

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background**

Health development is one of the efforts that can be made in national development to increase awareness, willingness, and ability to improve optimal health degrees and make it a right of every Indonesian citizen, including toddlers and children. Children are a gift as well as a human resource that pave the way for the development of a quality generation. Meanwhile, in Indonesia, children are regarded as the heirs of families who uphold family values. So that the family or parents can have a significant impact on their children's growth and development. However, children are more susceptible to disease than adults during the process and development because of their immature immune system and inability to defend themselves against disease. As a result, the child's immune system improves, the body becomes more resistant to disease-causing agents, and disease frequency decreases. Therefore, the role of parents in assisting sick children will be greatly influenced during the growth and development period by recognizing the disease or symptoms experienced by the toddlers (Susanti et al., 2021) .

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). 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 The National Institute for Health and Care Excellence (NICE) in (2021) children with fever and any of the symptoms or signs in the red column should be recognised as being at high risk and a sign of serious illness, so cases of fever in children must be treated immediately. An estimated 20-40% of parents in the UK report that their child's body temperature rises every year. Haryani et al (2018) describe the prevalence of illness among children, which is usually accompanied by fever. Fever will appear in a variety of diseases,

particularly infectious diseases, where fever is a physiological response characterized by an increase in body temperature above the normal daily variation. Any abnormal increase in a child's body temperature should be considered a symptom of an underlying condition. Infection is the most common cause of fever in children; non-infectious causes include immune-mediated, inflammatory, and neoplastic conditions. A fever can also indicate that your child's body is fighting an infection or bacteria that is making them sick and risk of increase the mortality (Barbi et al., 2017; Lusia, 2019).

Child mortality in Indonesia has decreased significantly over the last 30 years. Even so, it is still far from the Sustainable Development Goals (SDGs), which aim to reduce under-five mortality to 18.8 per 1000 live births by 2030 (Central Bureau of Statistics, 2020) in (Azinar,et al., 2022). According to UNICEF (2020) , the under-five mortality rate remains at 23 deaths in 2020. Meanwhile, it was reported in 2022 that there was an increase in children aged 0-4 years who were confirmed to have COVID-19 and were hospitalized. The Indonesian Pediatrician Society also reported 2,712 confirmed pediatric cases of COVID-19, with 51 deaths, and fever was the most common symptom (47.5%) (Center for Disease Control and Prevention, 2022; Dewi et al., 2021; Souza et al., 2020).

The World Health Organization (WHO) estimates that there are 16-33 million cases of fever worldwide, with 500-600 thousand deaths each year. Data on visits to child health facilities in Brazil show that 19% to 30% of children are tested for fever. The incidence and prevalence of fever in each country is different. The incidence of fever in the United States and Europe ranges from 2% to 5%. Compared with the United States and Europe, the incidence of fever in Asia has doubled by about 10-15%. This incident occurred in the age range of 1 month to 5 years, where the highest incidence occurred at the age of 14-18 months (Gultom et al., 2021; Usastiawaty Cik Ayu Saadiah Isnainy and M. Arifki Zainaro, 2018).

According to the National Population and Family Planning Board (BKKBN) et al., (2018) thirty-one percent of children under age 5 were reported to have a fever in the 2 weeks preceding the survey. The prevalence of fever varies by age; children age 6-23 months are more prone to fever (37%-38%) than other children. The prevalence of fever does not vary substantially according to gender or place of residence. Boys are slightly more likely to have had a fever than girls (32% and 30%, respectively). The prevalence of fever is lower among children from households in the highest wealth quintile than among children from households in the lower wealth quintiles (25% versus 32%-34%).

According to data from the South Kalimantan Provincial Health Office (2021), there were 369,602 children under the age of five (aged 1-4 years). Meanwhile, according to data from the Banjarmasin City Health Office, there were 50,393 toddlers (aged 1-4 years) in 2020 and 47,443 in 2021. Between 2020 and 2021, the number of children under the age of five falls by approximately 29.5 percent. Fever is one of several factors that contribute to the decrease in life expectancy in children under the age of five.

According to data from the Banjarmasin City Health Office, 2,995 toddlers were identified as having fever in (2019), 869 people in (2020), and 478 people in (2021). Based on these data, it can be seen that the number of fever sufferers who visit health facilities has decreased, and data from the South Kalimantan Provincial Health Office (2021) show that the number of under-five deaths in South Kalimantan Province was 56, with as many as 6 deaths in the city of Banjarmasin. Even though, data on the incidence of fever on toddler at Banjarmasin's Public Health Centers increased, specifically at the Public Health Centers of South Alalak, 9 November, and Central Alalak.

Overcome the problem of fever in toddlers, medical and non-medical treatment can be desired. Medical treatment is carried out by experts such as medical personnel or can be done pharmacologically with the use of pharmacological

antipyretic and non-pharmacological drugs that can be done, namely wearing thin clothes, drinking more frequently, getting plenty of rest, bathing with warm water, and applying compresses (Saito, 2013 in (Kristianingsih et al., 2019)). Non-medical medicine, on the other hand, is divided into complementary and traditional treatment. However, many people still choose complementary or traditional treatment to cure their child's illness, according to research findings from Maulida & Wanda (2017) that the most common traditional treatment used by respondents were onion (86.8%), mixed with oil (64.2%), and applied to the body (86.8%).

Several factors influence parental traditional treatment for their child when they have a fever, including parent knowledge, parent education level, parent socioeconomic status, parent age, parent gender, family experience, beliefs, perceptions of benefits, and barriers related to decision making of parents' decisions, particularly during the COVID-19 pandemic (Sholihah, 2018).

The decision of parents choose the treatment for their children is not easy, especially when the child is sick due to the outbreak of the pandemic caused by the Sars-CoV2 virus or the 2019 corona virus disease (COVID-19) at the end of 2019, which threatened the health system and caused massive losses for the global community. Even according to the findings of Odd et al research, 's 1550 child deaths were reported to NCMD between January 6 and June 28, 2020. Of the 437 deaths linked to SARS-CoV-2 virological records, 25 (5.7 percent) had positive PCR results, and it is expected that this number will rise, putting pressure on parents to seek treatment for their children to a health facility for fear of their child being diagnosed with COVID-19 or being at high risk of contracting the virus. As a result, it has an impact on children's access to health care, particularly in hospitals. These health issues affect not only children but also their parents, who will suffer from traumatic stress disorder, which will have an impact on the child's recovery (Raucci et al., 2021).

This virus spread and developed to several countries until on Friday (18/02/2022) it was reported that 195 countries in the world were infected with the COVID-19 virus with the prevalence of confirmed positive cases globally reaching 421,716,638 people, of which Indonesia ranks 17th. with 5,089,637 positive confirmed cases of COVID-19 (Worldometer, 2022) and on Saturday (19/02/22) South Kalimantan confirmed 78,135 positive cases of which the City of Banjarmasin amounted to 20,079 people (Dinas Kesehatan Provinsi Kalimantan Selatan, 2022).

There have been 3 waves of COVID-19 cases since March 2020 with lineage groupings , namely Variant Alpha is lineage B.1.1.7, first discovered in the UK, 18 December 2020. The Beta lineage variant is B.1.351, divided into 4 sub-lineages, namely (B.1.351.1, B.1.351.2, B.1.351.3, B.1.351.4), first discovered in the South Africa, 18 December 2020. Then, Gamma (P.1) first discovered in the Brazil, 11 January 2021. While the Delta B.1.617.2 variant is divided into sub lineage AY1-AY12 first discovered in the India, 11 May 2021. Last is Omicron (B.1.1.529) first discovered in the South Africa and has spread rapidly to 26 countries (Nath, 2021).

The decision of parents in choosing treatment for their children is not easy, especially when the child is sick due to the spread of the pandemic caused by the Sars-CoV2 virus or corona virus disease 2019 (COVID-19) at the end of 2019 causing the health system to be threatened and causing huge losses to the global community. COVID-19 is a new type of virus from China that is transmitted with acute respiratory syndrome (Hui et al., 2020).

Knowledge of parents, especially mothers, when their child has a fever will greatly affect the type of treatment given because if the child's body temperature is high, parents need to know what first aid to do when a fever occurs. However, in the results of research from Sudibyo et al., (2020) many parents do not know how to handle fever when their child has a fever, which is

a very high risk, the child will experience febrile seizures, dehydration, and even death. One indicator that affects parental knowledge is also obtained from parental education. Research from Habibi et al., (2021) show that parental education affects parents' knowledge in dealing with fever in their toddlers because parents with basic education levels cannot handle fever conditions. Therefore, it is very important to do health education about fever handling that reaches the whole community, especially junior secondary education in a way that is easier to understand so that respondents are more competent in dealing with fever in their toddlers.

Social, cultural, and environmental factors in society are part of the growth and development of infants and toddlers. Whether we realize it or not, socio-cultural factors that include traditional beliefs and knowledge such as conceptions of various diseases, perceptions about disease, cultural values including taboos, causal relationships about health and disease, and habits sometimes have a negative impact. both positive and negative, on life. Infant and toddler health. Various cultural components are one of the causes of the low level of health of infants or toddlers in an area. The belief factor also affects the mindset of parents by having positive expectations of traditional medicine by forming perceptions and attitudes following the Theory Health Belief Model (HBM), namely parents take actions and use traditional medicines to prevent or minimize side effects of treatment ( Kasnodihardjo and Angkasawati, 2013 in (Anggeriyane, 2019)).

Based on Murtie (2013), parents decisions are also influenced by traditional Indonesian medicines which are ingrained and become part of the socio-cultural life of the Indonesian people. The community's need for traditional medicine is still high, especially with the economic situation that is not yet optimal. Traditional medicine is still very affordable, easier to reach to all corners of Indonesia, easy to learn, minimize costs, lower side effects than modern medicine.

This is also supported by research by Lwin et al (2020) that the socioeconomic position of parents plays an important role in making health seeking decisions for common childhood illnesses. In contrast, only 40% of children from the poorest quintile are taken to health care providers. This shows socioeconomic inequality in the health-seeking behavior of parents towards their children.

When a child was sick, most parents seek health information to understand the symptoms before taking their child to medical treatment or a doctor. In addition, parents will also seek information in addition to the effects of drugs to improve the health of their children. The decision to choose this treatment is made by parents based on the information they know. However, in previous studies, mothers turned to obtain more information about the disease, social support, treatment and other medical alternatives as compare to fathers (Kartiwi et al., 2020).

The decision-making process is complex, and is influenced by many factors including age. Older people prefer to take a more passive role in decision making by relying heavily on doctor's recommendations or medications than younger people are more actively involved in treatment decisions, seeking information from various sources such as the Internet, friends, family members, and support groups (Sio et al., 2014). This is also supported by research by Bogninin et al (2022) that parents aged 24-34 years are more likely to seek health care for fever in under-five children.

Based on the results of a preliminary study conducted on Saturday, March 5<sup>th</sup> and Monday, March 7<sup>th</sup> 2022 at 9 November and Alalak Selatan Public Health Center, through direct interviews and filling out questionnaires from 10 respondents, it was found that 12 respondents brought their child to traditional medicine who had a fever for treatment. but only 6 out of 12 respondents often bring their children and will go straight to traditional medicine when their child has a fever. Meanwhile, only 5 out of 12 respondents had a fairly good

experience of traditional medicine, 3 out of 12 respondents felt that their child was no longer hot after being taken to traditional medicine, 6 out of 12 respondents were worried and afraid that their child would be diagnosed or exposed to COVID-19, then 3 out of 12 respondents 12 respondents strongly agree that it can save the cost of traditional medicine, 7 of 12 respondents strongly agree that the distance of traditional medicine is closer than to health services, 6 of 12 respondents get family support when their child has a fever and is taken to traditional medicine, 5 of 12 respondents will also recommend treatment traditional to family, friends or others. During the traditional treatment 7 out of 12 respondents strongly agree that there are no side effects caused by traditional medicine. However, only 2 out of 12 respondents knew about the complications of fever and 1 out of 12 respondents knew about traditional treatment methods.

## 1.2 Formulation of the problem

Based on the description of the background of the problem above, the researcher is interested in examining “Are there any factors that influence the Parental decisions in choosing traditional treatment for fever in toddlers during the COVID-19 pandemic?”

## 1.3 Research purposes

### 1.3.1 General purpose

- 1.3.1.1 Identify the factors influencing Parental decisions to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.

### 1.3.2 Special purpose

- 1.3.2.1 Identify the Parental age factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.2 Identify the Parental education level factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.

- 1.3.2.1 Identify the Parental gender factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.2 Identify the Parental economy factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.3 Identify the Parental knowledge factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.4 Identify the Parental belief factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.5 Identify the family experience factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.6 Identify the Parental perceived benefit factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.7 Identify the Parental perceived barrier factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.8 Analysis the Parental age factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.9 Analysis the Parental education level factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.10 Analysis the Parental gender factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.11 Analysis the Parental economy factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.12 Analysis the Parental knowledge factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.13 Analysis the Parental belief factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.14 Analysis the family experience factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.
- 1.3.2.15 Analysis the Parental perceived benefit factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.

1.3.2.1 Analysis the Parental perceived barrier factor to choose traditional treatment for fever in toddlers during the COVID-19 pandemic.

#### 1.4 Benefits of research

##### 1.4.1 For Children

This research can be useful for improving the health status of children according to the program of the third SDGs, so that every child also has the same opportunity to improve their growth and development.

##### 1.4.2 For Parents

This research can be used to add references and knowledge of parents in choosing their child's treatment.

##### 1.4.3 For Health Workers (Nurses)

Nurses and other health workers can help solve health problems that occur in children by studying the culture, behavior and processes of social relations that can affect health and disease conditions, especially in the scope of children.

##### 1.4.4 For Educational Institutions

This study is additional material for reference and can deepen academic understanding and analyze the factors that influence parents's decisions to choose traditional treatment for fever in toddlers.

##### 1.4.5 For Community

This research can make a positive contribution to the Banjarese community in negotiating, reconstructing, maintaining, or preserving cultural heritage to reflect the identity of the Banjarese. However, in terms of health, child care and the community can improve the health status of children.

#### 1.4.1 For Further Researchers

The results of this study can be useful for future researchers to become scientific reference material and basic data to be able to analyze more deeply about the factors that influence parents to choose traditional treatment.

### 1.5 Related research

1.5.1 Krisnanto et al.'s (2016) conducted a study titled "Factors Influencing Parental Behavior in Treating Children with Fever in the Working Area of the Ngaglik II Public Health Center, Sleman Yogyakarta." This study was carried out quantitatively using a cross-sectional design. The technique would be accidental/convenient sampling, with bivariate analysis using Chi-Square and multivariate analysis using logistic regression. This study included 96 samples of parents with children under the age of five. There is a significant relationship between the child's age and the treatment seeking behavior of the parents and the child with fever, with a p-value of 0.04. When their child has a fever, parents of children under the age of 12 months are more likely to seek medical attention; the majority have a secondary education and thus have sufficient knowledge about the condition of children and possible diseases in children. Second, with a p-value of 0.06, the treatment seeking behavior of parents in children with fever is influenced by the child's age. The older the adolescent, the more likely parents are to seek medical attention. Third, the perception of pain influences a person's decision to seek treatment. Parents who are seriously ill are more likely to seek medical attention. Similarly, when parents suffer from a minor illness, they tend to self-medicate. The severity of the disease will influence parental behavior. Fourth, a person's behavior will be influenced by the advice of others.

Instead of Krisnanto et al. (2016), the research I conducted for the dependent variable examined parents' decisions to use traditional medicine for feverish toddlers during the pandemic. Purposive random sampling was used in this study, which was carried out at the Banjarmasin City Health Center.

- 1.5.1 Research by Rahman et al. (2016) A study titled "Factors Related to Health-Seeking Behavior in Santri at Al Bisyrî Tinjomoyo Islamic Boarding School Semarang" was conducted. This study employed a cross-sectional design with univariate analysis, bivariate analysis using the chi-square test, and multivariate analysis. There were 73 people who participated in this study. The study's findings are as follows: first, the behavior of students seeking health services is in the good category (58.9 percent), while it is in the bad category (41.1 percent). Second, 65.8 percent of students have good knowledge about health seeking behavior. Third, 52.1 percent of students have faith in health-care services. Fourth, 64.4 percent of students have easy access to health care. Fifth, 50.7 percent of students have a high pain perception. Sixth, 52.1 percent of students require health care. As a result, access to health services ( $p\text{-value} = 0.032$ ), disease perception ( $p\text{-value} = 0.013$ ), and the need for health services ( $p\text{-value} = 0.007$ ) are obtained. The most influential factor on the behavior of seeking health services is the need for health services, with a regression value of Exp B (odds ratio) of 4.765, which means that the probability of respondents requiring health services is 4 to 5 times greater than that. Respondents who do not require health care.

In contrast to Rahman et al. (2016), the research I conducted for the dependent variable examined parents's decisions in selecting traditional medicine for toddlers with fever during the pandemic. Purposive

random sampling was used in this study, which was carried out at the Banjarmasin City Health Center.

- 1.5.1 Research from Pitang et al. (2018) conducted research titled "Factors Influencing Fracture Patients Choosing Traditional Medicines at RSUD dr. TC Hillers Maumer." This study employed a quantitative, cross-sectional design with total sampling. The test used in univariate analysis, bivariate analysis with the chi-square test at a significance level of 75% ( 0.25), and multivariate analysis with the logistic regression test. This study had 30 samples of respondents. The majority of respondents have a moderate/intermediate education, with 16 people accounting for 53.3 percent, while at least two respondents have a higher education (6.7 percent). According to the findings of the bivariate analysis, education has an impact on the choice of traditional medicine. Second, 53.3 percent have good knowledge, and 46.7 percent have sufficient knowledge. The p-value of 0.341 in the bivariate analysis indicated that the knowledge variable had no significant effect on the selection of traditional medicine. Third, the significance value of 0.25 indicates that there is a relationship between economic level and choice of traditional medicine based on the results of bivariate analysis. Economic factors also have a significant impact on the choice of traditional medicine because hospital treatment is relatively expensive and the average respondent has a low economic level. If the patient lacks health insurance. Fourth, a significant result of 0.850 0.25 was obtained using the chi-square test. This study found that family support has no effect on the use of traditional medicine. Encouragement and experience gained by the patient, as well as encouragement from the social environment, motivate decision-making and behavior. This combination fosters participants' trust in traditional medicine. Finally, cultural/traditional factors can influence people's choice of traditional medicine, especially if their belief in traditional fracture treatment was

passed down from their ancestors or ancestors. People accept that belief because it results in quicker healing than medical treatment.

Differences with research from Pitang et al. (2018) the research that I conducted for the dependent variable examined parents' decisions to choose traditional treatment for fever in toddlers during a pandemic. Purposive random sampling was used in this study, which was carried out at the Banjarmasin City Health Center.

- 1.5.1 Christop Herr et al. (2020) used a systematic review design in their study entitled " COVID-19 Parents' Healthcare-Seeking Behavior for Their Sick Children in Nigeria-An Online Survey." This study was carried out in Nigeria's 36 states and the Federal Capital Territory. This study makes use of the internet, specifically Whatsapp and Google Forms. Researchers distributed survey links individually or in WhatsApp groups. This descriptive study used a cross-sectional survey approach and was conducted from May 9 to June 8, 2020. According to the findings of this study, the COVID-19 pandemic period had a significant impact on parents' choice of health services for their sick children in Nigeria. This strategy of selection is based on accessibility, health education, and promotion.

Differences with research conducted by Christopher et al. (2020), the dependent variable study I conducted looked at parents' decisions to choose traditional treatment for fever in toddlers during a pandemic. This research design employs a cross-sectional study with purposive random sampling, which will be carried out at the Banjarmasin City Health Center. The analysis was performed using univariate analysis, bivariate analysis, and the chi-square test.