larger, if less than 90°, then the fetal head will be more difficult to be born because it requires more places in the dorsal direction (towards the anus).

In this case it is necessary to elucidate the tip os sekrum / os koksigis not protruding fore, so the fetal head can not be born. The distance between the two tubes os iskii (tuberum distansia) is also an essential pelvic floor size. Tuberum distansia taken from the inside is ± 10.5 cm. when smaller, the distance between the midst of the tuberum to the end of the sacrum (posterior sagittal diameter) should be long enough for normal babies to be born.

2.1.1.4 Outside Measures

These external pelvic measures may be used when radiologic pelvimetry is not possible. In this way can be determined in outline type, shape, and size of the pelvis when combined with internal examination. The tools used include: long-term pelvis Martin, Oseander, Collin, and Boudeloque. Measured as follows:

a. Distinguished spinarum (± 24 cm - 26 cm), the distance between the two anterior spine of the superior anterior sinus and the right.
b. Crystalline distansia (± 28 cm - 30 cm), the longest distance between two symmetrical places on the left and right armic iliac crest. Generally these measurements are not important, but if this size is 2-3 cm smaller than normal values, pelvic can be suspected of being pathological.

c. Outer oblique distansia (external outcrop): the distance between the left posterior iliac spine and the anterior iliac spine of the right hand and of the posterior iliac spine to the superior anterior superior sinus spina. Both sizes are crossed. If the pnggul is normal, then these two sizes are not much different. However, if the pelvis is asymmetric (italic), the two sizes are distinctly different.
d. Intertro-American distances: the distance between the two major trocharkers.
e. External conjugate (Boudelogue) ± 18 cm: the distance between the top of the symphysis to the lumbar spinolus processus 5.
f. Distances of tuberum (± 10.5 cm): the distance between the right and left iskii tubes to measure the Oseander's length is used. The designated number of term must be added 1.5 cm because of the subcutaneous tissue between the bone and the end of the term, which prevents rapid measurement. If the distance is less than normal, the pubic archus is less than 90 °.

2.1.2 Chepalopelvic Disproportion (CPD)

2.1.2.1 Definition

Cephalopelvic disproportion (CPD) results from reduced pelvic size, too large a fetal size, or more commonly, and because of a combination of both (Cuningham, 2006). Any narrowing of the pelvic diameter reducing the pelvic capacity may cause dystocia during labor. There may be a pelvic floor narrowing, a pelvic floor, or a pelvis narrowed entirely by a combination of the above.

Cephalopelvic disproportion (CPD) is a disproportion between fetal size and pelvic size, ie certain pelvic size is not large

enough to accommodate the release of certain fetuses through the pelvis until pervaginal birth (Jitowiyono, 2010).

The narrow pelvis is the lack of one pelvic size one centimeter or more than the normal size or the absolute narrow pelvis whose conjugate size is 5.5 cm. On an absolute narrow pelvis means that all childbirths alive or dead will be born by sectio caesaria. Some clinical terminology that must be known that relate to the ratio between the weight of the fetus and pelvic size is the term sevalopelvik disproportion, which is an imbalance between the size of the fetus compared to the size of the pelvis (Manuaba, 2008).

Cephalopelvic Disproportion (CPD) is a medical diagnosis used when the baby's head is declared too large to fit past the mother's pelvis. In the most important obstetrics are not anatomically narrow pelvis, more importantly the functionally narrow pelvis means the comparison between the head and pelvis (Rusleena. T et al, 2012)

Fetopelvic disproportion is the inability of the fetus to pass through the pelvis. Disproporsi can be absolute or relative. Absolute if the fetus is not going to survive through the birth canal. Relative disproportion occurs when other factors influence. A slightly narrow pelvis can be treated with efficient uterine contractions, soft tissue looseness, location, presentation, and favorable fetal position and ability of the fetal head to hold moulage. Conversely, bad contractions, stiff soft tissue, abnormal position and inability of the head to perform moulage as it should, all can cause vaginal delivery is not possible (Oxorn, 2010).

Cephalopelvic disproportion (CPD), or fetopelvic disproportion is between the size of the fetus and pelvic size i.e. a particular pelvic size is not large enough to accommodate the release of a particular fetus through the pelvis until vaginal birth occurs. Adequate pelvis for a 2.27 kg baby birth can be large enough for 3.2 kg babies may not be large enough with a 3.6 kg baby (Verney, 2009).

2.1.2.2 Etiology

According Jitowiyono (2010) The causes that can cause abnormal pelvis can be divided as follows:

a. Abnormalities due to growth disorders
   1) The entire narrow pelvic: all small size
   2) Tipple pelvis: the size of the back face is narrow, the transverse size is biased
   3) Narrow narrow pelvis: all small sizes but especially the size of the back face
   4) Mouthpiece: ordinary pelvic top door, narrow pelvic lower door.
   5) Pelvis: symphyse open
b. Abnormalities due to pelvic bone disease or joints
   1) Pelvis rachitis: pelvis pelvis, narrow pelvis, whole pelvis narrow picak and others
   2) Osteomalacci pelvis: narrow pelvis transversely
   3) Inflammation of articulatio sacroilliaca: oblique narrow pelvis
c. Pelvic abnormalities caused by spinal abnormalities
   1) Kyphose in the lumbar region causes a pelvic mouthpiece
   2) Sciliose in the stage bone area causes a narrow sloping pelvis.
d. Pelvic abnormalities are caused by lower members of Coxitis, luxatio, atrophia. One member causes the narrow pelvis to tilt

fractures of the pelvic bone that are the cause of pelvic abnormalities.

2.1.2.3 Pathophysiology

a. Narrowing of the pelvic floor

The top of the pelvis is considered narrow when the shortest anterioposterior diameter (konjugata vera) is less than 10 cm or if its largest transverse diameter is less than 12 cm. Dystocia will be more severe on the narrowness of the two diameters than narrow only in one diameter. The fetal biparietal diameter is 9.5-9.8 cm in size, making it very difficult for the fetus to pass through the pelvic top door with an anteroposterior diameter less than 10 cm. Women with small bodies may have small pelvic sizes, but also have a small fetal chance.

The presence of narrowing of the pelvic door causes the fetal head to float freely above the pelvic door so that it can cause the fetal presentation to change. In women with a narrow pelvis there are three times more frequent facial and shoulder presentations and cord prolapse four to six times more often than women with normal or wide pelvis (Jitowiyono, 2010).

b. Middle pelvic constriction

With a perfectly curved sacrum, the pelvic walls do not converge, the forium isciadikum is large enough, and the spinal isciadica does not protrude inward, it can be expected that the middle pelvis will not cause an obstacle to the passing of the fetal head. The narrowing of the middle door of the pelvis is more frequent than the upper door of the pelvis. This causes the cessation of the fetal head in the transverse plane, requiring middle forceps or cesarean section (Jitowiyono, 2010).

c. Big fetus

Normal neonatal weights are generally 4000grams and rarely exceed 5000gram. Usually for the weight of the fetus 4000-5000 grams in the pelvis normal there is no difficulty in the process of giving birth. Heredity factor plays an important role that can happen a big baby. Large fetuses can also be found in mothers with diabetes mellitus, postmaturity, and in grand multiparous. In such cases, careful examination is necessary to determine whether cephalopelvic disproportion is present. In addition, the use of ultrasonic devices can also measure carefully when there are babies with large bodies and large heads (Jitowiyono, 2010).

In normal pelvic, usually does not cause difficulties in the process of giving birth to a fetus weighing less than 4500gram. Difficulty in labor usually occurs because the large fetal head or hard head that usually occurs in postmaturity can not enter the pelvis, or because the broad shoulders are difficult through the pelvic cavity. A wide shoulder can be found in fetuses that have more weight can also be found in anensefalus.

The fetus may die during the labor process because of the occurrence of asphyxia because during the birth process the child's head is born, but because of the width of the shoulder results in a stuck in the delivery of the other fetal parts. While the withdrawal of the head of the fetus is too strong downwards can lead to injury to the brachial nerve and muscle sternokleidomastoideus (Jitowiyono, 2010).

2.1.2.4 Clinical Manifestation

a. Labor is longer than normal
b. Fetus has not entered the PAP at 36 weeks of pregnancy (primipara), 38 weeks.
c. the size of the fetus is larger than the pelvis. (Jitowiyono, 2010) According to Sulaiman (2010), the possibility of someone with a narrow pelvis if:

a. On the palpation of the abdomen, in primipara the child's head has not fallen after week 36.
b. In primipara there is a hanging belly.
c. In anamnesa, multiparous labor was difficult.
d. There are abnormalities in pregnancy.
e. There are abnormalities of the mother's body shape (midget, scoliosis, limp, and others).

2.1.2.5 Supporting Examination

External pelvic examination can be performed by a midwife while pregnant women perform antenatal care checks (sumarah, 2009).

a. Outer Pelvic Examination, that is:
    1) *Distansia spinarum*, the distance between the anterior superior iliac spine of the sinistra and dextra, the distance 24-26 cm.
    2) *Distansia kristarum*, the distance between both right and left iliac crest is 28-30 cm.
    3) External conjugate (Boudeloque) is the distance between the upper part of the symphysis and the lumbar spinous processus 5, a distance of 18-20 cm.
    4) These three dystansia are measured by pelvic length.
    5) The pelvic ring is the distance between the upper edge of the symphysis pubis midway between the trochanter and the anterior superior iliac spine and then to the 5th

lumbar back to the other side until it returns to the edge of the symphysis pubis. Normal 80-90 cm.

b. Clinical Examination is Measurement Conjugated Diagonalis with Check In, is:

Technically insert two fingers (index finger and middle finger) to the birth canal so as to touch the spine or promontory. After that, calculate the distance from the pubic bone to the promontory to know the size of the pelvic top door and pelvic middle door. The minimum distance between the pubic bone and the promontory is 11 cm. The middle pelvis is measured by examining the ischial spine or pelvic protrusion which is palpable or not, and the pubic bone angle is more than 90 degrees and the intertuberosum is more than 8 cm to find the broad lower pelvis (Rohani, 2011).

c. Radiology / X-ray examination

It is done by photographing the mother's pelvis, using an X-ray device. The results of the photo are then analyzed to determine the size of the pelvis. Starting from the top of the pelvis, the middle door of the pelvis and the lower door of the pelvis (Cunningham, 2013).

2.1.2.6 Medical Management

a. Trial Labor

After an assessment of pelvic size and the relationship between the fetal head and pelvis it can be estimated that labor can take place vaginan safely by trial labor. This method is a test of his strength, accommodation power, including moulage because of these factors can not be known before delivery (Winkjosastro, 2007).

The delivery of the experiment is performed only on the back of the head, not in the breech position, forehead, facial

position, or other abnormalities. The other provision is that the age of pregnancy should not be more than 42 mingu because the fetal head gets bigger so that moulage is difficult and there is a possibility of fetal placental dysfunction that will complicate labor trial (Winkjosastro, 2007).

In large fetuses the difficulty in giving birth to the shoulder will not always be suspected before. If in the birth process the baby's head has come out while in the shoulder delivery difficult, should be done mediolateral episiotomy large enough, then the nose and mouth of the fetus cleaned, head steeply pulled down with caution and of course with measurable power. If this doesn't work, you can rotate the baby's body in the pelvic cavity, so that it becomes the front shoulder where it was previously the back shoulder and was born under the symphysis.

If this method is still not successful, the helper puts his hand into the vagina, and tries to give birth to the fetus by moving in front of his chest. To give birth to the left arm, the helper uses his right hand, and vice versa. Then the front shoulder is rotated to the oblique diameter of the pelvis to give birth to the front shoulder (Winkjosastro, 2007).

Labor trial there are two kinds of trial of labor and test of labor. Trial of labor is similar to the trial labor above, while the test of labor is actually the final phase of trial of labor because it only starts at the complete opening and ends 2 hours later. Currently test of labor is rarely used because usually the opening is not complete in labor with narrow kneading and there is a high child mortality in this way (Winkjosastro, 2007).

The success of a trial labor is that the child can be born vaginally or assisted with extraction with a good mother and child. Trial labor is discontinued if the opening is not or less once the advancement, the mother or child is not good, there is a circle of bands, after complete opening and rupture of the head membrane does not enter the PAP within 2 hours despite his good, as well as on failed forceps. In this condition cesarean section is performed (Winkjosastro, 2007).

b. **Caesarean section**

Elective cesarean section is performed in severe pelvic narrowing with term pregnancy, or real cephalopelvic disproportion. It can also be performed on mild pelvic narrowing if there are complications such as old primigravida and irreparable fetal location abnormalities (Winkjosastro, 2007).

Secondary cesarean section (after delivery for some time) is done because the trial is considered to have failed or there are indications to complete labor as soon as possible while the requirements for vaginal delivery have not been fulfilled (Winkjosastro, 2007).

c. **Symphysiotomy**

This action is done by separating the left and right pelvis at the symphysis. This action is no longer done (Winkjosastro, 2007).

d. **Craniotomy and Kleidotomy**

In a dead fetus, craniotomy or kleidotomy can be performed. If the pelvis is so narrow that the fetus still cannot be born, cesarean section is performed (Winkjosastro, 2007).

2.1.2.7 Complications

According Sarwono (2010) when delivery with disproportionfalo pelvik left alone without-if need to take appropriate action, the emergence of danger to mother and fetus.

a. Early amniotic rupture. On the other hand, because the head of the fetus does not go down, often the umbilical cord gets out of the birth canal.
b. The period of labor is slow. The time needed for the progress of each opening tends to be long. The ends of the tear rupture occurred.
c. This prolonged labor also results in a long-standing emphasis on soft tissue resulting in edema or swelling of the birth canal.
d. Mother feels pain and exhaustion due to increasingly strong uterine contractions but the fetus is not down to the pelvic door.
e. Alternatively, infection occurs in both the mother and the fetus due to prolonged labor.
f. You can also experience fractures at the pelvic door and pelvic nerve damage.
g. Impact on the fetus is a fracture of the head bone due to pressure from his (the force pushes the mother).
h. The fetal head attempts to enter the pelvic door, consequently the skull bone and the head are piled up or overlapping to get into the pelvic door resulting in abnormalities of the position of the head. This condition can cause obstruction or bleeding in the fetal brain. Fatal can result in death from lack of oxygen.

2.2 **Section Caesarea**

2.2.1 Definition

According to Sofian (2012) said that Caesarean section is one of the births of the fetus by making an incision in the uterine wall through the front wall of the abdomen.

According to Lockhart (2014) said that Caesarean section is the act of giving birth to the baby through an incision (making an incision) in front of the uterus.

According to Prawirohardjo, (2005) said that Caesarean section is an artificial labor, where the fetus is born through an incision in the abdominal wall and uterine wall with uterine incision in a state of intact and fetal weight above 500 grams.

So Caesarean section is an action through the process of incision in the uterine wall through the abdominal wall to give birth to a fetus with a fetal weight above 500 grams.

2.2.2 Etiology

According Nurarif, A.H & Kusuma, H. (2015). Nursing Care Application Based on Medical Diagnosis & Nanda. Volume 3, says that the etiology of section caesarean is divided into 2, namely:

2.2.2.1 Etiology originating from Mother

In the primigravida with the placental abnormalities, the primitive elderly with abnormalities are present, disproportioned cephalopelvic (disproportion of the fetus / pelvic), there is a poor history of pregnancy and childbirth, pelvic constriction, placenta previa primigravida primarily, placental solutsio level I-II, pregnancy complications of preeclampsia - eclampsia, on demand, pregnancy accompanied by disease (heart, DM), impairment of labor (ovarian cysts, uterine myomas and so on).

2.2.2.2 Etiology derived from the fetus

Fetal distress / fetal distress, presentation mall and mal position fetal position, umbilical cord prolapsus with small opening, failure of vacuum labor or forceps extraction..

2.2.3 Clinical Manifestations

According Nurarif, A.H & Kusuma, H. (2015). Nursing Care Application Based on Medical Diagnosis & Nanda. Volume 3, says that the clinical manifestations of sectio caesarea are:

2.2.3.1 Narrow pelvis

2.2.3.2 The cephalopelvic dispensation: the imbalance between head size and hip size

2.2.3.3 Partus long (prolonged labor)

2.2.3.4 Obstructed labor

2.2.3.5 Pre-eclampsia and hypertension

2.2.3.6 Malpresentation of the fetus

a. Latitude
b. Buttocks
c. Presentation of forehead and face (deflection location)
d. Duplicate presentation if repositioning is not successful
e. Gemeli

2.2.4 Type of Section Caesarea

According to Nurarif, A.H & Kusuma, H. (2015). Nursing Care Application Based on Medical Diagnosis & Nanda. Volume 3, the types of section caesarean are divided into 4, namely:

2.2.4.1 Section caesarean abdomen

Section caesarean transperitonealis

2.2.4.2 Section caesarean vaginalis

According to the direction of the incision on the uterus, the section caesarean may be performed as follows:

a. The incision is longitudinal according to Kronig
b. Transverse (transversal) by Kerr
c. T-incision

2.2.4.3 Classical caesarean section (Corporal)

This is done by making an incision lengthwise on the corpus of the uterus approximately 10 cm long. But today this technique is rarely done because it has many shortcomings but in such cases as repeated surgery that has a lot of adhesions organs this way can be considered.

2.2.4.4 Section caesarean ismika (Profunda)

Conducted by making a concave transverse incision in the lower uterine segment (low cervical transversal) approximately 10 cm long.

2.2.5 Pathophysiology

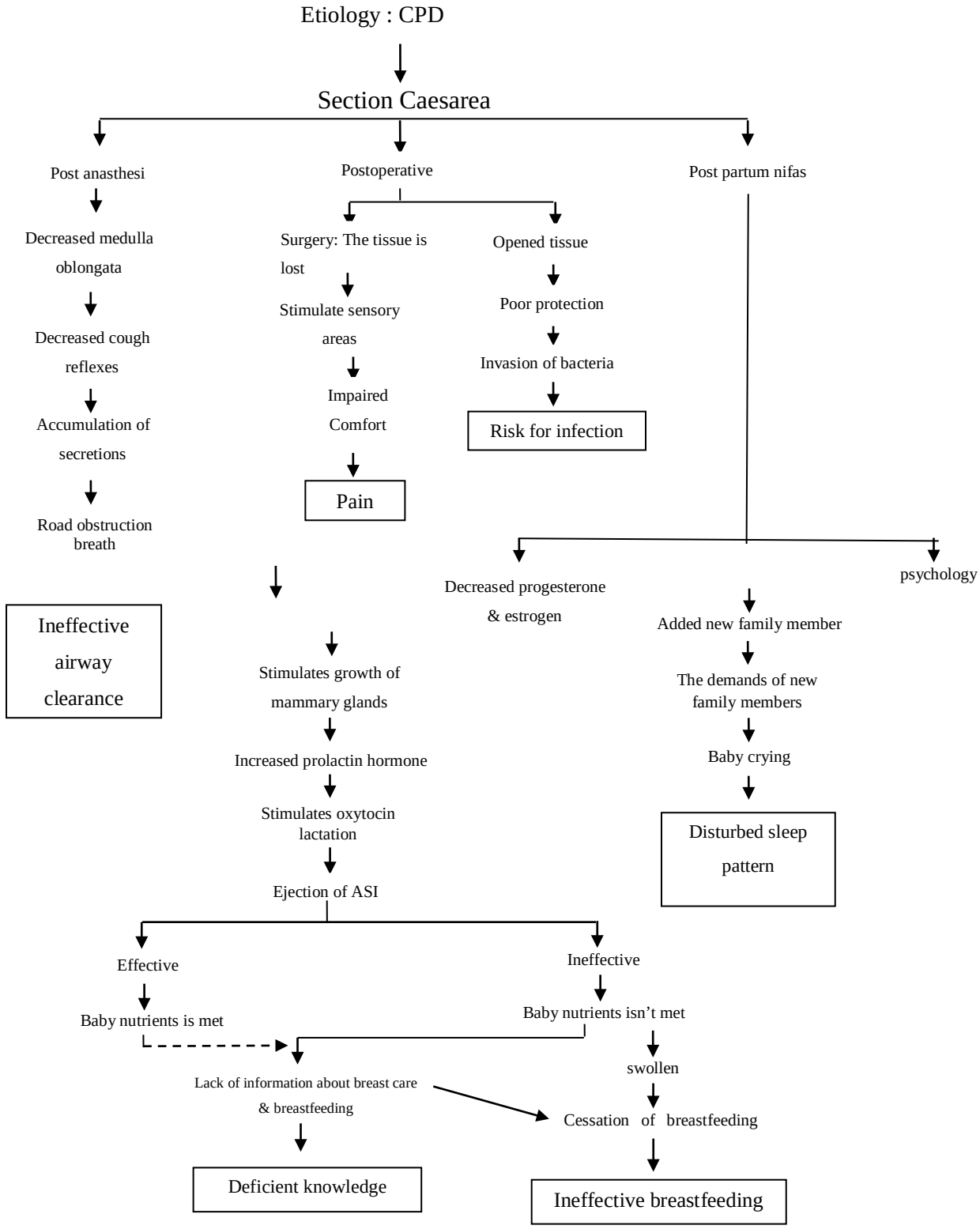
SC is an action to give birth to a baby weighing above 500 grams with an incision on the uterine wall that is still intact. Indications of this action are pelvic head distortion, uterine dysfunction, soft tissue distorsia, placenta previa etc., for the mother. As for the fetus is fetal distress. The large fetus and the location of latitude after the mother's SC will experience post partum adaptation from the cognitive aspects of lack of knowledge. Due to lack of information and from the physiological aspect of inadequate oxytocin products will result in only a small amount of breastmilk, the wound from the incision will be a post de entris for germs. Therefore it is necessary to be given antibiotics and wound care with sterile principles. Pain is a major blunder because of an incision that results in a discomfort.

Prior to surgery the patient needs to do anesthesia can be regional and general. However, general anesthesia has more effect on the fetus and mother of fetal anesthesia, so that sometimes the baby is born in an uptoe that can not be easily resolved. As a result the fetus can die, while the effect of anesthesia for the mother itself is on uterine tone of atria

uteri so much blood that comes out. For influence on the breath of the airway that is not effective due to excessive secretions due to the work of the cilia breath muscle that closes. This anesthesia also affects the digestive tract by decreasing intestinal mobility.

As is known after food enters the stomach there will be a process of destruction with the help of peristaltic intestine. It is then absorbed for metabolism so the body gets energy. As a result of decreasing mortility, peristalsis also decreases. Food that is in the stomach will accumulate and because the reflexes for cough also decreased. So the patient is very risky to aspiration so that need to be installed endotracheal pipe. In addition, decreased motility also results in changes in the elimination pattern of constipation. (Saifuddin, 2008)

2.2.6 Pathway



(Modification of Nanda Nic Noc 2015)

2.2.7 Supporting Examination

According to Nurarif, A.H & Kusuma, H. (2015). Nursing Care Application Based on Medical Diagnosis & Nanda. Volume 3, investigations from section caesarean, namely:

2.2.7.1 Fetal monitoring of fetal health: ensuring the health of the fetus.

2.2.7.2 ECG monitoring: recording the electrical activity of the heart, and to some extent, identifying if there is circulatory or abnormal blood flow.

2.2.7.3 JDL with dimensionality: Determine the presence of anemia, leukopenia, lymphocytosis. Blood thrombosis shows less than normal.

2.2.7.4 Electrolytes: to detect any disturbance in body fluid balance.

2.2.7.5 Hemoglobin / Hematocrit: to reduce the risk of bleeding at the time of delivery.

2.2.7.6 Blood type: facilitate blood transfusion in case of bleeding during childbirth.

2.2.7.7 Urinalysis: to determine whether the protein content in pregnant women is normal or not.

2.2.7.8 Amniocentesis to fetal lung as indicated: to determine genetic abnormalities in infants by examining amniotic fluid or amniotic fluid.

2.2.7.9 Ultrasound: localizing the placenta determines the growth, position, and presentation of the fetus.

2.2.8 Medical Management

According to Cunningham (2006) said that medical management and treatment after caesarean section were carried out, namely:

2.2.8.1 Bleeding from the vagina should be carefully monitored.

2.2.8.2 The uteri fundus should often be palpated to ensure that the uterus remains firmly contraction.

2.2.8.3 Analgesia is given.

2.2.8.4 Check uterine blood flow at least 30 ml / hr.

2.2.8.5 Provision of intra-vascular fluid, 3 liters of fluid is usually adequate for the first 24 hours after surgery.

2.2.8.6 Ambulation, one day after surgery the client can take a moment from bed with the help of others.

2.2.8.7 Wound care on the 3rd day, every day examined the condition of bandages.

2.2.8.8 Laboratory examination, hematocrit is measured in the morning after surgery to ensure bleeding of the post section caesarean surgery or suggests hypovelemia.

2.2.8.9 Prevents infection of the caesarean section surgery, antibiotics, after the fetus is born.

2.2.9 Complications

According Rasjidi (2009) said that cesarean section complications are: damage to organs such as urinary vesika and uterus during surgery, complications of anesthesia, bleeding, infection and thromboembolism. Maternal mortality is greater than vaginal delivery. It is difficult to ascertain whether this happened due to the operating procedure or for reasons that caused the pregnant woman to be operated on. Momentary Tachypneu in newborns is more common at delivery of Caesarean section and the incidence of labor trauma can't be excluded. Long-term risks that can occur are the occurrence of placenta previa, abruption placenta accrual and uterine rupture.

2.3 **Nursing Care Plans**

2.3.1 Assessment

According to Mitayani, (2013) the theoretical review of nursing care section caesarean is as follows:

2.3.1.1 Circulation

a. Hypertension
b. There is vaginal bleeding

2.3.1.2 Ego integrity

Can show anticipated procedures as a sign of failure and a negative reflection on the ability as a woman.

2.3.1.3 Food fluids

Epigastric pain, visual disturbance, and edema as signs of pregnancy hypertension (HIP).

2.3.1.4 Pain / discomfort

a. Distosa
b. Old / dysfunctional labor, induction failure
c. There is uterine tenderness

2.3.1.5 Security

a. Active sexual intercourse (e.g. herpes)
b. Cord prolapse, fetal distress
c. The threat of premature fetal birth
d. Presentation of the butt with an unsuccessful external cephalic version
e. Amniotic rupture for 24 hours or longer
f. The presence of maternal complications such as HKK, diabetes, kidney or heart disease, as well as ascending infections.

2.3.1.6 Sexuality

a. Cephalopelvic Disproportion (CPD).
b. Multiple pregnancy or gestation (uterus is highly distended).
c. Previous uterine or cervical surgery.
d. Tumors / neoplasms that block the pelvis / birth canal.

2.3.1.7 Counseling / learning

Unplanned caesarean birth can affect maternal readiness and understanding of the procedure.

2.3.2 Nursing Diagnosis

According Nurarif, A.H & Kusuma, H. (2015). Nursing Care Application Based on Medical Diagnosis & Nanda. Volume 3 (2015): nursing diagnoses at Caesarean section are as follows:

2.3.2.1 Ineffective airway clearance related to accumulation of secretions, airway obstruction (mocus in excess), allergic airway (response of anesthetic drugs).

2.3.2.2 Pain related to physical injury agents (surgery, birth trauma, episiotomy).

2.3.2.3 Ineffective breastfeeding related to poor mother's knowledge, cessation of the breastfeeding process.

2.3.2.4 Disturbed sleep patterns related to weakness, baby crying.

2.3.2.5 Risk for infection, risk factors: episiotomy, laceration, birth assistance (section caesarean).

2.3.2.6 Deficient knowledge: post partum care related to lack of information about breast care & post partum handling.

2.3.3 Nursing Interventions

According to Nurarif, A. H & Kusuma, H. (2015). Nursing Care Application Based on Medical Diagnosis & Nanda. Volume 3, nursing interventions at Caesarean section are as follows:

2.3.3.1 Ineffective airway clearance related to accumulation of secretions, airway obstruction (excessive focus), allergic airway (anesthetic drug response).

Results criteria:

a. The airway remains patent.
b. There are no unusual breath sounds.
c. Arterial gas levels remain in normal values.

Intervention and rationale:

a. Assess respiratory status at least every 4 hours or according to established standards.

   Rational: to detect early signs of danger.

b. Use the fowler position and support arm of the patient.

Rational: to help breathing and expansion of the chest and basilar pulmonary field ventilation.

c. Help the patient to change position, cough, and breathe in every 2 to 4 hours.
   Rational: to help out secretions and maintain airway patency.
d. Sip the secretions as needed.
   Rational: stimulates coughing and cleanses the airway.
e. Give fluids (at least 3 liters per day)
   Rational: to ensure adequate hydration and dilute secretions, unless contraindicated.

2.3.3.2 Pain related to physical injury agents (surgery, birth trauma, episiotomy).

Result criteria:

a. Report that pain is reduced by pain management techniques
b. Be able to recognize pain (scale, intensity, frequency and pain sign)
c. Able to express comfort after reduced pain.

Intervention and rationale:

a. Ask the patient to describe the pain and examine the physical symptoms that identify the pain.
   Rational: Continuous review allows modification of the necessary treatment plan.
b. Give drugs that are recommend to reduce pain.
   Rational: to reduce pain
c. Check the effectiveness of treatment after 30 minutes.
   Rational: to monitor pain reduction and foster the level of trust required for therapeutic relationships
d. Ask the patient to help determine the goal of pain reduction (including reduced reliance on analgesics) and develop a plan to control the pain.
   Rational: this action gives the patient a sense of control

e. Teach patients alternative pain control techniques, such as relaxation.
   Rational: to reduce dependence on analgesics.

2.3.3.3 Ineffective breastfeeding related to poor mother's knowledge, cessation of the breastfeeding process

Result criteria:

a. Mother and baby will experience the effectiveness of breastfeeding as shown by the mother's knowledge in breastfeeding stability and maintenance of breastfeeding
b. Babies will show the stability of breastfeeding as evidenced by the indicators:
   1) The correct alignment and latch on.
   2) Gripping and compressing the areola appropriately.
   3) Sucking and attaching the baby's tongue correctly.
   4) Swallowing sounds that can be heard.
   5) Minimum feeding eight times a day
   6) Satisfaction of the baby after feeding.
   7) Weight gain according to age.

Intervention:

a. Assess mother's knowledge and experience in breastfeeding.
   Rational: mother's knowledge and experience is the most important thing in the effectiveness of breastfeeding.
b. Assess the baby's ability to latch on and suck effectively.
   Rational: the ability of infants to suck is one indicator of the effectiveness of breastfeeding.
c. Instruct the mother in correct breastfeeding techniques.
   Rational: the correct breastfeeding technique is with one hand that is the palm of the hand holding the baby's buttocks and the baby's head in the arm so as to facilitate the position of the mother and mother not bending while breastfeeding.

d. Instruct the mother to use both breasts every time breastfeeding, starting with one side of the breast alternately.
   Rational: both breasts must be balanced given to infants in order for babies to get quality milk.
e. Instruct the mother about the need for adequate rest and fluid intake.
   Rational: adequate rest and adequate fluid intake is necessary for breastfeeding mothers.

2.3.3.4 Impaired sleep patterns related to weakness.

Result criteria:

a. the number of hours of sleep within the normal limit of 6-8 hours / day
b. sleep patterns within normal limits
c. fresh feeling after sleeping or resting
d. able to identify things that improve sleep.

Intervention and rationale:

a. Ask the patient what environmental factors make sleep difficult.
   Rational: Sleeping in a foreign or new environment tends to affect REM or non-REM sleep.
b. Ask the patient what changes can facilitate sleep.
   Rational: this action allows the patient to play an active role in the handling.
c. Immediately make any possible changes to accommodate the sample patient to reduce noise, change the lighting, close the door.
   Rational: this action encourages rest.
d. Plan for treatment schedules around the patient's sleep schedule.
   Rational: to allow maximum rest.
e. Make a detailed plan to give the patient a chance to sleep without any disruption when possible.

Rational: this action allows consistent nursing care and provides uninterrupted sleep time to the patient.

2.3.3.5 Risk for Infection related to risk factors: episiotomy, laceration of birth canal, aid delivery assistance.

Result criteria:

a. Clients are free of signs and symptoms of infection.
b. Describe the process of transmission of disease factors that affect transmission and management.
c. Demonstrate ability to prevent infection.
d. Leukocyte counts are within normal limits, showing healthy living behavior.

Intervention and rationale:

a. Minimize the risk of infection in patients, such as:
   1) wash hands before and after treatment. Hand washing is one of the best ways to prevent transmission of pathogens.
   2) Use gloves to maintain asepsis when providing direct treatment.

   Rational: the glove can protect the hand when handling the wound is bandaged or perform various actions.
b. Monitor the temperature at least every 4 hours and record it on graph paper. Report an immediate evaluation.

   Rationale: elevated temperature after surgery can be a sign of pulmonary complications, wound infection, urinary tract infections.
c. Perform urine culture, respiratory secretions, wound drainage, or blood according to hospital policies and programs from doctors.

   Rational: this action can identify pathogens and serve as guidelines for antibiotic therapy.
d. Help the patient wash his hands before and after meals and after from the bathroom, use a urinal or chamber.

Rational: hand washing prevents the spread of pathogens to other objects and foods.

f. Help the patient whenever possible to ensure that the perianal area is clean after elimination.

   Rational: cleansing the perianal area by wiping from areas with little contamination (urinary meatus) to the area with the most contamination (anus) helps prevent genitourinary injection.

2.3.3.6 Deficient knowledge: post partum care related to lack of information about post partum handling.

Result criteria:

a. Patients and families express understanding of diseases, conditions, prognosis and treatment programs.
b. Patients and families are able to carry out properly described procedures.
c. Patients and families are able to explain again what the nurse / other health team explained.

Intervention and rationale:

a. Assess the patient's level of knowledge about the specific disease process.

   Rational: makes it easy to intervene to what extent the client's knowledge.

b. Check the accuracy of feedback to ensure that patients understand the therapy program and other relevant information.

   Rational: the presence or absence of feedback from patients sets the level of patient knowledge.

c. Assess the current level of patient knowledge.

   Rational: makes it easy to intervene to what extent the client's knowledge.

d. Determine the motivation of the client to learn certain information

Rational: motivation is needed to increase knowledge.

e. Provide counseling according to the client's level of understanding.

Rational: accuracy in providing information.