

CHAPTER 2

LITERATURE REVIEW

2.1 Toddler

2.1.1 Definition

Toddler age is a very special period in the process of child growth and development, this period is the beginning of a series of successful child development at a later stage. Child development at the age of five is one of the golden ages that will only happen once in a child's life (Gunawan and Ash shofar, 2018). The same thing was also stated by Butchon and Liabsuetrakul (2017) which stated that the first five years of a child's life are for development, fostering learning abilities and social and emotional abilities in the future due to rapid physical, cognitive growth and development. Toddlers are children who are vulnerable to nutritional problems, where this nutritional deficiency can affect the growth and vulnerability of children to infectious diseases that can increase the risk of death in children (Ibrahim et al., 2017)

Therefore, it can be concluded that toddlers are children aged 1-3 years or 1-4 years which are characterized by a rapid growth and development process so that the process of growth and development is a very special period for them or is often referred to as the golden period. At this stage of development, a toddler is able to perform certain activities such as talking, walking and interacting with the surrounding environment. In this toddler age, they need good nutrition to support their growth and development.

2.1.2 Classification and Characteristics

According to the Ministry of Health of the Republic of Indonesia (2022), toddlers are children aged 0-59 months. Meanwhile, according to the Center for Disease Control and Prevention (CDC) in (2021) and

Cambridge Dictionary (2022) toddlers are children aged 12-36 months or (1-3 years). American Academy of Pediatrics (2022), toddler is advancing from infancy towards and into to preschool years (1-3 years). Based on the South Kalimantan Provincial Health Office (2021) and the Banjarmasin City Health Office (2021) toddlers are children aged 1-4 years.

According to Yulistati and Arnis (2016), the characteristics of toddlers are: 1-3 years old are passive consumers, meaning that children receive food given by their parents. The growth rate of children under five is greater than that of preschool age, so relatively large amounts of food are needed. A smaller stomach causes the amount of food he can receive in one meal is less when compared to older children. Therefore, the diet given is small portions with frequent frequency. After birth until the first 3 years of life (toddler), the growth and development of brain cells is still ongoing and the growth of nerve fibers and their branches forms a complex network of nerves and brain.

The number and arrangement of the connections between these nerve cells will greatly affect the performance of the brain, from the ability to learn to walk, recognize letters to socialize. At this time the development of speech and language skills, creativity, social awareness, emotional and intelligence runs very quickly and is the foundation of further development. Moral development and the basics of the child's personality are also formed at this time so that every slightest abnormality or deviation if not detected and handled properly will reduce the quality of human resources in the future (Yuliastati and Arnis, 2016).

2.1.3 Toddler Growth and Development

Growth is related to changes in large, number, size or dimensions at the level of cells, organs or individuals which can be measured by weight (grams, kilograms), length (cm, meters), bone age and metabolic balance (body calcium). and nitrogen retention). While development is an increase in ability and structure and function. In toddlerhood, the development of language skills, creativity, social awareness, and intelligence runs very quickly (Aldita et al., 2019).

According to Azijah and Asyifa (2020) Development in toddlerhood is a qualitative symptom, meaning that in toddlers there is a process of increasing and maturation of personal abilities and social abilities.

2.1.3.1 Personal abilities are marked by the utilization of all the functions of the senses and other organ systems they have. The ability of the sensing function includes;

- a. Vision, for example seeing, glancing, watching, reading and others.
- b. Hearing, for example the reaction to listening to sounds, listening to conversations and others.
- c. Olfaction, for example smelling and smelling something.
- d. Touch, for example reactions when touching or being touched, touching objects, and others.
- e. Taste, for example sucking breast milk, knows the taste of food and drink. Other body systems include:
 - 1) Hands, for example holding, lifting, throwing, doodling, writing and others.
 - 2) Feet, for example kicking, standing, walking, running and others.
 - 3) Teeth, for example biting, chewing and others.
 - 4) Mouth, for example babbling, reciting, shouting, talking, singing and others.

- 1) Emotions, such as crying, smiling, laughing, happy, happy, confident, empathetic, compassion and others.
- 2) Cognition, for example recognizing objects, remembering, understanding, understanding, comparing and others.
- 3) Creativity, for example the ability of imagination in making, assembling, creating objects and others.

2.1.3.1 Social skills

Social ability (socialization), is actually the effect of increasing personal abilities. From there, he is faced with various aspects of the surrounding environment, which makes him consciously interact with that environment. For example, in a child who is one year old and able to walk, he will be happy to be invited to play with other children, even though he is not yet good at speaking, he will feel happy hanging out with these children. This is where the world of socialization in the wider environment is being nurtured, by trying to get to know the friends.

2.1.4 Factors Affecting Growth

In general, there are two factors that influence the growth and development of children according to (Soetjiningsih, 2016) namely:

2.1.4.1 Genetic factors

Genetic factors are basic provisions and have the first position to obtain the final results of the child's growth and development process. Growth is characterized by the strength or toughness and speed or efficiency of division, the sensitivity status of the tissue to stimulation, the age of puberty, and the end of bone growth. Normal and pathological innate factors, gender, ethnicity or nation are genetic factors (Soetjiningsih, 2016).

2.1.4.1 Environmental factor

The environment is a component that really ensures the success or failure of genetic potential or abilities. A good or quality environment will allow the achievement of genetic potential, while a bad environment will hinder it. This environment is a biophysico-psychosocial environment that affects a person every day, from conception to the end of his soul. Post-natal environmental factors that affect growth and development consist of (Soetjiningsih, 2016):

- a. The biological environment consists of race/ethnicity, gender, age, nutrition, health care, susceptibility to disease, chronic health conditions, metabolic function and hormones.
- b. Physical factors consist of weather, seasons, geographical conditions of an area, sanitation, housing conditions, and radiation.
- c. Psychosocial actors consist of stimulation, learning motivation, reasonable rewards or punishments, peer groups, stress, school, love and affection, and the quality of interaction between children and parents.
- d. Customary and cultural factors consist of work and family income, father and mother education, number of siblings, gender in the family, household stability, mother and father personality, parenting patterns, customs, norms and taboos, religion, urbanization, and political life.

The above explanation is in accordance with Blum's theory which states that health status is influenced not only by heredity but also by the environment and even health services. Therefore, it can be concluded that toddlers are children aged 1-3 years which are characterized by a rapid growth and development process so that the process of growth and development is a very special period for them or is often referred to as the golden period. At this stage of development, a toddler is able to

perform certain activities such as talking, walking and interacting with the surrounding environment. At this time, the health condition of toddlers will greatly affect their growth and development.

2.2 Fever

2.2.1 Definition

Fever is a symptom experienced by everyone. Gerard van Swieten, a scientist in the 18th century, stated that no one lives without having a fever. Most of the diseases experienced by humans have symptoms of fever, some include "fever" as the name of the disease (such as dengue fever, dengue haemorrhagic fever), and those that do not include it (such as pneumonia, influenza, malaria). In addition, fever can also arise due to other conditions such as injuries to the body, trauma to body tissues, after childbirth, and cancer (Hamlin, 2014 in (Sari, 2021).

Table 2.1 Advantages and Disadvantages of the Four Locations for Body Temperature Measurement

Location	Normal Range	Advantages	Deficiency
Oral (Average 37°C)	35,5 – 37,5°C	Easy to access and convenient	Glass thermometers can break if bitten. Inaccurate scores if the client has recently consumed cold or hot liquids or foods or smoked
Rectal (Average 0,4°C higher than oral)	36,6 – 38°C	Reliable results	Uncomfortable and more unpleasant for the client, difficult to perform on a client who can not tilt left and right, can injure the rectum . The presence of feces can interfere with the placement of the thermometer. If the stool is soft, the thermometer can enter the stool rather than the rectal wall.

Axilla (Average 0,6°C lower than oral)	36,5 – 37,5°C	Safe and noninvasive	The thermometer must be installed for a long time in order to obtain an accurate result.
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Tympanic membrane (Calibrated to oral or rectal scales)	35,8 – 38°C	Easily accessible and can cause discomfort, there is a risk of injury if the thermometer is placed too deep into the ear canal.	Repeated measurements may show different results. However, the presence of cerumen can affect the results
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(Estes et al., 2019)

2.2.2 Classification Degree

2.2.2.1 According to Lusia (2019) by measuring through the rectal (anus) an increase in temperature or fever is as follows:

- a. Subfebrile : 37.5 – 38°C
- b. Mild fever : 38 – 39°C
- c. High fever : 39 – 40°C
- d. Hyperpyrexia : 41.2°C

2.2.2.2 Measurement through the armpit of an increase in temperature or fever as follows:

- a. Low fever : 37.2 – 38.3°C
- b. Moderate fever : 38.3 – 39.5°C
- c. High fever : > 39.5°C

2.2.2.3 Oral temperature measurement as follows:

- a. Low fever : 37.7 – 38.8°C
- b. Moderate fever : 38.8 – 40°C
- c. High fever : >40°C

2.2.3 Etiology

Fever is the result of an increase in the set point (due to infection) or by an imbalance between heat production and excretion. Fever in infection occurs due to microorganisms stimulating macrophages or PMNs to form PE

(endogenic pyrogen factor) such as IL-1, IL-6, TNF (tumour necrosis factor), and IFN (interferon). This substance acts on the hypothalamus with the help of the prostaglandin-forming cyclooxygenase enzyme. Prostaglandins are what increase the hypothalamic set point. In other circumstances, for example in tumors, blood diseases and malignancies, collagen diseases, metabolic diseases, the source of PE release is not from PMNs but from other places. The child's ability to react to infection with the onset of clinical manifestations of fever is highly dependent on age. The younger the baby, the less ability to change set-points and produce heat. Small babies often get severe infections without being ac

accompanied by symptoms of fever (Ismoedjianto, 2016). Broadly speaking, there are two categories of fever that are often suffered by children under five (and humans in general) namely non-infectious fever and infectious fever (Widjaja, 2016).

2.2.3.1 Noninfectious fever

Non-infectious fever is a fever that is not caused by the entry of germs into the body. Non-infectious fever is rare and suffered by humans in daily life. Non-infectious fever arises because of abnormalities in the body that are brought from birth, and are not treated properly. Examples of non-infectious fever include fever caused by *degenerative* disorders or congenital heart defects, fever due to stress, or fever caused by severe diseases such as leukemia and blood cancer (Widjaja, 2016)

According to Lusia (2019) Non-infectious causes of fever are:

- a. Malignancy
 - 1) Lymphoma
 - 2) Renal Carcinoma
- b. Collagen Disease
 - 1) Rheumatic Fever

- 1) Rheumatism Arthritis
- 2) Periarthritis Nodosa
- 3) Lupus Erythematosus
- a. Iatrogenic Disease
 - 1) Vaccination or Immunization
 - 2) Fever Drugs like Steroids
- b. Hematologic Disease
 - 1) Leukemia
 - 2) Hemolytic Anemia
 - 3) Thrombophlebitis
 - 4) Cyclic Neutropenia
- c. Allergy
- d. Substance or Disease
 - 1) Central Nervous System Damage
 - 2) DDT poisoning
 - 3) Scorpion
 - 4) Radiation
 - 5) Epinephrine poisoning

2.2.3.1 Infectious fever

Infectious fever is a fever caused by the entry of pathogens, such as germs, bacteria, viral or viruses, or other small animals into the body. Bacteria, germs or viruses can enter the human body through various ways, for example through food, air, or body contact. Immunization is also a cause of infectious fever because when immunizing means someone has intentionally introduced weakened bacteria, germs or viruses into the toddler's body with the aim of making the toddler immune to certain diseases. Some diseases that can cause infection and eventually cause fever in children include Lusia (2019) :

- a. Typhoid fever
- b. Dengue Hemorrhagic Fever (DHF)
- c. Pes

- a. Chikungunya
- b. Hand, foot and mouth disease
- c. Kawasaki disease
- d. Malaria
- e. Influenza
- f. Have a cold
- g. Sinusitis
- h. Pneumonia
- i. Bronchitis
- j. Pertussis
- k. Tuberculosis (TB)
- l. Tetanus
- m. Meningitis (Inflammation of the membranes of the brain)
- n. Mumps
- o. Morbili (Measles)
- p. German Measles
- q. Tonsillitis (Tonsilitis)
- r. Diphtheria
- s. Otitis Media (Middle Ear Infection)
- t. Chicken pox
- u. Urinary tract infection
- v. Hepatitis (Inflammation of the Liver)
- w. Abscess
- x. Worm Disease
- y. Appendicitis
- z. Poliomyelitis
- aa. Sepsis

2.2.2 Clinical Manifestations

Table 2.2 Clinical Manifestations of fever

Manifestations	Clinical Findings
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Sign	Rigour, myalgia, headache, anorexia, oversleeping, fatigue, thirst, delirium and oliguria
Symptoms	Drowsiness, irritability, tachycardia, tachypnea, increased blood pressure, facial redness, snoring, decreased glomerular filtration rate (GFR) and proteinuria.
Electrocardiogram (ECG) changes	QT interval shortens, supraventricular ectopic beats increase

(Sari, 2021)

Most fevers in children are the result of changes in the heat center (thermoregulation) in the hypothalamus. Diseases characterized by fever can attack the body's systems. According to Chairulfatah(2017) clinically, fever consists of four phases, namely prodromal, chills, fever and healing (defervescence/resolution).

2.2.4.1 Prodromal Phase

In this phase there is stimulation of endogenous pyrogen production, non-specific symptoms such as fatigue, lightheadedness and malaise.

2.2.4.2 Shivering Phase

The formation of prostaglandin E2 will start an increase in the set point in the hypothalamus, the patient will enter the shivering phase. In this phase the body tries to increase body temperature to match the new set point. The increase in body temperature is carried out through thermogenesis (shivering), reducing heat loss through vasoconstriction of skin blood vessels, contraction of the erector pili muscles and the position of the body curled up to reduce body surface area. Clinically, the child feels cold, has chills, pale skin, wants to be covered, and is in a crouched sleeping position. The various changes that occur in the shivering phase are the same as those that occur in normal people exposed to cold temperatures.

2.2.4.3 Fever Phase

When a new balance has been achieved between the set points and body temperature, the shivering disappears and is replaced by an increase in body temperature (fever), the child will feel hot, the skin is warm and dry, the face is flushed (flushing), ciliary injection in the conjunctiva and photophobia.

2.2.4.1 Healing phase

In the healing phase, the set point decreases, the body releases heat to adjust to the normal set point so that heat is released such as through the sweating process, explains the process of healing fever caused by the majority of viral infections occurs for 2-3 days. A fever that is successfully treated with antipyretic drugs can reappear but the fever will not come back if the child's immune system manages to fight off bacterial infections that enter the body.

2.2.2 Classification

Fever is an abnormal increase in body temperature (Sari, 2021) Types of fever that may be encountered include:

2.2.5.1 Septic Fever

Body temperature gradually rises to very high levels at night and drops back to above normal levels in the morning. Often accompanied by complaints of chills and sweating. When the high fever drops to a normal level, it is called hectic fever.

2.2.5.2 Remittent Fever

Body temperature can drop every day but never reaches normal body temperature. The possible causes of recorded temperatures can be as high as two degrees and not as large as the temperature difference noted for septic fever.

2.2.5.1 Intermittent Fever

Body temperature drops to normal levels for several hours of the day.

If a fever like this occurs once every two days, it is called *tersiana* and if it occurs two days free of fever between two attacks of fever, it is called *quartana*.

2.2.5.2 Continuous Fever

Temperature variations throughout the day do not differ by more than one degree. At the level of fever that is continuously very high is called *hyperpyrexia*.

2.2.5.3 Cyclic Fever

There is an increase in body temperature for several days followed by several fever-free periods for several days which is then followed by a rise in temperature to normal.

2.2.2 Pathophysiology

Fever occurs when various infectious and non-infectious processes interact with host defense mechanisms. When this mechanism takes place, bacteria or tissue fragments will be phagocytosed by leukocytes, macrophages, and killer lymphocytes which have large granules. All of these cells then digest the breakdown products of bacteria, and release interleukin substances into body fluids (leukocyte pyrogens or endogenous pyrogens). When interleukin-1 reaches the hypothalamus, it triggers a fever by increasing body temperature within 8-10 minutes.

Heat centers in the hypothalamus and brainstem will then send signals for increased production and conservation of heat so that body temperature rises to a new set temperature level. This can be achieved by vasoconstriction (narrowing) of the blood vessels of the skin, so that the blood that reaches the surface of the body is reduced, and body heat that occurs in the core of the body still maintains the body's core temperature. Epinephrine released due to sympathetic nerve stimulation will increase body metabolism and

muscle tone. There may be a process of shivering and/or individuals trying to wear thick clothes and trying to fold certain body parts to reduce evaporation.

During fever, arginine vasopressin (AVP), alphanelanocyte-stimulating hormone, and corticotropin releasing factor are released by the body. This substance can work as an endogenous antipyretic (intrinsic antipyretic) to reduce fever reactions, so that the body temperature does not increase excessively. This antipyretic effect will create a feedback circuit to the hypothalamus. Arginine vasopressin (AVP) or vasopressin, or also known as antidiuretic hormone produced during fever, will cause water retention by the kidneys and this may play a role in regulating body temperature during fever.

Initially, what was thought to be the trigger for the fever reaction was infection and infection products. In subsequent developments, it turned out that several endogenous molecules such as antigen-antibody complexes, complement, lymphocyte products and inflammation bile acids can also stimulate the release of cytokine pyrogens. The concept that cytokines can induce other cytokines is also important to understand to explain the mechanism of fever due to non-infectious diseases. In tumors, blood diseases, malignancies, collagen diseases, metabolic diseases. Interleukin-1 also has the ability to induce the formation of prostaglandins or substances that have similarities to these substances, then act on the hypothalamus to evoke a fever reaction. Lack of fluids and electrolytes can cause fever, because these fluids and electrolytes affect the thermoregulatory balance in the anterior hypothalamus. Theoretically, the increase in temperature in infection is considered beneficial, because the blood flow is getting faster so that food and oxygenation are more smoothly. However, if the temperature gets higher (above 38.5°C) the patient begins to feel uncomfortable, the blood flow is fast, the amount of blood to flow through

the vital organs (brain, heart, lungs) increases, so the volume of blood to the extremities (hands and feet) increases. reduced, as a result the tips of the feet / hands feel cold. A high fever spurs a very fast metabolism, the heart is pumped stronger and faster, the respiratory rate is faster. Dehydration results from evaporation of the skin and lungs and is accompanied by an electrolyte imbalance, which pushes the temperature higher. Tissue damage will occur when body temperature is higher than 41°C, especially in permanent brain and muscle tissue. This damage can cause turbulence, seizures, coma and paralysis. Muscle damage that occurs in the form of rhabdomyolysis with consequent myoglobinemia (Lusia, 2019)

2.2.2 First Handling

According to Lusia (2019) the first things that can be done when a child has a fever are:

2.2.7.1 Do not panic

At the time of fever, parents will feel anxious and confused, there are even parents who panic and do not know what to do because they are too confused. Actually fever is the body's defense mechanism against disease, for example by bacteria or viruses (which are the main causes of fever in children). In the early stages of a disease "attack", the body naturally defends itself and fights off the cause of the disease. Experts believe, the body can be more effective against infection if the temperature rises, in other words at a certain stage of fever can benefit the patient in the sense that it can increase phagocytosis (immune response) and decrease viability (survival) of germs.

If the fever is high, for example, reaching 39°C, it usually causes the sufferer to be restless, unable to sleep, and to lose appetite and drinking. Even a very high fever can cause brain damage if not treated quickly and appropriately. So we must remain vigilant and

fever should still be watched out for if the fever leads to a serious illness which includes serious illnesses, such as typhoid fever, dengue hemorrhagic fever, measles, chicken pox, pneumonia, Kawasaki disease, leukemia, and lymphoma. In dealing with this situation, what parents need to do is see if there is an emergency (such as shortness of breath, decreased consciousness, prolonged/recurrent seizures, severe dehydration, headache, stiff neck, etc.), then find out/suspect the cause of high body temperature. whether it's due to flu, sore throat, after immunization, lack of fluids, too hot air, too long playing in the sun or other reasons, taking into account his age and condition. Furthermore, seeking information and asking for an explanation from the doctor about what the child is experiencing is the wisest action that parents can take before giving the drug.

2.2.7.1 Monitor Children's Condition

Measure the child's body temperature. If the child's temperature rises above normal, take the child's temperature again 20-30 minutes to make sure it's not just a case of a temporary temperature rise. Clothing should not be too thick and not covered by a blanket. Crying, throwing tantrums, playing in hot environments, and taking hot showers can raise your temperature. Children who have a fever need to be monitored continuously for their body temperature every 4-6 hours and note whether they are decreasing, stable or even increasing. Monitor the child's condition, whether the symptoms are improving or not. runny nose, fever with typical symptoms such as the appearance of lesions in smallpox.

2.2.7.2 Remove excess clothes and coats/blankets

Wear light, comfortable clothing that absorbs sweat such as cotton and linen fabrics that allow good heat dissipation. It is better if the child is not covered, but if it is still necessary, let the child sleep with a blanket or thin cloth. Do not wrap the child in flannel or put on

pajamas because it can cause the child to overheat. Likewise, if the child is shivering, don't wear thick clothes, but still wear light clothes.

2.2.7.1 Pay attention to room temperature and air flow in the room (fresh air)

Flow air circulation in the room so that the temperature feels comfortable. Can be with a fan. If using an air conditioner, set the temperature at 22-24-26°C (cool room temperature) with humidity between 65% to 95% because a comfortable room temperature will stimulate the body to release heat more aggressively with the aim of adjusting.

2.2.7.2 Drink lots and nutritious food

Give more fluid intake, preferably sweet or add sugar (can mineral water, juice, isotonic drinks). Drinking lots of water can stimulate heat dissipation through urine. Although water or fruit juice without sugar is best, let him choose what he likes, including sparkling water/lemonade. Tea and caffeinated drinks should be avoided during a fever because caffeine can induce diuresis (frequent urination). The appetite of a sick child is generally reduced, but this is nothing to worry about. Almost no disease requires a special diet, but if you are afraid that your child is not eating enough, persuade him to eat his favorite foods. It doesn't matter if the food isn't very nutritious. Doctors will only act if this loss of appetite continues in a long period of illness.

2.2.7.3 Cold foods such as ice cream, cold fruits can be given to provide a sense of comfort, but by looking at the situation, such as when there is painful swallowing, runny nose, stuffy nose, and cough, cold food should not be given. Let the child eat what he wants. Do not force it. Avoid fatty foods, because they are difficult for the body to digest. However, for people with fever due to strep throat, it will be difficult

to swallow so they usually don't want to eat or breastfeed, try offering liquids little by little, for example 3-4 spoons, but often.

2.2.7.1 Rest

Ask the child to rest or reduce physical activity. Get enough sleep to reduce metabolism. With enough rest, the body will quickly get back in shape. In general, a child doesn't have to stay in bed all day. If the child feels comfortable enough to get up and play in the house, it's usually still okay. However, if your child is reluctant to get out of bed or if the doctor asks him to rest, prevent boredom by providing lots of fun. When sick, a child may not be as strong as usual, so they don't like toys that require too much concentration. Drawing activities, sticking pictures to books and so on can entertain him. When sick children tend to ask for more attention and should spend time with him, to reduce boredom. Generally a child prefers to lie on the sofa in the sitting room, making him feel involved with other members of the family. It also lets you keep a closer eye on your little patients.

2.2.7.2 Try not to stress the child or increase stress

The pain suffered can certainly make children become stressed. This makes him tend to be more fussy than usual. If parents are not patient enough to deal with it, then scolding the child, can make it even more stressful. As a result of this condition, the healing process of the fever will be slower. Give attention and understanding that his parents can also feel the pain and wish him a speedy recovery. The attention from parents can be felt by the child and is able to provide a sense of security and comfort. Tension is reduced and the healing process can be accelerated.

2.2.7.3 Giving Compress

Apply warm compresses to areas of the body that have large blood vessels such as the neck, armpits and groin/groins, as well as on the outside and open areas such as the forehead and abdomen. Warm

compresses make the peripheral blood vessels in the skin widen which in turn makes the pores open making it easier for heat to be removed from the body. Avoid compressing using cold water or ice cubes because this action causes the peripheral blood vessels to shrink so that the heat that should be flowed by blood to the skin to get out is blocked so that body heat does not decrease.

2.2.2 Supporting Examination

Laboratory tests that can be done to determine the correct diagnosis are:

- 2.2.8.1 Complete peripheral blood examination: Hb, Ht, number and type of leukocyte count, platelets
- 2.2.8.2 Peripheral blood smear
- 2.2.8.3 Microscopic special routine urine analysis (examination)
- 2.2.8.4 Chest X-ray (as indicated)
- 2.2.8.5 Lumbar puncture examination if it shows signs of meningitis

2.2.3 Complications

According to Nurarif (2015) complications from fever are:

- a. Dehydration: fever increases evaporation of body fluids
- b. Febrile seizures: rare (1 in 30 children have fever). Often occurs in children aged 6 months to 5 years. Attacks within the first 24 hours of fever and generally brief, do not recur. Febrile seizures are also not harmful to the brain.

In addition, fever above 41°C can cause hyperpyrexia which is very dangerous because it can cause various changes in metabolism, physiology, and ultimately have an impact on damage to the central nervous system. At first the child appears to be restless with headaches, dizziness, convulsions, and finally unconscious. A coma occurs when the temperature is >43°C and death occurs within a few hours when the temperature is 43°C to 45°C.

2.2.2 Management

According to Widjaja (2016) handling of fever can be done with pharmacological measures and non-pharmacological measures. There are several steps that can be taken to treat fever in children:

2.2.10.1 Pharmacological action

Pharmacological actions that can be taken are to provide antipyretics in the form of:

a. Paracetamol

Paracetamol is the drug of first choice to lower body temperature. Doses given between 10-15 mg/Kg BW will reduce fever within 30 minutes with a peak at 2 hours after administration. Fever can come back within 3-4 hours

b. Ibuprofen

Ibuprofen is a propionic acid derivative which has anti-inflammatory, analgesic, and antipyretic properties. The analgesic effect is the same as aspirin, while the anti-inflammatory power is not too strong. Side effects include nausea, flatulence, and bleeding, but are less common than aspirin. Severe haematological side effects include agranulocytosis and aplastic anemia. Other effects such as skin erythema, headache, and thrombocytopenia are rare. Effects on the kidneys in the form of acute renal failure, especially when combined with acetaminophen. Therapeutic dose is 5-10 mgr/kgBW/time every 6 to 8 hours.

c. Aspirin

Aspirin or acetylsalicylic acid is often used as an analgesic, antipyretic, and anti-inflammatory. Aspirin is not recommended in children <16 years because it has been shown to increase the risk of *Reye's syndrome* (Katzung, 2002). Aspirin is also not recommended for low-grade fevers because

it has the side effect of stimulating gastric and intestinal bleeding. Other side effects, such as discomfort in the stomach, nausea, and gastrointestinal bleeding can usually be avoided if the daily dose is not more than 325 mg.

2.2.10.1 Non-pharmacological action

According to Nurarif (2015) non-pharmacological measures to reduce heat that can be done such as:

a. Complementary Therapy

- 1) Tepid Water Sponge
- 2) Warm Compress

a. Traditional Medicine

- 1) *Pijat*
- 2) *Bapidara*
- 3) Herbal Medicine or *Jamu*

2.3 Traditional Treatment

2.3.1 Definition

According to the Decree of the Minister of Health of the Republic of Indonesia Number 1076/MENKES/SK/VII/2003 concerning the Implementation of Traditional Medicine, traditional medicine is treatment or treatment by means, drugs, and remedies that refer to experience, skills hereditary, and/or education or training, and applied in accordance with the norms prevailing in society. WHO defines traditional medicine as the sum total of knowledge, skills and practices based on the theories, beliefs and experiences of people who have different cultural customs, whether described or not, used in the maintenance of health and in the prevention, diagnosis, improvement of health. or treatment of physical and mental illness (Kementerian Kesehatan Republik Indonesia, 2003 in Esme Anggeriyane, 2019)

2.3.2 Purpose

2.3.1.1 General Purpose

Increasing the utilization of traditional medicine, either separately or in an integrated manner in a complete health care system, in order to achieve optimal public health status. Thus, traditional medicine is one alternative that is relatively more favored by the community. Therefore, the health community seeks to recognize and, if possible, include traditional medicine (Kementerian Kesehatan Republik Indonesia, 2003 in Esme Anggeriyane, 2019).

2.3.1.2 Special Purpose

- a. Increasing the quality of traditional medicine services, so that the community is protected from the negative impacts of traditional medicine.
- b. Increased community independence in overcoming health problems with traditional medicine efforts.
- c. The development of various traditional medical personnel in health services.
- d. The integration of traditional medicine efforts in the plenary health service program, starting from the household level, puskesmas to the referral level (Kementerian Kesehatan Republik Indonesia, 2003 in Esme Anggeriyane, 2019).

2.3.3 Classification of Banjarese Traditional Treatment

According to Astutik et al. (2016) explained that the pattern of treatment carried out by traditional healers is using healing techniques using amulets, coconut oil which is given special readings, using water, herbal plants, *baurut*, *bapidara* (repels disturbing spirits). Not only that, according to Fadhillah (2021), other treatment patterns can also be done by means of *batimung* and *batatamba*.

2.3.3.1 Amulets/ magical items

The belief in amulets is a belief in the rejection of harm from spirits that can cause disease. One example of an amulet is the use of black thread used by toddlers. The goal is to protect from the disturbance of evil spirits so that the child is always healthy. Talismans are also used by toddlers in the healing process (Astutik et al., 2016).

2.3.3.2 Coconut oil with special reading

Coconut oil or fatty oil in addition to functioning for processing massaging is also used as a treatment medium after going through certain process. The manufacture of oil uses coconut oil which is cut, burned, allowed to stand and only the top is taken. Coconut oil that has been processed can be stored in bottles and if it has a little can be added with ordinary coconut oil. In moderately severe disease, the oil needs to be repainted to increase the healing power (Astutik et al., 2016).

2.3.3.3 Water

The people of Banjar believe that certain readings in the form of prayers and remembrance taken from the Qur'an and Hadith contain magical powers that can resist supernatural influences or are used to heal those affected by supernatural beings. The verses of the Qur'an that contain the healing power of diseases are used as a treatment which are called "Syifa verses" (Jamalie, 2016).

2.3.3.4 Herbs

People generally use cold purifiers for protects the skin from the hot weather. This cold purifier material, apart from rice flour, is also leaf juice which has properties cool like *jalukap* leaves (*pegagan*), *tambura*, *kambat*, *dilam*, *pudak* (*pandan*) and *ribu-ribu* leaves. The use of this *pupur* when hot weather and a child has a fever, it can also be used with coarse salt to accelerate the loss of the baby's umbilical cord (Astutik et al., 2016).

2.3.3.1 *Batatamba*

Etymologically, *batatamba* in the Banjarese language comes from the word *tamba* or *tatamba* which means medicine; *batatamba* means treatment or shaman; *mananambai* means to treat or cure; and *pananamba* means one who gives treatment. *Batatamba* has a function to cure disease and means that a person should immediately rest (Jamalic & Rifat, 2012 in (Fadillah et al., 2021).

2.3.3.2 *Baurut/* massage

According to the results of the Resmi (2017) explained that massage Traditionally, it is a tool-free skill that uses only touch using the fingers and palms to massage. Traditional massage is one of the complementary therapies that parents in Tabudarat Hilir village often use in treating fever. Parents consider using massage as a quick way to reduce a child's fever because massage is one of the benefits of improving blood circulation and relieving pain. Parents think massage is an easy and inexpensive alternative to reduce a child's fever. The parents said they did not know for sure what caused their child to have a fever, whether the fever was due to a serious illness, in the Banjarese language *kepidaraan* or *kepuhunan*, or due to other causes.

2.3.3.3 *Bapidara*

According to research Astutik et al. (2016) Banjar tribe is one of the tribes many still believe in traditional medicine. People believe that if a child under five has a fever and the cause is unknown, then the child is most likely *kapidaraan* or disturbed by spirits. *kapidaraan* according to the Banjarese language, comes from the word *pidara*, the prefix “ka” and the suffix “an”, the meaning has been exposed. *Kapidaraan* can be concluded that people who have been greeted by a spirit called *pidara* who occupy one elemental composition as a cause as a sick person are greeted by the spirits of their relatives. The words *pidara*, *kapidarai*, *mamidarai* and

dipidarai as elements that make up a paradigmatic relation are structured and distinguish each other.

Bapidara is a ritual performed to ward off disturbances of spirits that cause pain to the affected. *Pidara* can be done at all ages, from infants to adults. In line with the interviews conducted by Astutik et al. (2016) in the Dusun Pondok Tengah village observed two *pidarai* treatment rituals for toddlers carried out by two traditional birth attendants (Anggeriyane et al., 2019). The first toddler looks a bit unwell, the first toddler was reprimanded by the spirit of his father (ancestor) when he passed by the area near the tomb. Meanwhile, another toddler was sick with diarrhea and was reprimanded by the spirit. According to Jamalie's research (2016) explaining *kapidaraan* or being reprimanded (*kataguran*) by subtle people (creatures or supernatural people) with the intention of inviting him to play or whatever, usually experienced by children under five years old (toddlers) or infants (Anggeriyane et al., 2019). In line with the results of the Resmi (2017) it was found that the purpose of *Bapidara* is a traditional ritual of belief to cure fever experienced by his child by causing disturbing supernatural beings and has been carried out for generations (Anggeriyane et al, 2019).

According to Jamalie's research (2016) to treat small children who have *kapidaraan* usually sprayed with water that is read a prayer (mantra) then certain parts of the body such as the forehead, palms, soles of the feet, chest and back are marked with a bird's claw (like a plus sign but longer) than turmeric mixed with whiting. The more reddish-yellow (orange) the mixture of turmeric and whiting is, it is believed that the child's *kapidaraan* is also heavier. Characteristics of *kapidaraan* children are usually hot or cold body temperatures, in toddlers or young children they are usually cranky,

sluggish, unmotivated or sluggish. In the management of *Bapidara*, traditional healers not only use skills in the form of using whiting and turmeric, but this process is accompanied by prayer which is believed to affect the healing of children under five who are being disturbed by supernatural beings. Banjar people believe that certain readings in the form of prayers, remembrance, or tawa'udz taken from the Qur'an and the Hadith of the Prophet SAW contain magical powers that can resist the influence of supernatural (evil) or are used to heal those who are affected by interference from supernatural beings. The verses of the Qur'an that contain healing power against disease and are used as treatment are called "Syifa verses" (Jamalie, 2016 in Aggeriyane et al., 2018).

One of the most common reasons is that in the opinion of parents, massage is one of the traditional therapies to reduce fever, make you feel comfortable and not fussy when massaged when you have a fever. According to them, traditional complementary therapies such as massage, Bapidara and spiritual make it easier to deal with fever in their children because they are cheaper than going to the doctor. Many parents use health facilities such as going to the doctor, taking their children for treatment to the puskesmas or village midwife and buying their own medicine at the warung, but also using complementary therapies such as massage, Bapidara and spiritual medicine. This is also related to suggestions to each parent for the recovery of their child (Resmi, 2017).

2.4 COVID-19 Pandemic

2.4.1 Definition

Corona virus is a disease that attacks the respiratory tract. There are two types of corona viruses that are known to cause disease, namely *Middle East Respiratory Syndrome* (MERS) and *Severe Acute Respiratory*

Syndrome (SARS). Coronavirus Disease 2019 (COVID-19) is a new type of disease that has not been previously identified in humans. The virus that causes COVID-19 is called Sars-CoV-2. Corona virus is zoonotic (transmitted between animals and humans). COVID-19 can be transmitted from human to human through close contact and droplets, and not through the air. People who are at risk of contracting this disease are people who are in close contact with COVID - 19 patients, including medical personnel who treat COVID-19 patients. Standard recommendations to prevent the spread of infection are washing hands regularly or after doing activities outside the home, applying cough and sneezing etiquette, avoiding direct contact with farm animals and wild animals and also avoiding direct contact with people who have symptoms such as coughing and sneezing, and don't forget to always wear a mask when doing activities outside the home (Kementerian Kesehatan Republik Indonesia and Gerakan Masyarakat Hidup Sehat, 2020).

So it can be concluded that the COVID-19 virus is a virus that can be transmitted by humans or animals. One of the transmissions is through droplets, so people must comply with health protocols by maintaining distance, using masks, washing hands, staying away from crowds and reducing mobility.

2.4.2 Clinical Manifestations

Based on the World Health Organization (2020) clinical manifestations consist of:

2.4.2.1 Fever

2.4.2.2 Cough

2.4.2.3 Fatigue

2.4.2.4 Loss of ability to smell and feel

2.4.2.5 Shortness of breath or difficulty breathing

- 2.4.2.1 Unable to speak, lose mobility or feel disoriented
- 2.4.2.2 Chest pain
- 2.4.2.3 Sore throat
- 2.4.2.4 Headache
- 2.4.2.5 Diarrhea
- 2.4.2.6 Skin rash or discoloration of the fingers and toes
- 2.4.2.7 Irritation to the eyes

2.4.3 Deployment

The spread of COVID-19 or *Corona virus disease* can be done in two ways, namely through contact and droplets and through transmission of fomites or surfaces of objects contaminated with the virus.

2.4.3.1 Via Contacts and Droplet

Transmission of SARS-CoV-2 can occur through direct contact or indirect contact. Direct contact can occur if we have close contact with an infected person, it can be through secretions such as saliva, respiratory tract secretions such as coughing, sneezing, and talking. While indirect contact can occur if we accidentally touch objects around that have been contaminated with the virus. Droplet transmission can occur if we are less than 1 meter away from an infected person or person who has symptoms of coughing and sneezing, these droplets can reach the mouth, nose and eyes of susceptible and infected people (World Health Organization, 2020)

2.4.3.2 Formal Transmission

Respiratory tract secretions or droplets released by an infected person can contaminate surfaces and objects, resulting in the formation of fomites (contaminated surfaces). Live virus and/or SARSCoV-2 detected by RTPCR can be found on these surfaces for hours to days, depending on the surrounding environment

(including temperature and humidity) and the type of surface (World Health Organization, 2020).

2.4.4 Prevention

Prevention and mitigation measures are the key to implementation in health and community services (Kementerian Kesehatan Republik Indonesia and Gerakan Masyarakat Hidup Sehat, 2020). The most effective preventive measures in the community include:

- 2.4.4.1 Always maintain hand hygiene by using hand sanitizer if hands look dirty or wash hands with soap and water.
- 2.4.4.2 Avoid touching eyes, nose and mouth after contact with people.
- 2.4.4.3 Apply coughing and sneezing etiquette by covering the mouth and nose with the inside of the upper arm or using a tissue and continuing to wash hands.
- 2.4.4.4 Use a medical mask or cloth mask when going out and wash your hands immediately after touching the mask or throwing away used masks.
- 2.4.4.5 Always maintain a minimum distance of 1 meter from people or do not congregate with many people

2.4.5 Management of COVID-19 in Children

According to Wati and Manggala (2020) Determination of child status and follow-up can be done in two approaches, namely based on history of residence or local transmission and based on direct contact with ODP, PDP, and positive confirmed cases of COVID-19 . The following are some of the treatments for COVID-19 in children:

2.4.5.1 Management of ODP (People Under Monitoring)

ODP must self-isolate at home for 14 days and must report to the local health office for surveillance, carry out swab tests on days 1 and 2, and monitor if they have pneumonia following the PDP with pneumonia.

2.4.5.1 Management of PDP without Pneumonia

Patients under surveillance without symptoms of pneumonia must also self-isolate at home for 14 days and must report to the local health office for surveillance, carry out swab tests on the 1st and 2nd days, carry out therapy according to the patient's condition, carry out monitoring and if they have pneumonia follow the flow of PDP with pneumonia.

2.4.5.2 Management of PDP with Pneumonia

PDP patients with pneumonia should be immediately referred to a referral hospital so that medical personnel can immediately treat them. If it is not possible to be referred, do isolation treatment, with one patient being treated in a separate room (if it is not possible to do a cohorting of pneumonia patients), the treating officer is obliged to use standard PPE according to the instructions, perform a nasopharyngeal swab on days 1 and 2, carry out treatment pneumonia according to the patient's condition, and report it to the local health office.

2.4.6 Impact

The COVID-19 pandemic has many impacts, one of which is anxiety. Anxiety is a universal and frequent emotion. Anxiety is also a normal reaction that occurs in dealing with stressful situations. Anxiety is experienced by almost all humans. The feeling is characterized by a sense of fear, unpleasantness, vaguely accompanied by autonomic symptoms such as headache, sweating, palpitations, chest stiffness and mild gastric disturbances. Anxiety can also be accompanied by anxiety, namely the ability of a person to feel unable to sit or stand for long.

Cameron et al (2020) evaluated the prevalence of depression and anxiety in mothers with children aged 0-8 years during the COVID-19

pandemic. The results of the identification found that there was an increase in anxiety from 29.59% to 36.27% (Tangkuman et al., 2021)

This is supported by the research of Tangkuman et al (2021) that parents have an important role, especially when their child is sick. So based on research by Yuan et al (2020) during the COVID-19 pandemic, if children must be hospitalized when they are sick, a densely populated hospital is a high-risk area for virus-borne infections. Simultaneously, children's immunity is low, so the possibility of infection is greater than that for adults. Parents will also worry that they may get infected in hospital. Also, children are curious about life. During hospitalization, if parents or physicians do not pay sufficient attention, children may touch various items randomly, leading to SARS-CoV-2 transmission. Therefore, the parents of children hospitalized during the COVID-19 epidemic face huge pressure and anxiety. Post-traumatic stress disorder and mental-health problems may occur in parents, which may affect the child's recovery.

2.5 Factors Influencing Parents' Decisions

According to Foster and Anderson (Sholihah, 2020) the factors that influence knowledge are as follows:

2.5.1 Education

Knowledge is very closely related to education, where it is expected that with higher education, the person will have more extensive knowledge, but that does not mean someone with low education is absolutely low in knowledge (Sholihah, 2018)

2.5.1.1 Classification

a. Basic education

Basic education is the level of education that underlies the secondary education level. Basic education is in the form of

Elementary School (*SD*) and Madrasah Ibtidaiyah (*MI*) or other equivalent forms.

a. Secondary school.

First (*SMP*) and Madrasah Tsanawiyah (*MTs*), or other equivalent forms.

b. Middle education

Secondary education is a continuation of basic education. Secondary education consists of general secondary education and vocational secondary education. Secondary education is in the form of Senior High School (*SMA*), Madrasah Aliyah (*MA*), Vocational High School (*SMK*), and Vocational Madrasah Aliyah (*MAK*), or other equivalent forms.

c. Higher education

Higher education is a level of education after secondary education which includes diploma, bachelor, master, specialist, and doctoral education programs organized by universities. Higher education is held in an open system. Higher education can take the form of academies, polytechnics, high schools, institutes, or universities. Higher education institutions are obliged to provide education, research, and community service. Universities may organize academic, professional, and/or vocational programs (Kementerian Pendidikan dan Kebudayaan dan Pusat Data Statistik Pendidikan Kebudayaan, 2017).

Based on Badan Pusat Statistik Indonesia (2020) The details of formal education are as follows: Graduated from *SD*, *SLTP*, *SLTA*, *D1*, *D2*, *D3*, Bachelor Degree, Graduated *D4*, Diploma, *S2*, *S3* diploma.

2.5.2 Social and Economic

Social factors are based on the occurrence of suggestions, namely the giving of a view or influence by one person to another in a certain way so that the person follows the influence without thinking. While economic factors have a big role in the acceptance or rejection of treatment. This economic factor is reinforced by the public perception that traditional treatment requires little effort, costs and time and the costs incurred are not greater (Sholihah, 2018).

Work is a series of tasks designed to be carried out by one person and in return for which wages and salaries are given according to the qualifications and the severity of the work. Job type is a collection of jobs that have a series of concurrent tasks. The types of work in the KBJI are a collection of jobs that are sufficiently similar to their main task so that they can be combined together in one group in the overall classification system :

2.5.2.1 Classification Basis

In this classification, the type of work is classified according to the criteria of level and specialization of expertise.

a. Skill level

The level of expertise required for a type of job is determined by the breadth and complexity of the set of tasks. The wider and more complex the set of tasks, the higher the level of expertise required for this type of work. Operational skill level is measured by the number of years of formal education, training and relevant experience normally required to complete a series of tasks satisfactorily. Here the criteria regarding training are not explicitly enforced.

The operational criteria used to measure skill level reflect competence in the job and are intended as a minimum

requirement to be accepted into this type of work for the first time. This entry is applied because of the difficulty of determining the criteria for the skills needed to be able to do the job satisfactorily. Determining the level of expertise of each type of work requires subjective assessment. The level of expertise assigned to a particular type of work is the best judgment based on various references, but is intended only as an indicative reference only, not absolute. For many types of jobs there may be several alternative entry requirements. In this case, the various entry requirements are reviewed and then the main ones are determined. Maybe the definition and the description of a job type is a generalization of a range of jobs that vary by industry, company and location. To accommodate possible changes in education and training, terminology to describe formal education is used that is both general and flexible possible.

a. Specialization of expertise

Specialization of expertise of a type of work is a function of the field of knowledge required, equipment and supplies used, raw materials and goods and services produced in connection with the tasks of the type of work. The main criterion for classifying the types of work in the Main Group is the level of expertise. As for Groups, Sub-classes, Groups, and Types of Work, they are distinguished based on the criteria for specialization of expertise with flexible interpretation. At a very detailed level (type of work), for some groups the types of work are only distinguished according to their level of expertise. Strive for the Main Group, the level of expertise is homogeneous, concurrent and there is no big difference. However, the level of expertise is not followed too strict and rigid in such a way that the categorization of the Main Group

becomes meaningless and pointless. It was decided that there are 10 Basic Classes which are differentiated according to skill level and one Base Class specifically for Army Members the Indonesian National Police and the Indonesian National Police. If two Principal factions have the same skill level, they are differentiated according to their specialization (Badan Pusat Statistik Indonesia, 2020).

2.5.2.1 Minimum wage in Banjarmasin City (Badan Pusat Statistik Provinsi Kalimantan Selatan, 2022) :

- a. .> Rp. 3,000,371
- b. < Rp. 3,000,371

2.5.3 Age

The more old enough, the level of maturity and strength of a person will be more mature in thinking and working, in terms of public trust someone who is more mature is more trusted than people who are not yet mature, this is related to experience and mental maturity along with increasing age and maturity. Al Amin, 2017 in (Hakim, 2020) wrote that age classification according to the Ministry of Health as follows:

2.5.3.1 Toddler Age: 0–5 Years

2.5.3.2 Childhood: 5–11 Years

2.5.3.3 Early Adolescence: 12–16 Years

2.5.3.4 Late Adolescence: 17–25 Years

2.5.3.5 Early Adulthood: 26–35 Years

2.5.3.6 Late Adulthood: 36–45 Years

2.5.3.7 Early Old Age: 46–55 Years

2.5.3.8 Late Old Age: 56–65 Years

2.5.3.9 Old Age: > 65 Years

2.5.4 Gender

Gender divided into man and women, and it will affect the disease as women are more sensitive than men. In addition, women have a more active immune system than men, producing larger and more active cells to fight pathogens that attack our bodies such as bacteria and viruses. It seems that the female hormone estrogen plays an active role, while the testosterone hormone does not. This is also the reason why women are more resistant to infection than men (Sholihah, 2018).

2.5.5 Family Experience

A person's knowledge of an object contains two aspects, namely positive aspects and negative aspects. These two aspects will determine a person's attitude, the more positive aspects and objects that are known, the more positive attitudes towards certain objects will be health object can be described by knowledge gained from own experience. Experience with traditional medicine in the family will influence someone to choose traditional medicine. this is supported by the results of research from Ervina and Dian (2018) that as much as 63.7% good family experience the respondent will increase respondents' trust in traditional medicine by 68.4%. While Satisfaction The choice of traditional medicine services will affect a person to return to traditional treatment as much as 66%.

Interpretation scale used:

1. Good if the presentation result is 51-100%
2. Bad if the result of the presentation is 0-50%

2.5.6 Perceived Benefit

The effectiveness of alternative medicine is the reason why influence the selection of traditional medicine. The perception of the benefits felt by the family will increase family support for the treatment method that will be taken, one of which is traditional medicine. In addition, the benefits obtained will increase one's confidence in the recommended method to

reduce the risk of disease. In line with the results of research from Narsih and Nova (2020) that the reason for choosing traditional medicine will identify a person about how much the perceived benefits are so that the higher the perceived benefit perception, the higher the confidence in choosing the same and repeated treatment method. Interpretation scale used:

1. High if the presentation result is 67-100%
2. Netral if the presentation result is 34-66%
3. Low if the result of the presentation is 0-33%

2.5.7 Perceived Barriers

The perceived obstacles, such as the COVID-19 pandemic, have made parents worried about taking their children to the hospital for treatment, thus affecting the choice of traditional medicine. Perceptions of perceived barriers are related to the individual's evaluation of the obstacles encountered to adopt a new behavior. Based on the results of research from Kurniawati et al., (2020) it is known that the perception of obstacles in the high or high category is 64% while the perception of low or little obstacles is 36%. The higher the barriers perceived by the respondent will affect perceptions in the selection of treatment compared to respondents who choose the perception of low barriers. Factors causing obstacles such as cost, time, distance or others. This is in line with the theory of health belief model which shows that perceived barriers can also be considered be a good predictor in taking health actions because if the obstacles are less than the benefits, someone tends to want to do the action, and vice versa if the obstacles outweigh the benefits obtained, someone tends not to want to do the action (Notoatmodjo, 2007 in (Kurniawati et al., 2020)).

Interpretation scale used:

1. Low if the presentation result is 67-100%
2. Netral if the presentation result is 34-66%

3.High if the result of the presentation is 0-33%

2.5.8 Belief

Trust is an attitude of accepting a statement or position without showing a pro or anti attitude. A belief can grow because it gets socio-cultural influences from people who have the same interest, namely to get cheaper and more efficient treatment by using traditional medicine as an alternative family treatment. Most people use traditional medicine from generation to generation because it is inherited from their parents. Trust itself is a psychological state consisting of an intention to accept vulnerability based on positive expectations about intentions or the behavior of others without the ability to monitor or control the other. Trust is also a person's willingness to rely on and have a feeling of confidence which is then given by other people in a certain situation. How this belief is based on non-coercion on the feeling. Factors that influence the belief of each individual in developing his hope to be able to trust one thing depends on factors, one of which is the factor about Deutsch's predisposition (in Deutsch & Coleman, 3006) personality, namely each individual who has a different predisposition to believe in others, the higher the level of individual predisposition to trust, the greater the expectation. to be able to believe in something or believe as is the case with following traditional medicine which is traditionally practiced as a healing method, it proves that the higher the predisposition level. This is supported by the results of research by Putri (2017) that respondents in this study trust traditional medicine because it has no side effects and is inherited from their ancestors from generation to generation. Although the times have improved the medical system, traditional medicine still survives today because of the belief in the low negative effects of traditional medicine and medicines derived from natural ingredients. In addition, the reasons that support the use of traditional medicine consist of economic factors and ease of access,

beliefs also affect the perception of illness experienced by oneself or their family (Putri, 2017). Interpretation scale used:

1. Good if the presentation result is 67-100%
2. Enough if the presentation result is 34-66%
3. Less if the result of the presentation is 0-33%

2.5.9 Knowledge

Knowledge is information in the form of facts or truths obtained based on experience or learning.

2.5.9.1 Knowledge level

Knowledge included in the cognitive domain has six levels, namely:

a. Know

Tofu is defined as a reminder of a material that has been studied. This includes recalling something specific to a material being studied or a stimulus that has been received. Know is the lowest level of knowledge, verbs to measure it include mention, describe.

b. Understand

Understanding is defined as the ability to explain about an object that is known and can interpret the material correctly.

c. Application

Application is defined as an ability to use the material that has been studied in actual situations and conditions. Application here can mean the use of laws, formulas, methods, principles in other contexts or situations.

d. Analysis

Analysis is an ability to describe the material into components, but still within an organizational structure and still have something to do with each other.

a. Synthesis

Synthesis refers to an ability to put or connect parts in a new whole form or an ability to construct new formulations from existing formulations.

b. Evaluation

This evaluation is related to the ability to justify or evaluate a material or object. This assessment is based on a self-determined criterion or using existing criteria.

2.5.9.1 Knowledge Measurement

Measurement of knowledge according to Notoatmodjo, S (2007) can be known by interviews or questionnaires that ask about the content of the material to be measured from the research subject or respondent. A person's knowledge criteria according to Arikunto (2013) can be known and interpreted with a qualitative scale, namely:

- a. Good, if the result of the measurement percentage is 67-100%
- b. Enough, if the measurement percentage results is 34-66%
- c. Less, if the result of the measurement percentage is 0-33%

2.6 Decision Making

2.6.1 Definition

Decision making is making an assessment and making a choice. This decision was taken after going through several calculations and considerations of several alternatives. Before a choice is made or a choice is made, there are several stages that the decision maker may go through. These stages may include identifying the main problem, compiling alternatives to be chosen and arriving at the best decision making (Haudi, 2021). Interpretation scale used:

- 1. Good if the presentation result is 67-100%
- 2. Enough if the presentation result is 34-66%

3. Less if the result of the presentation is 0-33%

Based on Haudi (2021) that in general, the definition of decision making has been put forward by several experts, including:

2.6.1.1 G.R Terry: proposes that decision making is a selection based on certain criteria over more possible alternatives.

2.6.1.2 Claude.S.George, Jr.: decision-making process is done by most managers in the form of a thought activity that includes consideration, selection among a number of alternatives.

Decision making is the process of selecting or determining various possibilities among uncertain situations. Decision-making occurs in situations where a person must:

- a. Making future predictions
- b. Choose one of two or more options or make estimates (forecasts) about the frequency of events based on limited evidence

2.6.2 Fuction

According to Syaekhu and Suprianto (2020) decision making as a continuation of the problem solving method has the following functions:

2.6.2.1 The starting point of all conscious and directed human activity, both individually and in groups, and institutionally and organizationally.

2.6.2.2 Something that is futuristic, meaning that it has to do with the future, the future, where the effect or influence lasts long enough.

2.6.3 Purpose

According to Syaekhu and Suprianto (2020) purpose of Decision Making
The purpose of decision making can be divided into two, namely as follows:

2.6.3.1 Single goal

The purpose of single decision making occurs when the resulting decision only concerns one problem, meaning that once it is decided, it will have nothing to do with other problems.

2.6.3.2 Multiple goals

The purpose of dual decision-making occurs when the resulting decision involves more than one problem, meaning that one decision is taken at the same time to solve two (or more) problems, which are contradictory or non contradictory

2.6.2 Elements

According to Syaekhu and Suprianto (2020) in order for decision making to be more focused, it is necessary to know the elements/components of the decision making. The elements/components of the decision making are as follows:

2.6.4.1 The purpose of decision making.

2.6.4.2 Identify decision alternatives to solve problems.

2.6.4.3 Calculation of factors that cannot be known beforehand / beyond human reach.

2.6.4.4 Means or tools to evaluate or measure the results of a decision.

2.6.3 Decision Making Basics

The basics used in making decisions vary, depending on the problem. By George R. Terry, 2010 in Syaekhu and Suprianto (2020) said that the applicable decisions are as follows:

2.6.5.1 Intuition

Decision making based on intuition or feelings has a subjective nature, so it is easy to be influenced. This intuitive decision-making has several advantages and disadvantages.

a. The advantages include the following:

1) The time used to make decisions is relatively shorter.

- 1) For problems of limited influence, decision making will give satisfaction in general.
- 2) The decision-making ability of the decision maker is very important, and it needs to be put to good use.
- a. The disadvantages include the following:
 - 1) The resulting decisions are relatively unfavorable.
 - 2) It is difficult to find a comparison tool, so it is difficult to measure the truth and validity.
 - 3) Other basics of decision making are often overlooked.

2.6.5.1 Experience

Decision making based on experience has the benefit of practical knowledge. Because of experience, a person can predict the state of something, can calculate the pros and cons, the good or bad decisions that will result. Because of experience, someone who suspects the problem even if just by looking at it may already be able to guess how to solve it.

2.6.5.2 Taking Facts

Decisions based on facts can provide healthy, solid, and good decisions. With facts, the level of trust in decision makers can be higher, so people can accept the decisions made willingly and gracefully.

2.6.5.3 Authority

Decision making based on authority is usually carried out by the leader against his subordinates or people who are in a higher position to people who are lower in position. Decision making based on authority also has several advantages and disadvantages.

- a. The advantages include the following:
 - 1) Most of the acceptance is subordinate, regardless of whether the acceptance is voluntary or forced.
 - 2) The decisions can last for quite a long time.

- 1) Have authenticity (authentic).
- b. The disadvantages include the following:
 - 1) Can lead to routine nature.
 - 2) Associating with dictatorial practices
 - 3) Often skips problems that should be solved so that it can cause confusion.

2.6.5.1 Rational

In rational-based decision making, the resulting decisions are objective, logical, more transparent, consistent in order to maximize results or values within certain constraints, so that they can be said to be close to the truth or in accordance with what is desired. In making rational decisions, there are several things, as follows:

- a. Clarity of the problem: there is no doubt and ambiguity of the problem.
- b. Goal orientation: a unified understanding of the goals to be achieved.
- c. Alternative knowledge: all alternatives are known in kind and their consequences.
- d. Clear preference: alternatives can be sorted according to criteria.
- e. Maximum results: the selection of the best alternative is based on maximum economic results.

This rational decision-making applies fully under ideal circumstances.

2.6.5.2 Decision Making Component

According to Sarwono, 2004 Syaekhu and Suprianto (2020) in that the decision to seek alternative health services there are 3 components:

- a. The predisposing component consists of demographics (age, gender, marital status and number of family members), social

structure (type of work, social status, education, race and ethnicity), and culture and health beliefs.

- a. The enabling components (supporting) are family resources (family income, ability to purchase services and participation in health insurance) and community resources (number of health service facilities, number of health workers, ratio of population and health workers, location of health facilities).
- b. The need component, this component is measured by reports on various symptoms of disease and types of disease as well as disturbed body functions.

2.6.2 Factors Influencing Decision Making

According to (Syaekhu and Suprianto, 2020) the factors that influence community decision making in choosing health services are:

2.6.6.1 Service quality

Quality health service is a health service that is needed and determined by the health care profession as well as desired by both patients and the community and is affordable by the purchasing power of the community. Brown suggests that there are ten dimensions of health service quality including: technical competence, affordability, effectiveness, efficiency, sustainability, security, security, information, timeliness and human relations.

2.6.6.2 Facility

Facilities are everything that can facilitate and expedite the implementation of a business, associated with facilities in health services, which are the completeness they have to support the smooth running of treatment and care for patients.

2.6.6.3 Cost of treatment

The cost of health care services is a big problem. The health service delivery system is strongly influenced by the state of the

country's total economy. The reasons for the increase in costs are due to, among other things: modern equipment and facilities, inflation increases all costs, the number of people who do not have insurance increases, the cost of prescription drugs continues to creep up.

2.6.6.1 Factors for individual differences include:

a. Social status

Social status is a relatively homogeneous and fixed group in a hierarchically structured society and its members have similar values, interests and behavior. Social status will show how a person behaves in his social life.

b. Habit

Habit is the same response tends to be repeated for the same stimulus. Habits are behaviors that have settled in everyday life, both in themselves and in their social environment.

c. Social symbol

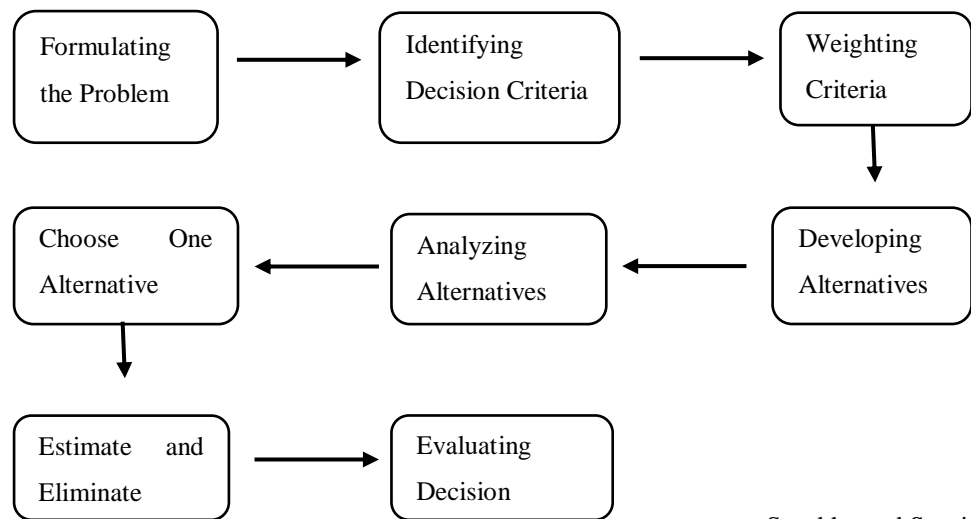
Social symbols are everything that has an important meaning in the social environment. So if someone wants to be in one of the groups, they have to follow the habits of the group.

d. Demands

The existence of a dominant influence in the family, be it the family environment, association or social environment, then with self-awareness or being forced someone will do risky behavior.

2.6.2 Decision Making Process

(Saeykhu and Suprianto, 2020) suggested that the decision-making process involves a series of stages that must be passed. These stages can be described in a scheme :



Syaekhu and Suprianto, 2020

Scheme 2.1 Decision Making Process

From the scheme above, it can be explained that the decision-making process goes through several stages, including:

- 2.6.7.1 Identify an important and relevant organizational problem
- 2.6.7.2 Identify all identified criteria
- 2.6.7.3 The identified criteria are evaluated and numbered in order of importance to the organization's goals.
- 2.6.7.4 Creatively develop a comprehensive list of all alternatives
- 2.6.7.5 All alternatives are judged by the decision criteria and their weights, the consequences of each alternative are known
- 2.6.7.6 Maximizing decision: The decision with the highest economic return in terms of the organization's objectives is selected.
- 2.6.7.7 The decision maximizes the chances of achieving the only well-defined goal, all members of the organization will accept the solution.
- 2.6.7.8 The results of the decision were objectively assessed against the original problem.

2.7 Health Belief Model (HBM) Theory

2.7.1 Definition

Health Belief Model (BHM) is a theory that was first put forward by Resenstock in 1966, which was later refined by Becker, et al in 1970 and 1980. BHM theory is a theory to determine individual perceptions of accepting or not their health condition. According to Janz and Becker , 1984 revealed that the Health Belief Model is a concept that expresses the reasons for individuals to want or not to do healthy behavior. Meanwhile, according to Hochbaum (in Hyden, 1958) HBM is a health behavior that is influenced by individual perceptions of their beliefs about the disease and the available ways to reduce the occurrence of symptoms of the disease suffered (Rachmawati, 2019).

2.7.2 Components of Health Belief Model

The Health Belief Model has four dimensions that can describe how individuals believe in a healthy behavior (Buglar, White & Robinson, 2009 in (Rachmawati, 2019)), these dimensions include:

2.7.2.1 Perceived Susceptibility

Perceived susceptibility is an individual's belief about his susceptibility to a disease risk in encouraging a person to perform healthier behavior. The greater the perceived risk, the more likely the individual is to engage in behavior to reduce the risk. Basically someone will believe more if they are at risk of disease, they will be more inclined to take preventive measures. On the other hand, if a person is not in a state of disease risk, they are more likely not to take precautions or have assumptions about healthy behavior.

2.7.2.2 Perceived Severity

Perceived severity is an individual's belief in the severity of the disease. While the perception of the severity of the disease is often based on information or knowledge of treatment, may also

stem from the belief in people who have difficulties about their illness or the impact that disease has on their lives (McCormick-Brown, 1999). For example, most of us view the flu as a mild illness. Most people think that just staying at home for a few days can make the body feel better. However, if a person suffers from asthma, then also suffers from the flu, that person will assume that the flu is a serious illness.

2.7.2.1 Perceived barriers

Perceived barriers are negative aspects of individuals that prevent these individuals from behaving in a healthy manner, because to make changes is not an easy thing. The construct of HBM addressing these issues is a perceived obstacle to change. It is the individual's own evaluation of the barriers in the individual's way of performing a new behavior of all constructs, perceived barriers are the most significant in determining behavior change (Janz & Becker, 1984 in (Rachmawati, 2019)). When a new behavior is carried out, a person needs to believe that the benefits of the new behavior are greater than continuing the old behavior (Centers for Disease Control and Prevention, 2004 in (Rachmawati, 2019)). This allows for barriers to overcome obstacles in determining the new behavior to be carried out.

2.7.2.2 Perceived Benefits

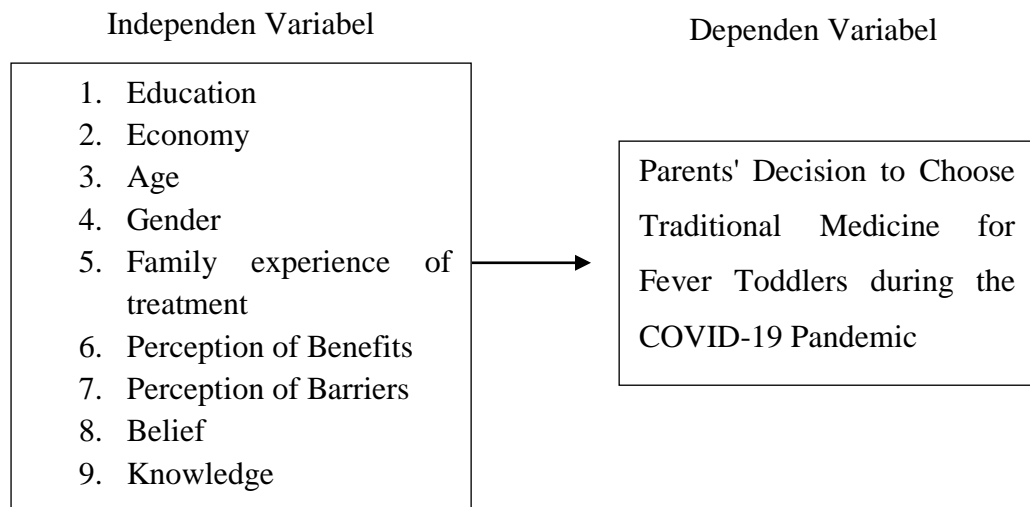
Perceived benefits are beliefs about the benefits that are felt in individuals when performing healthy behavior (Janz & Becker, 1984 in (Rachmawati, 2019)). The construction of perceived benefits is a person's opinion about the usefulness of a new behavior in reducing the risk of disease. Individuals tend to be healthier when they believe a new behavior will decrease their likelihood of developing disease. Perceived benefits play an important role in determining behavior for secondary prevention.

2.7.2.1 Self-efficacy

Self-efficacy is belief in oneself in the ability to do something (Bandura, 1977 in (Rachmawati, 2019)). People generally don't try to do something new unless they think they can do it. If a person believes a new behavior is useful (perceived benefits), but does not think that he or she is capable of doing it (perceived barrier), chances are that they will not be tried. Along with the development of the Health Belief Model theory, Janz & Becker (1984) added 2 constructs, one of which is cues to action. Cues to action is a construct that explains the factors that stimulate individuals to want to behave in a healthy manner (Janz & Becker, 1984 in (Rachmawati, 2019)). Cues to action is motivated by internal and external factors that can influence a person such as demography, psychosocial, individual perception, mass media, and health promotion (Janz & Becker, 1984 in (Rachmawati, 2019)).

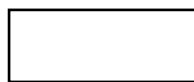
2.8 Conceptual Framework

The conceptual framework is the basis of your research problem. It stems from the theoretical framework and usually focuses on the section(s), which becomes the basis of your study. The conceptual framework describes the aspects you selected from the theoretical framework to become the basis of your inquiry (Nursalam, 2020).

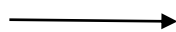


Scheme 2.2 Conceptual Framework

Descriptions :



: Researched Variables



: Affecting Relationships

2.9 Hypothesis

The research hypothesis is a predictive statement that relates an independent variable to a dependent variable (Kothari, 2019) .

Ha : There is a Factors The Influence of Parents Decisions To Choose Traditional Treatment For Fever In Toddlers During the COVID-19 Pandemic

H0 : There is not a Factors The Influence of Parents Decisions To Choose Traditional Treatment For Fever In Toddlers During the COVID-19 Pandemic