CHAPTER 2
THEORETICAL BACKGROUND

2.1. Physiological Labor

According to Johariyah & Ningrum (2012) childbirth is the process of infant amnioration, the placenta and the amniotic membrane out of the mother's uterus. Labor is called normal if the process occurs at the age of months (after 37 weeks) without any complications or without help (self strength).

2.1.1. The Causes of Labor

How the occurrence of labor is not known with certainty, thus raising several theories related to the beginning of the birth.

Keep in mind that there are two dominant hormones during pregnancy, namely:

2.1.1.1. Estrogen

a. Increases sensitivity of uterine muscle
b. Facilitate the reception of external stimuli such as oxytocin stimulation, prostaglandin stimulation and mechanical stimulation

2.1.1.2. Progesteron

a. Decreases sensitivity of uterine muscle
b. Difficult acceptance of external stimuli such as oxytocin stimulation, prostatglandin stimulation and mechanical stimulation
c. Causes muscle of the uterus and smooth muscle relaxation

2.1.2. The Theories of Cause Labor

2.1.2.1. Theory Stretching

a. The uterine muscle has the ability to stretch within certain limits.
b. After crossing the boundary contraction occurs so that labor can begin
c. For example, multiple pregnancies often contract after a certain strain, resulting in labor.

2.1.2.2. Theory of Progesterone Dicline

a. The aging process of the placenta begins at 28 weeks' gestation, where there is accumulation of connective tissue, blood vessels narrowed and clogged.

b. The production of progesterone decreases, so the uterine muscle becomes more sensitive to oxytocin.
c. As a result, the uterine muscle begins to contract after a certain level of progesterone decreases.

2.1.2.3. Theory Internal Oxytocin

a. Oxytocin is secreted by the posterior parst hipophysis gland.
b. Changes in the balance of estrogen and progesterone may alter the sensitivity of the uterine muscle, resulting in frequent Braxton Hicks contractions.
c. Decreasing concentration due to the old pregnancy, then oxytocin may increase activity, so labor can begin.

2.1.2.4. Theory Prostaglandin

a. The concentration of prostaglandins increases as the age of 15 weeks, issued by the decidu.
b. Provision of prostaglandins during pregnancy can cause contractions of uterine muscle so that the conception is removed.
c. Prostaglandins are considered to be a trigger for labor.

2.1.2.5. Theory Hypothalamus-pituitary and suprarenalis gland

a. This theory shows that in pregnancy with anencephalus there is often delay in labor because no hypothalamus is formed.
b. Malpalar in 1933 raised the brain of guinea pigs, the result of rabbit pregnancy lasted longer.
c. From the penetilian results it can be concluded that there is a relationship between the hypothalamus with the onset of labor.
d. Galndula suprarenalis is the trigger for labor
How the births, remains not known with certainty, it is likely all factors work together, so that the trigger of the multiplication be multifaktor.

2.1.3. Stage Of Labor

2.1.3.1. First Stage

a. Referred to as first stage is the opening time which runs from zero opening to complete opening

b. First stage begins since the occurrence of regular and increased uterine contractions (frequency and strength) so that the cervix opens complete

c. First stage is divided into two phases:

1) Pgase Latent

It starts from the beginning of the contractions that leads to gradual depletion and cervical opening. Lasts until the cervix opens less than 4 cm. In general, the latent phase lasts nearly or up to 8 hours. Contractions start regularly but the duration is still between 20-30 seconds.

2) Phase active

The frequency and duration of uterine contractions will increase gradually (contraction is considered to be adequate if it occurs three or more times in 10 minutes and lasts for 40 seconds or longer). From 4 cm to 10 cm opening, it will occur at an average speed of 1 cm per hour (nullipara or primigravida) or more than 1 cm to 2 cm in multiparas.

The decline in the lower part of the fetus. The active phase is divided into 3 phases, namely: Acceleration phase is within 2 hours of opening 3 cm to 4 cm, the maximum dilation phase is within 2 hours of opening very fast, from 4 cm to 9 cm, and Deceleration Phase is the opening becomes slow within 2 hours of opening 9 cm to complete.

2.1.3.2. Second Stage

a. The second stage starts from the complete opening up to the baby is born.

b. Symptoms and signs of the second stage of labor

1) His is getting stronger, with 2 samoai interval of 3 minutes, with duration of 50 to 100 seconds.
2) Towards the end of the first stage of rupture of membranes characterized by sudden discharge of fluids
3) Mother feels the desire along with the occurrence of contractions
4) Mother feels an increased pressure on the rectum and or vagina
5) Perineum stands out
6) Increased mucus exposure mixed with blood
7) Definition signs of the second stage: the opening of the cervix is complete or visible the lowest part of the fetus in the vaginal introitus.

2.1.3.3. Third Stage

a. Third stage begins after the birth of the baby and ends with the birth of the placenta and membranes.
b. In the third stage of labor, the myometrium contracts following the depletion of the volume of the uterine cavity after the birth of the baby. The concentration of this size causes a decrease in the size of the placental attachment site. Because the placenta attachment becomes smaller, whereas the size of the placenta does not change, the placenta will be folded, thickened and finally released from the uterine wall. After release, the placenta will descend to the bottom of the uterus or into the vagina.
c. Signs of placental separation are, the uterus is round, the uterus is pushed upward because the placenta is released into the lower segment of the uterus, the cord grows longer and bleeding occurs.

2.1.3.4. Fourth Stage

a. Monitoring period for 2 hours after the baby is born, to observe the mother's condition especially to the danger of post partum hemorrhage
b. Fourth stage begins since the mother declared safe and comfortable up to 2 hours.
c. Fourth stage is intended to make observations because postpartum hemorrhage is common in the first 2 hours
d. Observations made are
   1) The level of awareness of the patient
   2) Examination of vital signs: blood pressure, pulse, temperature, and breathing.
   3) Uterine contractions, high fundus uteri
   4) Occurrence of bleeding: normal bleeding when not exceeding 400 cc to 500 cc.

   The duration of labor calculated from stage I to stage III is likely to be different, below is a table of differences in labor duration between nullipara and multipara.

The duration of labor		
	Para 0	Multipara
First stage Second stage Third stage	13 hours 1 Hour ½ hour	7 hours ½ hour ¼ hour
	14 ½ hour	7 ¾ hour

2.2. Concept of Disease

2.2.1. Anatomy dan Physiology

2.2.1.1. Female Reproductive System

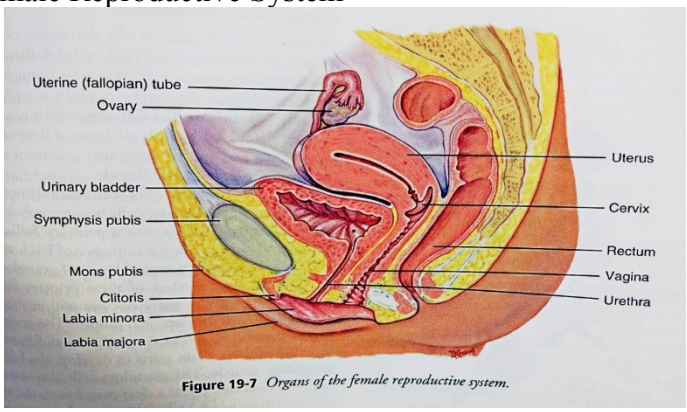


Figure 19-7 *Organs of the female reproductive system.*

Image 2.1 Female Reproduction
Source : Applegate (2011)

According to Mustikawati (2017) Vulva or pudendum and mons pubis/ mons veneris is :

a. Vulva or Pudendum

Vulva is the appears from the outside (from the mons pubis to the perineal edge), consisting of mons pubis, labia majora, labia minora, clitoris, hymen, Vestibule, orificium, urethrae externum, glands in vestibule.

b. Mons pubis / mons veneris

Mons Pubis is the fat layer symphisis anterior pubic bones. At puberty this area began to grow the hair of pubis.

c. Labia majora

Labia majora is the subsequent fat layer of the pubic monsses downward and backward, many containing the venous plexus. Homolog embryologically with scrotum in men. The uterine rotundum ligament ends at the upper limit of the labia majora. At the bottom of the perineum, the labia majora together / on the posterior commissura (Mustikawati, 2017).

The labia majora (*labium majus*) are two large fat-filled folds of skin that enclose the other external genitalia. Ateriorly the labi majora merge to from the mons pubis, a rounded elevation of fat that overlies the pubis symphysis. After puberty, the mons pubis and lateral surfaces of the labia majora are covered with coarse pubic hair. The skin on the medial surfaces of the labia majorais thinner than that on the lateral surfaces and contains numerous sebaceous and sweat glands (Applegate, 2011).

d. Labia minora

Labia Minora is the thin folds of tissue behind the labia majora, have no hair follicles. There are many blood vessels, smooth muscle and nerve endings (Mustikawati, 2017).

The labia minora (*labium minus*) are two smaller folds of skin medial to the labia majora. The skin on the labia minora contains sebaceous glands but does not have hair, sweat, glands, or adipose tissue (Applegate, 2011).

e. Clitoris

Clitoris is there is a capillary / glans clitoridis located in the superior part of the vulva, and corpus clitoridis embedded within the anterior vaginal wall. An embryologic hemologist with a penis in a man. There is also a androgen receptor in the clitoris. Many blood vessels and nerve endings, and very sensitive (Mustikawati, 2017) .

Clitoris is at the anterior end of the vestibule, where the two labia minor meet, there is a small mass of erectile tissue. The clitoris is homologous to the male penis becomes erect in response to sexual stimulation (Applegate, 2011).

f. Vestibule

Vestibule is the area with the upper limit of the clitoris, the lower limit of the fourchet, the lateral boundary of the labia minora. Derived from the urogenital sinus. There are 6 holes / orificium, namely orificium urethrae externum, introitus vaginae, ductus glandulae bartholinii right-left and duct skene right-left. Between fourchet and vagina there is fossa

navicularis (Mustikawati, 2017). Vestibule is the area between the two labia minora (Applegate, 2011).

g. Introitus/ Orificium Vagina

Introitus/ Orificium Vagina is located at the bottom of the vestibule. The girl (virgo) is covered with a thin layer of hymen, intact without rips. Normal hymen There are small holes for menstrual blood flow. the hymen can be crescent, round, oval, cribiformis, septum or fimbrae. As a result of coitus or other trauma, hymen can torn and the shape of the hole becomes irregular with torn (eg fimbrae-shaped). The shape of the postpartum hymen is called parous. Corrunculare myrtiformis is the remains of a torn hymen seen in women having given birth. An abnormal hymen, such as a hollow primary (hymen imperforate) closes the total vaginal opening, causing menstrual blood to accumulate in the internal genetal cavity (Mustikawati, 2017).

The hymen is smooth muscle and mucosal lining of the vaginal wall are capable of stretching to accommodate the erect penis and to permit passage of a baby. The opening of the vagina to outside, the vaginal orifice, may be incompletely covered by a thin fold of muscous membrane called the hymen (Applegate, 2011).

h. Vagina

Vagina is tubuloidal tubular cavity begins from the edge of the cervix uteri in the dorsal cranial portion to the vulva in the ventral caudal section. The area

around the cervix is called fornix, divided into 4 quadrants: the anterior fornix, the posterior fornix, and the right and left lateral fornix. The vagina has a ventral wall and an elastic dorsal wall. Coated epithelial squamous epithelium changes following the menstrual cycle. Vaginal function: to excrete uterine excretion in hais, for birth canal and for copulation (copulation). The upper part of the vagina is formed from the mulleri duct, below the urogenital sinus. Clinical inner boundaries are anterior, posterior and lateral fornices around the cervix uteri. The point of grayenbergh (G-spot), is the sensory region point around 1/3 anterior of the vaginal wall, very sensitive to vaginal orgasmic stimulation (Mustikawati, 2017).

The vagina is fibromuscular tube, about 10 cm long, that extends from the cervix of the uterus to the outside. It is located between the rectum and the urinary bladder. Because the vagina is tilted posteriorly as it ascends and the cervix is tilted anteriorly, the cervix projects into the vagina at nearly a riht angle. The vagin provides a passageway for menstrual flow to reach the outside, receives the penis and semen during sexual intercourse (coitus), and serves as the birth canal during the birth of a baby (Applegate, 2011).

i. Perineum

Perineum is the area between the bottom edge of the vulva with the front edge of the anus. The borders of the pelvic diaphragm (m.levator ani, m.coccygeus) and the urogenital diaphragm (m.perinalalis transversus profunda, m.constrictor urethra). Perineal

body is the rapian median m.levator ani, between the anus and vagina. Perineum stretches in labor, sometimes need to be cut (episiotomy) to enlarge the birth canal and prevent rupture (Mustikawati, 2017).

The perineum is a soft tissue different from that of the pelvic cavity, located from the bottom of the posterior commissure to the external part of the rectum. The area of the perineum consists of: perineal pouches (superficial perineal muscles), perineal muscles (transversus perinei profundus, sphincter urethrae membranous), ischional fossa, which is filled with fat in the lateral and anal canals and limited by the obturator internus muscle located in the middle of the pelvic diaphragm and anal canal. Anal canal and pudendal canal containing pudendal arteries and pudendal nerves. The perineal surface layer from the outermost to the deepest composed of the skin and superficial perineal fascia of sub cutaneous tissue. A sub cataneous network consisting of two layers of superficial fatty layer and a collection of fascia. Collection of fascia such as deep fascia, membranous layer (Manurung *et al*, 2011).

j. Uterus

Uterus is a muskular organ is shaped like a pear, coated with peritoneum (serosa). During pregnancy serves as a place of implantation, retention and nutritional konseptus. At the time of delivery in the presence of uterine wall contractions and uterine cervical opening, the contents of conception are

excluded. Consists of the corpus, fundus, cornu, isthmus, and cervix uterus.

1) Cervix of uterus
   The lower part of the uterus, consisting of the pars vaginalis (bordering / penetrating the inner wall of the vagina) and the supra-vaginalis pars. Consists of 3 main components: smooth muscle, connective tissue (collagen and glycosamine) and elastin. The outer part of the vaginal cavity is the portio cervics uteri (wall) with the external uterine ostium hole (outside, the vaginal direction) coated with the cervical mucosal squamous epithelial epithelium and the internal uterine os.
2) Corpus Uterus
   Consist of: the outermost layer of serosa / periteneum attached to the uterine ligamentum in the intra-abdomen, the middle of the muscular / myometrial layer of smooth three-layered muscle (from the outside into the direction of the longitudinal, woven and circular muscle fibers), and in the lining of the endomentrium cavity wall uteri, thicken and collapse according to the menstrual cycle due to the influence of ovarian hormones. The position of the intra-abdominal corpus is flat with anterior flexion, the uterine fundus is above the urinary vesica. The proportion of the size of the corpus to the uterine isthmus and cervix varies during the growth and development of women.
3) Uterine Buffer Ligaments

Ligamentum uterus, ligamentum rotundum uterus, cardinale ligamentum ovarii ligament, ligamentum sacrouterina propium, infundibulopelvicum ligament, ligamentum vesicouterina, ligamentum rectouterina.

Uterine vascularization

Particularly from the uterine artery branch of the internal hypogastrica / illiaca artery, as well as the ovarian artery branches of the abdominal aortic branch (Mustikawati, 2017).

The uterus is a muscular organ that receives the fertilized oocyte for implantation and provides an appropriate environtment for the developing offspring. An ectopic pregnancy occurs when a fertilized egg implants in some site other than the uterus. Since other locations do not provide a suitable environment for development, an ectopic pregnancy often ends in a miscarriage. The uterus is located in the pelvic cavity, between the rectum and urinary bladder. Before the first pregnancy, the uterus is about the size and shape of a pear, with the narrow portion directed inferiorly. After childbirth, the uterus is usually larger and then regresses after menopause. The upper, bulging surface of the uterus, above the entrance of the uterine tubes, is the fundus. The large main portion is the body, and the narrow region thet is directed inferiorly into the vagina is the cervix.

The opening between the body and cervix is the internal os, and the opening from the cervix into the vagina is the external os. Normally the uterus is bent forward between the body and cervix so that the body

projects anteriorly over the superior surface of the urinary bladder. In this position the uterus is said to be anteflexed. Several ligaments hold the uterus in place. The largest of these is the broad ligament, which drapes over the uterus like a sheet and extends laterally to the lateral pelvic wall. The broad ligament also encloses the uterine tubes. The wall of the uterus consists of perimetrium, myometrium and endometrium.

The outer serous layer, the perimetrium, is visceral peritoneum. The thick middle layer, the myometrium, is smooth muscle and makes up the bulk of the uterine wall. The inner layer, the endometrium, is a mucous membrane and is subdivided into two regions. The stratum functionale of the endometrium is the portion that is sloughed off during menstruation. The deeper, thinner stratum basale is more constant and provides the materials to rebuild the stratum functionale after menstruation (Applegate, 2011).

Uterus is shaped like an avocado or an inverted incandescent slightly slightly flat. Uterine size varies with age, gastric experience. Adult women of uterine size when not containing 7-7.5 cm in width are measured in the width of 5.25 cm and 2.5 cm thick of uterine portion consisting of the uterine uterine and uterine cavity corpus, the upper part of the uterus is called the uterine fundus. The uterine wall consists of three layers of the outer uterine wall called the perimetrium layer of the uterine wall of the uterine portion of the middle of the inner endometrium. The

perimetrium wall associated with the peritoneal cavity of the central uterine wall is the myometrium which is smooth muscle. Smooth muscle is composed of three layers.

The outer layer of longitudinal muscle. The inner layer of circular muscle. Layer between the outer layer and the inner layer of woven. Between the layers of woven there are blood vessels. Myometrium that can contract and relax as a whole, thus helping vasoconstration and vasodilation of blood vessels that prevent postpartum hemorrhage. The inner uterine wall (the inner layer of the uterine cavity) is coated by a mucous membrane rich in glands called the endometrium. The endometrium consists of cubic epithelium, the glands and the stroma with many winding veins. The endometrium undergoes a monthly turnover called a menstruation. The uterus serves as a zygote, fetal development and growth. The uterine wall of the uterine portion can contract during labor and postpartum. The uterus may remain in its position maintained by the ligament. Ligaments supporting the uterus consist of 6 ligaments. The latum ligament is located on the right and left lateral side of the uterus extending to the wall and pelvic floor. This ligament maintains the uterus as if it is hanging on the tube (Manurung *et al*, 2011).

k. Salping/Tuba fallopi/ Ovidauct

According to Mustikawati (2017) The embryologic uterus and tuba are derived from the Mulleri ducts. A pair of left-right tubes, 8-14 cm long, serves as the path of ovum transport from the ovaries to uteri.

Tubular wall consists of three layers: serosa, muscular (longitudinal and circular) and mucosa with ciliated epithelium. Consists of pars interstitialis, pars isthmica, pars ampularis, and pars infundibulum with fimbria, with the characteristics of cilia and the thickness of different walls in each part.

1) Pars isthmica (proksimal/isthmus)
   Pars isthmica is part with the narrowest lumen, there is uterotuba sphincter gamete transfer controller.
2) Pars ampularis (medial/ampulla)
   The most common place of fertilization is the area of ampulla / infundibulum, and in ectopic pregnancy (pathologic) there is often implantation in the tuba wall of this section.
3) Pars infundibulum (distal)
   Fitted with fimbriae and ostium tubae abdominale at the end, attached to the ovary surface. Fimbriae serves to "catch" the ovum that comes out during ovulation from the ovary surface, and bring it into the tube.
4) Mesosalping
   The connective tissue of the fallopian tubes (as well as the mesenteres of the intestine)

l. Ovaries

Endocrine organ is oval-shaped located in the peritoneal cavity, a pair of left-right. Coated mesovarium, as connective tissue and path of blood vessels and nerves. Consists of the cortex and medulla. The ovaries function in the formation and maturation of the follicles into the ovum (from the primordial germ epithelial cells in the outer layer of the ovarian epithelium in the cortex), ovulation

(ovulation), synthesis and secretion of steroid hormones (estrogen by the internals of the follicles, progesterone by postovulatory corpus luteum) . Associated with infundibulum pars of the fallopian tube through the fimbriae attachment. Fimbriae "captures" the ovum released at the time of ovulation.
The ovary is fixed by the ligamentum of the proprietary ovaries, the infundibulopelvicum ligament and the mesovarium connective tissue. Vascularization of the inferior abdominal aortic branch towards the renal artery (Mustikawati, 2017).

The primary reproductive organs, or gonads, in the female are the paired ovaries. Each ovary is a solid, ovaid structure about the size and shape of an almond, about 3.5 cm in length, 2 cm wide , and 1 cm thick. The ovaries are located in shallow depressions, called ovarian fossae, one on each side of the uterus, in the lateral wall of the pelvic cavity. They are held loosely in place by peritoneal ligaments.
The ovaries are covered on the outside by a layer of simple cuboidal epithelium called germinal (ovarian) epithelium. This is actually the visceral peritoneum that envelops the ovaries. Underneath this layer there is a dense connective tissue capsule, the tunica albuginea. The substance of the ovaries is indistincly divided into an outer cortex and an inner medulla. The cortex appears more dense and granular because of the presence of numerous ovarian folicles in various stages of development. Each of the follicles contains an oocyte, a female germ cell. The medulla is loose

connective tissue with abundant blood vessels, lymphatic vessels, and nerve fibers (Apllegate, 2011).

2.2.1.2. Urinary System

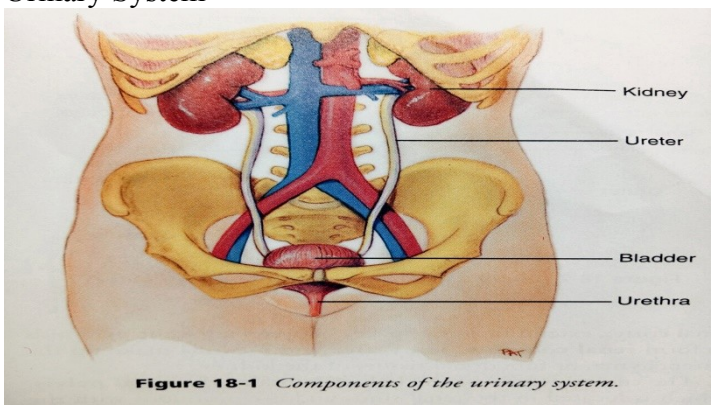


Image 2.2 Urinary System
Source : Applegate (2011)

Urinary system is a system where the occurrence of blood filtration process so that blood is free of substances that are not used by the body and absorb substances that are still used by the body. Substances not used by the body dissolve in water and excreted in the form of urine (Mustikawati, 2017).

The overall function of the urinary system is to maintain the volume and compsition of body fluid within normal limits. One aspect of this function is to rid the body of waste products that accumalate as a result of cellular metabolism, and because of this the urinary system is sometimes referred to as the excretory system. Although the urinary system has a major role in excretion, other organs contribute to the excretory function. In addition to ridding the body of waste materials, the urinary system maintains an appropriate fluid volume by regulating the amount of water that is excreted in the urine. Others aspects of its function include regulating the

concentrations of various electrolytes in the body fluids and maintaining normal pH of the blood. In addition to maintaining fluid homeostatis in the body, the urinary system controls red blood cell production by secreting the hormone erythropoietin. The urinary system also plays a role in maintaining normal blood pressure by secreting the enzyme renin, which activates angiotensin II increase blood pressure (Applegate, 2011).

a. Kidneys

The position of the kidney lies on the belize part of the abdominal cavity behind the peritonium on both sides of the thoracic vertebra 12 to lumbaris III, and attaches directly to the abdominal wall. Shaped like red beans (kara / pea), there are 2 pieces left and right. The left kidney is larger than the right kidney. Kidney length approximately 11 cm, 5-7,5 cm wide and 2.5 cm thick.

In adults the kidney weight is ± 200 grams and in general the male kidney is longer than the female kidney. The smallest structural and functional units of the kidney are called nephrons. Each nephron consists of vascular and tubular components. The vascular component consists of the blood vessels of glomelurus and peritubuler capillaries that surround the tubule. In the tubular component there are bowman capsules, as well as tubules, the proximal con- tract tubules, distal contrast tubules, collecting tubules and henle curves present in the medulla.

The bowman's capsule with glomelorus is called the renal corpuscle, the part of the tubule coming out of the renal corpuscle called the tubule

1) Cortex
   In the kidney skin there is a section in charge of carrying out blood filtering called nephron with amount more than 1 million.
2) Medulla
   The renal marrow consists of several cone-shaped bodies called renal pyramids. basically facing the cortex and its peak is called apex or renise, leading to the inside of the kidneys.
3) Renal Pelvis
   The renal pelvis is the tip of the ureter, which is raised in the kidney, in the shape of a wide funnel. Before bordering the kidney tissue, two or three branched renal pelvis is called the major calyx, each of which branches into several minor cycles that directly cover the renis papilla from the pyramid.
4) Function of Kidneys

   Excrete nitrogen-containing metabolic waste substances, excrete excessive amounts of substances, regulate the water and salt balance by osmoregulation, and regulate blood pressure in the arteries by secreting the renin enzyme (Mustikawati,2017).

The kidneys are the primary organs of the urinary system. They are the organs that perform the functions of the urinary system . they filter the blood, remove the wastes, and excrete the wastes in the urine. The other components are accessory structures to help

eliminate the urine from the body. When the kidneys fail to remove the waste products from the blood, toxic levels of urea may accumulate, resulting in uremia. The body attempts to compensate by excreting urea through the sweat glands. After the perspiration evaporates, tiny crytals of urea remain on the skin. This is called uremic frost. The paired kidneys are located between the twelfth thoracic and third lumbar vertebrae, one on each side of the vertebral column. The right kidney usually is slightly lower than the left because the liver displaces it downward. The kidneys, partially protected by the lower ribs, lie in shallow depressions against the posterior abdominal wall and behind the parietal peritoneum (Applegate, 2011).

b. Ureters

Consists of 2 pipes each of which extends from the kidney to the bladder (vesika urinaria) length ± 25-30 cm with ± 0.5 cm thick, 6 mm diameter. The position of the ureter tilts at a meeting with the bladder prevents urine flow reflux. The ureteral lining causes peristaltic movement every 5 minutes which will push the urine into the bladder/ vesika urinaria (Mustikawati, 2017).

Ureter is a small tube, about ± 25 cm long, that carriers urine from the renal pelvis to the urinary bladder. It descends from the renal pelvis, along the posterior abdominal wall, behind the parietal peritoneum, and enters the urinary bladder on the

posterior inferior surface. The wall of the ureter consists of the three layers. The outer layers, the fibrious coat, is a supporting layer of fibrious connective tissue. The middle layer, the muscular coat, consists of inner circular and outer longitudinal smooth muscle. The main function of this layer, the mucosa, is transitional epithelium that is continuous with the lining of the renal pelvis and the urinary bladder. This layer secretes mucus, which coats and protects the surface of the cells (Applegate, 2011).

There are two ureters in the form of two pipes, each of which is continuous with the kidney and from the kidney running the bladder. thickness of each ureter about the size of a goose feather and length 35 cm and 40 cm. consisting of a fibrus outer wall, a muscular middle layer, and an inner mucous layer. the uterer begins as dilation of the kidney and travels down through the abdominal cavity into the pelvis and with the oblique direction empties into the posterior side of the bladder (Manurung *et al*, 2011).

c. Urinary Bladder

The bladder can expand and deflate like a rubber balloon located behind the symphysis pubis inside the pelvic cavity. A bladder-like cone shape surrounded by a strong muscle associated with the mediate umbicalic vesicular ligament. Serves as a temporary container for accumulating urine bladder wall point consisting of several layers of peritonium, tunica muscularis, submucous tunica and mucous layer. In the inner layer there is a muscle called the detrusor

muscle. These muscle contractions primarily serve to empty the bladder during urination (Mustikawati, 2017).

The bladder works as a container of urine; this organ is pear-shaped. Lies within the large pelvis, in front of other contents and behind the symphysis pubis. The baby is located higher. The bladder wall consists of: an outer seam layer, a muscular layer, a submucosal layer, and a mucosal layer of transitional epithelium (Pearce, 2014).

Urinary bladder is a temporary storage reservoir for urine. It is located in the pelvic cavity, posterior to the symphysis pubis, and below the parietal peritoneum. The size and shape of the urinary bladder very with the amount of urine it contains and with the pressure from surrounding organs. The inner lining of the urinary bladder is a mucous membrane of transitional epithelium that is continuous with that in the ureters. When the bladder is empty, the mucosa has numerous folds called rugae (Applegate, 2011).

d. Urethra

The urethra is a narrow channel that stems on the bladder that serves to pass the urine out. The urethra in the female is located behind the symphysis pubis running a slight incline toward the top of the 3-4 cm long. The urethral abaca in the female is located at the top of the vagina (between the clitoris and the vagina) and the urethra is here only as a channel of urinary excretion (Mustikawati, 2017).

The urethra is a channel from the neck of the bladder to the outer hole; coated with a mucous membrane attached to a membrane lining the bladder. The urinary meatus consists of a circular muscle fiber, which is the urethral sphincter. In women the urethra length is 2.5-3.5 cm. In men 17-22.5 cm (Pearce, 2014).

The final passageway for the flow of urine is the urethra, a thinwalled tube that conveys urine from the floor of the urinary bladder to outside of the body. The opening to the outside is the external urethral orifice. The mucosal lining of the urethra is transitional epithelium. The urethral wall also contains smooth muscle fibers and supported by connective tissue. The beggining of the urethra, where it leaves the urinary bladder, is surrounded by the internal urethral sphincter. This sphincter is smooth (involuntary) muscle. Another sphincter, the external urethral sphincter, is skeletal (voluntary) muscle and encircles the urethra where it passes through the pelvic floor. These two sphincters control the flow of urine through the urethra. In females the urethra is short, only 3 cm to 4 cm (about 1.5 inches) long. The external urethral orifice opens to the outside just anterior to the opening for the vagina (Applegate, 2011).

2.2.2. Definition of Disease

Urinary retention is a disturbance of urination, where there is weak urine emission, not smooth and there is a sense of remaining and not satisfied, can be accompanied by a desire to strain or put pressure on suprapubik when urinating (Padlilah, 2017).

Urinary retention is defined as the inability to urinate. Postpartum urinary retention caused some complication is the occurrence of uremia, infection, sepsis, and occurrence of spontaneous bladder rupture (Utami *et al,* 2014).

Urinary retention is a common phenomenon in postpartum. This is due to many factors. One is the suppression of the fetal head to the urethra and bladder causing edema. Distribution caused will last for about 24 hours after delivery. But then because of the buildup of fluid that occurs, will gradually occur large-scale discharge of fluid commonly called incontinence (Mahesta, 2018).

2.2.3. Etiology

According to Mahesta (2018). Some things that can cause urinary retention post partum, namely :

2.2.3.1. Intrapartum Trauma

Intrapartum trauma is a major cause of urinary retention, where there is trauma to the urethra and bladder. This occurs because of the heavy and long lasting emphasis on the urethra and bladder by the fetal head entering the pelvic cavity, resulting in tissue injury, edema of the bladder mucosa and the extravasation of blood within it. Tract genital trauma can cause extensive hematoma and lead to postpartum urine retention.

2.2.3.2. Reflex spasm (cramp) urethral sphincter.

This happens when the post-partum patient feels a fear of pain and pain if urine is concerned with an episiotomy injury during urination. This interruption is temporary.

2.2.3.3. Hypotonia during pregnancy and childbirth

Muscle muscle tone (detrusor muscle) of urinary vesica since pregnancy and post partum is decreased due to hormonal influences or the effects of anesthetic drugs on labor using epidural anesthesia.

2.2.3.4. Sleeping position on the back of the intrapartum makes the mother difficult to urinate spontaneously.

2.2.4. Clinical Manifestations

Recognize the presence of urinary retention we can see in the presence of symptoms such as:

2.2.4.1. Beginning with urine flowing slowly
2.2.4.2. Then the polyuria becomes more and more severe because emptying of the bladder is not efficient.
2.2.4.3. Abdominal distension occurs due to bladder dilatation
2.2.4.4. Heavy retention can reach 2000-3000 cc.
2.2.4.5. Feel the pressure, sometimes feel pain and feel want to urinary (Suci, 2016).

Urine retention provides symptoms of urinary disorders, including:

2.2.4.1. Difficulty urinating
2.2.4.2. The urinary flash is weak, slow, and disjointed
2.2.4.3. The desire to strain or put pressure on suprapubicwhen urinating
2.2.4.4. Dissatisfaction after urination
2.2.4.5. The bladder feels full (abdominal distension)
2.2.4.6. Urine drips after urination
2.2.4.7. Frequent urination with small volume
2.2.4.8. Nocturia more than 2-3 times unrelated to breastfeeding
2.2.4.9. Delays of urination more than 6 hours after delivery
2.2.4.10. Difficulty in starting urination after delivery
2.2.4.11. The location of the uterine fundus is high or does not move with the bladder that is palpable (detected via percussion) and possibly abdominal pain low part (Andi, 2008) .

2.2.5. Patofisiologi

The process of urination involves two different processes: filling and storing urine, and emptying urine from the bladder. This process is often opposite and alternates normally. The activity of the bladder detrusor muscle in terms of storage and urinary excretion is controlled by the autonomic and somatic nervous system.

During the filling phase, the influence of the sympathetic nervous system on the bladder becomes low pressure by increasing urinary resistance. Urine storage is coordinated by the sympathetic system

barrier of detrusor muscle contraction activity that is associated with increased muscle tension from the bladder neck and proximal urethra.

Normal urinary expenditure results from the simultaneous contraction of the detrusor muscle and the relaxation of the urethral sphincter. This is influenced by the parasympathetic nervous system that has a major neurotransmitter that is acetylcholine. The impulse delivery of the afferent nerve is transmitted to the sensory nerve at the end of the spinal cord ganglion in the S2-S4 segment and further up to the brain stem. The nerve impulses of the brainstem inhibit parasympathetic flow from the spinal sacral urinary center. During the emptying phase of the bladder, the barrier to the sacral parasympathetic flow is stopped, resulting in the return of contraction of the detrusor muscle.

Post partum urine retention most commonly results from dissinergis of detrusor muscle and urethral sphincter. The occurrence of imperfect urethral sphincter relaxation causes pain and edema. So the post partum mother can not empty her bladder properly (Mahesta, 2018).

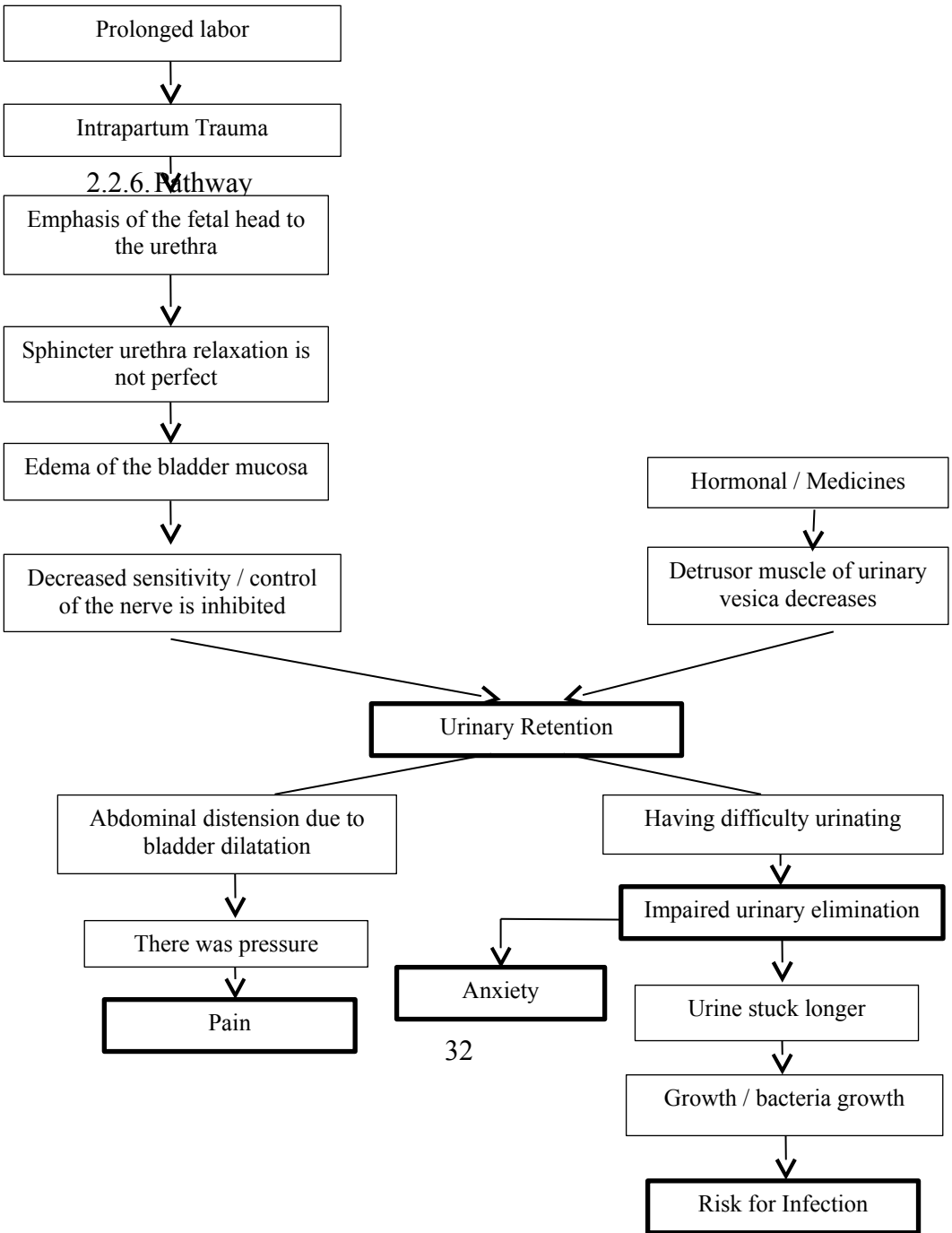
During pregnancy elasticity increases in the urinary tract, partly due to the effects of the hormone progesterone that decreases muscle tone detrusor. In the third month of pregnancy, the detrusor muscle loses its tone and the capacity of the urinary vesica increases slowly. As a result, pregnant women usually feel like urinating when urinary vesica contains 250-400 ml of urine.

When a pregnant woman stands up, the enlarged uterus suppresses the vesica urinary. The pressure becomes doubled when the gestational age enters 38 weeks. This emphasis gets bigger when the baby is born, it's possible the occurrence of intrapartum trauma in the urethra and vesica urinary and cause obstruction. This

pressure disappears after the baby is born, causing vesika urine is no longer limited in capacity by the uterus.

As a result vesika urinaria become hypotonic and tend to last for a while. Postpartum urine retention is most common due to muscle dissolence detrusor and urethral sphincter. The occurrence of urethral sphincter relaxation is not perfect cause pain and edema. So the post partum mother can not emptying his bladder well (Soetomo, 2018)

2.2.6. Pathway



Sources : Modification from Soetomo
(2018) & Mahesta (2018).

2.2.7. Supporting Investigation

According to Mahesta (2018) The Q-tip test (the cotton swab test), is a simple test to show true stress incontinence. Patients were told to empty the bladder, urine accommodated. Then the urine specimen is taken with catheterization. The amount of urine from the urine and catheter is the volume of the bladder. Residual volume strengthens the diagnosis of overflow incontinence. The urine specimen is sent to the laboratory.

Advanced diagnostic tests include cystourethroscopy and imaging diagnostics. Cystourethroscopy is done under general anesthesia and no anesthesia, it can be seen pathology conditions such as fistulas, ectopic ureter and diverticulum. Urodinamic tests include uroflowmetry and cystometry. Cystometry is the most important test, because it can indicate a hyperactive bladder state, normal or hypoactive. Imaging diagnostics include ultrasound, CT scan and IVP used to identify pathological disorders (such as fistula / tumor) and anatomical abnormalities (ectopic ureter).

Additional tests needed for diagnostic evaluation are 'Pessary Pad Test'. Patients drink 500 ml of water for 15 minutes to fill the bladder. After ½ hour, the patient performs the exercise for 45 minutes by standing from sitting (10 times), coughing (10 times), jogging in place (11 times), picking up objects from the floor (5 times), and washing hands from running water for 1 minute. Test positive if Pad weight is equal to or greater than 1g. This test may indicate the presence of stress incontinent only if no unstable bladder is obtained.

2.2.8. Management

Postpartum Urinary Retention Management is :

2.2.8.1. Prevention

Obstetric Case :

a. Overcome pelvic organ pain
b. Evaluate and measure the remaining 6 hours postpartum urine
c. Installation of a 24-hour catheter for old partus and long second stage dystocia
d. Prostaglandin administration

Gynecological Cases

a. Overcome pain
b. Installation of a 24-hour postoperative catheter, then measured urine remaining 6 hours after catheter was removed
c. Prostaglandi administration

2.2.8.2. Catheterization

Urine Residual <500 mL: intermittent catheter (every 4 hours for 24 hours), then check again residual urine, lots of drinking, antibiotics, prostaglandins.

500-1000 mL of Residual Urine

a. Catheterization 1x24 hours
b. Intermittent catheterization: every 4 hours for 24 hours, except for spontaneous urination? Check the remaining urine
c. Drink a lot of 3 liters / day
d. Urinalysis
e. Antibiotics according to culture
f. Prostaglandins (eg misoprostol) may continue to be given as long as the catheter is still installed

Urine Remaining 1000-2000 mL

a. Catheterization 2x24 hours

b. Installation of intermittent catheter / 4 hours for 24 hours, except for spontaneous urination
c. Check the remaining urine
d. Drink a lot of 3 liters / day
e. Urinalysis
f. Antibiotics according to culture
g. Prostaglandins (eg misoprostol) may continue to be given as long as the catheter is still installed

Urine Time> 2000 mL

a. Catheterization 3x24 hours
b. Open catheter cap / 6 hours for 24 hours, except for spontaneous urination
c. Check the remaining urine, if urinary retention keeps the catheter in place for 1 week (consider silicone catheter to reduce the risk of infection), can go home, open catheter cover done 2 days before the control. During control, the catheter is removed and reexamined for urine remaining 6 hours later or after spontaneous urination
d. Drink a lot of 3 liters / day
e. Urinalysis
f. Antibiotics according to culture
g. Prostaglandins (eg misoprostol) may continue to be given as long as the catheter is still installed

2.2.8.3. Medicines

Medicines that increase urinary vesica contraction and decrease urethral resistance that is working on:

a. Parasympathetic is cholinergic, acetylcholine acting in the end organ produces muscarinic effects (eg, betanekhol, karbakhol, metakholin)
b. Sympathetic (eg phenoxybenzamine)
c. Plain muscle affects the work of destrusor muscle (eg prostaglandin E2)

2.2.8.4. Consume lots of water
Drink plenty of 3 liters / 24 hours to prevent bacterial colonization (Anugerah, 2017).

Bladder training is a bladder training activity for restore normal urine pattern by stimulating expenditure urine. With bladder training is expected elimination function of micturition spontaneously in spontaneous post partum mother can occur within 2-6 hours post partum. When the bladder becomes very fluid it is needed catheterization, Foley catheter is left in the bladder for 24-48 hours to keep the bladder blank and allow the bladderurine recovers normal muscle tone and sensation. When the catheter removed, the patient should be able to urinate spontaneously within 2-6 hours.

After spontaneous urination, the bladder should be reassembled to ensure that the urine residue is minimal. When the bladder contains more than 150 ml of urine residue, drainage of the bladder. continued again. The urine residue after urination is normally less or the same with 50 ml.

The bladder training program includes: counseling, effort scheduled micturition, and provide positive feedback. The purpose of bladder training is to train the bladder to improve ability to control, control, and improve ability micturition.

2.2.8.1. In general, first attempted various non-invasive ways so that the patient may spontaneously urinate.
2.2.8.2. Postpartum patients should be as early as possible to stand and walk to the toilet for urinate spontaneously
2.2.8.3. Medical therapy is given uterotonika in order to involveo uteri the good one. Uterine contractions are followed by bladder contractions.
2.2.8.4. If all attempts have been made but unsuccessful for emptying the full bladder, it needs to be done urinary catheterization, if necessary repeat (Andi, 2008).

2.4. Concept of Nursing Care

According to Manurung *et al* (2011) the concept of nursing care are as follows :

2.4.1. Assessment

2.4.1.1. Identity

These data include: client and husband's name, age, ethnicity, religion, last education, occupation, income, and address. In the client's antenatal period the age data grouping the client is at risk.

Rationale: knowing the client's bios is the first step in implementing the nurse-client interpersonal relationship. interpersonal relationships that have been built facilitate exploring data where clients will be more open and nurses are not strangers to him as long as the client is treated.

2.4.1.2. Main Complaint

Anamnesa that need to be directed to explore the mother's main complaint is a complaint that mother, pretended about her pregnancy.

Rationale: maternal complaints are as preliminary data for diagnosis. In addition, complaints illustrate the main problems of mothers who need immediate treatment, in order to avoid pregnancy complications.

2.4.1.3. History of Family Health

These data include: family illness, which is hereditary (asthma, diabetes mellitus, haemophili twin ancestors) and chronic diseases.

Rationale: by identifying the existence of disease or family health that is genetic can know the existence of disease that influence pregnancy directly or indirectly. The disease

may present a time that exacerbates the current condition of the mother.

2.4.1.4. History of Client's Health

The data that need to be explored are: the current illness that is caused by pregnancy like vaginal bleeding, spotting or massif, contraction, out the water from the genitals, vaginal discharge and itching. Diseases that accompany the mother during pregnancy asthma: diabetes militus heart, lungs, seizures, hypertension, anemia and drug therapy are lived.

Rationale: the illness that accompanies the mother during pregnancy or the illness suffered by pregnancy helps us to more easily classify the pregnancy into complications or normal pregnancy and to identify possible congenital abnormalities. So a nurse can make a special referral to other profession team that is doctor to get more intensive service.

2.4.1.5. History of Obstetrics

Data that needs to be studied include menstrual history (menarche, menstrual period, cycles, menstrual blood count, dismenorrhae, menstrual complaints, first day of last menstruation, fluorus albus). Past pregnancy, childbirth, childbirth and family planning history, and complication problems experienced by clients during pregnancy, maternal, and postpartum periods. Gestational age at visit.

Rationale: identifying obsetetri and gynecology data helps to establish a pregnancy diagnosis (persumtive, proable and positive of pregnant), recognizing the effectiveness of contraceptives used by clients in enumerating pregnancy

and interpretation of labor. Assessment of pregnancy history, childbirth and childbirth by health workers to determine the risks of pregnancy that may be experienced by the mother due to past complications that have been experienced and the type of childbirth that will be experienced today.

2.4.1.6. History of Daily Activity

Data that needs to be assessed for the physiological needs of everyday life during the pregnancy period include: elimination of nutritional needs, sexuality, activity and rest, immunization and lifestyle patterns (use of addictive substances, alcohol and smoking).

Rationale: the review of daily life pattern data helps to identify the client's ability to meet adequate daily needs to support the growth and development of the fetus and to identify factors that interfere with fetal growth and development. So this data can be used to detect any congetinal abnormalities in the fetus.

2.4.1.7. History of Psychosocial

The influence of family practice / client practice during the term of pregnancy, family acceptance of current pregnancy, changes in self-image with respect to postural changes during pregnancy.

Rationale: the study of data about the psychological history of the client can identify deviant cultural practices in caring for pregnant women.

2.4.2. Physical Examination

2.4.2.1. General Condition

General examination is a general physical examination. The purpose of the general examination: to determine the health of mothers physical factors that can affect pregnancy. Common examinations in pregnant women with normal pregnancies include: vital signs, posture, weight, height, and the upper arm circumference.

Rationale: review of the client's general circumstances is to identify normal circumstances or irregularities.

2.4.2.2. Examination of Generalist Status

Generalist examination is a physical examination of all organ systems in relation to physiological changes to all organ systems, as a result of the pregnancy. use gloves when checking, checks include:

a. Respiratory System include: shape of chest, development of thoracic wall, breath sound (ronchi, wheexzing) airway hygiene.
   Rationale: increased fundus uteri urgent diaphragm impact on changes in the respiratory system during pregnancy
b. Cardiovascular System include: heart rate (a heartbeat count in a minute), peripheral tissue perfusion, (conjunctiva: anemis / hyperemesis, warm / cold, moist / dry, red / pale) oedema, chest pain.
   Rationale: physical changes during pregnancy that is the increase in total volume, changes in blood composition. Such changes begin early in pregnancy.
c. Digestive System include: bowel motility per minute, bowel pattern, fecal consistency, haemorrhoids, gum conditions (epulis), dental caries
   Rationale: hormonal influences on the digestive system make the bowel peristalsis more relaxation and this affects the pattern of bowel movements,

feces slightly hardened, the mother is at risk of haemoroid.

d. Urinary System: urinary patterns, urinary complaints, urinary retention, urgency, urinary incontinence and pain during urination.
Rationale: increased metabolism affects more urine expended, other effects of pregnancy are ureter and right dilated kidney. the condition as a result of an enlarged uterus is more likely to be right because the right rectosigmoid colon.

e. Muskuloskeletal System: body appearance (lordosis, skyposis), walking, joint movement.
Rationale: enlarging the uterus that changes the body's gravitational point is more forward and the increased body burden makes the joints of the body feel more pain and cramp.

f. Sleep and Rest: nighttime sleep patterns, daytime sleep patterns, sleeping habits.
Rationale: increased metabolism makes mothers sweat and frequent sweating and frequent urination, which contributes to changes in rest / sleep activity.

g. Endocrine System: breast shape, isola condition, nipple condition, isola and nipple hygiene, colostrum stimulation.
Rationale: estrogen and progesterone hormones play a role in preparing breast structure as a source of breastmilk production.

h. Integument System: chloasma gravidarum, linea gravidarum, albican striae, skin texture, palmar erythema and spide nervi
Rationale: the increase in estrogen and progesterone hormone increases the activity of melanocyte stimulating hormone which causes the increase of pigment production in the skin.

2.4.2.3. Examination of Obstetrics Status and Gynecology

Physical examination of obstetric and gynecological status includes examination of external and internal genetalia. External genetic examinations include: conditions of the labia majora, minora, vestibulum, vaginal introitus and perineum. Internal genetalia examination includes: examination of the uterus and pelvic cavity.

a. Examination of external genetalia

Genitalia examination techniques. Wash hands then wear gloves before checking the vulva. In the Vulva seen a little clear or odorless white liquid in normal pregnancy no itching wounds or bleeding. Rabalah skin in the groin area in normal circumstances is not palpable lumps of the gland. The studied Lebia Mayora includes color, varicose veins, new tissue growth. The vestibule includes the condition of the urethral introitus, the hygiene of the vestibule. The vaginal introitus includes secretion, color, odor, fluid outflow. Perineum includes perineal elasticity and varicose veins. After you finish washing your hands with gloves that are still attached to the chlorine solution then remove the gloves and once again wash your hands with soap.

Rationale: studies of external genitalia provide information of abnormalities such as fungal or bacterial infections that are at risk of infection in the amnionic tract, ie the occurrence of amnionic membrane rupture. In addition, the effects of increased estrogen hormone increase the distension in the vascular including the vein around the external genitalia called varicose veins. The process

of labor that will be experienced by the mother of the possibility of varicose veins will break for that need to be anticipated as early as possible since pregnancy

b. Examination of Internal Genetalia

1) Deep Inspection

Inspection examination in using speculum examination is called by *in speculo* examination results will be seen the location of the shape and size of the uterus and the state of portion and the opening of the cervix.

2) Palpation

Palpation with two fingers on one hand and the other hand pressing the fundus from the outside of the abdomen is called bimanual palpation. The purpose of this examination is to check the consistency of the thickness of the direction and the presence or absence of cervical opening.

3) Palpation : abdoment

Uterine examination is basically to determine the gestational age of pregnancy can be determined based on the length of the fetal weight fetus first day of last menstruation, high fundus uteri and high fundus uteri according to Leopold basically the principle of palpation examination to avoid the stimulus that increases fetal activity.

2.4.3. Supporting Investigations

According to Mahesta (2018) The Q-tip test (the cotton swab test), is a simple test to show true stress incontinence. Patients were told to empty the bladder, urine accommodated. Then the urine specimen is taken with catheterization. The amount of urine from the urine and catheter is the volume of the bladder. Residual

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2.4.4. Nursing Diagnostic

2.4.4.1. Impaired Urinary Elimination r/t depressed springter urethra by fetal head

2.4.4.2. Acute Pian r/t Agent Bilogical Injury

2.4.4.3. Anxiety r/t changes in health status

2.4.4.4. Risk For Infection

2.4.5. Nursing Interventions

According to Nurarif *et al* (2015) the interventions for nursing diagnosis is :

2.4.5.1. Impaired Urinary Elimination r/t depresses springter urethra by fetal head

After After the nursing action for 2 x 24 hours. The urinary retention is resolved by the outcome criteria.

a. Client feel comfortable
b. Result of inspection and palpation no bladder distention
c. Client is able to urinate without a catheter.

Intervention :

a. Assess client's ability to urinate

   Rationale : Assessment of the ability of the urinary client to assist the next appropriate action
b. Observation of urine output
   Rationale : Knowing the existence of abnormali-ties in urine
c. Stimulate the bladder reflex
   Rationale : Stimulate the sense of urination of client.
d. Bladder traning.
   Rationale : Strengthen sphincter control. This action also helps adapt the client to physiologi-cal functions.
e. Encourage client to drink 6-8 of water glasses everyday
   Rationale : Stimulate the desire to urinate
f. Maintain high drainage bags under the bladder
   Rationale : Avoid reflux of urine into the bladder.
g. Give the client information
   Rationale : Accurate health knowledge will enhance clients' ability to maintain health and reduce anxiety.

2.4.5.2. Acute Pain r/t agent biological injury

After the action of nursing 1x 60 minutes pain problem overcome with Criteria Result:

a. Patients verbally say pain is reduced / lost.
b. Patients can perform a method or action to overcome or reduce pain.
c. Increased movement of the patient.

Interventions :

a. Keep the bed rest during the acute phase.
   Rationale: Minimizing stimulation improves relaxation.
b. Give non-pharmacological action to relieve headaches, for example: cold compress on the forehead, back and neck massage.

Rationale: Action that lowers cerebral vascular pressure by inhibiting / blocking the sympathetic response, effective in relieving headaches and complications.

c. Eliminate / minimize vasoconstriction activity that can increase headache: straining during bowel movements, long cough, and bending.
   Rationale: Activities that increase vasoconstriction cause headaches in the presence of increased cerebral vacuum pressure.
d. Help the patient in ambulation as needed.
   Rationale: Minimize the use of oxygen and excessive activity that aggravates the condition of the client.
e. Give liquids, soft foods. Let the client rest for 1 hour after eating.
   Rationale: decrease myocardial work with respect to digestive work.
f. Collaboration with doctors in administration of analgesic, anti anxiety, diazepam etc.
   Rationale: Analgesic decreases pain and decreases sympathetic nerve stimulation.

2.4.5.3. Anxiety r/t changes in health status

After being given nursing care is expected to ansietas can be reduced or lost. Results criteria:

a. Express an anxiety feeling
b. Reporting that anxiety has decreased
c. Looks relaxed, can sleep / rest properly.

Interventions :

a. Encourage the presence or participation of a spouse
   Rationale: provide emotional support; Can push to reveal the problem.
b. Determine the level of patient anxiety and the source of the problem.

Rationale Encourage the patient or spouse to reveal any unfulfilled grievances or expectations in the bonding / parenting process.

c. Assist the patient or partner in identifying new coping mechanisms and the development of new coping strategies if needed.
   Rationale: helps facilitate positive adaptation to new roles, reduces anxiety feelings.
d. Provide accurate information about the patient and baby.
   Rationale: delusion caused by information or misunderstanding can increase the level of anxiety.
e. Start contact between patient / spouse as soon as possible.
   Rationalee: reduce anxiety that may be related to baby's handling, fear of something unknown, or think bad about the baby.

2.4.5.4. Risk for infection

After being given nursing care for 3 x 24 hours expected patient can avoid risk for infection, with result criteria:

a. There is no signs and symptoms of infection
b. Normal client skin temperature
c. Absence of skin lesions

Interventions :

a. Monitor the characteristics, color, size, liquid and odor of the wound
   Rationale: To know the state of injury and its development
b. Clean the wound with normal copy
   Rationale: Normal saline is an isotonic fluid that corresponds to the fluid in the body
c. Treat wounds with a sterile concept
   Rationale: In order not to get infected and exposed by germs or bacteria

d. Teach clients and families to do wound care
   Rationalee: Embrace patient and family
e. Explain to clients and families about signs and symptoms of the infection
   Rationale: In order for the patient's family to know the signs and symptoms of the infection
f. Collaboration of antibiotics
   Rationale: Provision of antibiotics to prevent the onset of infection

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