

## **THE LEVEL OF KNOWLEDGE OF PARENTS IS STILL 24% WORTH ENOUGH ABOUT DENGUE FEVER PREVENTION AT PUSKESMAS II SOUTH DENPASAR**

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### **Abstract**

The level of parental knowledge is still 24%, which is of sufficient value regarding the prevention of dengue hemorrhagic fever in children 5-14 years and this is one of the problems with dengue fever outbreaks. This study aims to determine the level of knowledge of parents about the prevention of dengue fever in children 5-14 years. The study was conducted at Puskesmas II Denpasar Selatan in February-April 2021. The population of this study are parents who have children aged 5-14 years. Research method with descriptive method, the number of samples is 58 respondents with total sampling technique. Measuring tool used is a questionnaire and analyzed with descriptive statistics. The results showed that the knowledge level of the respondents showed an average score of 20.57 (good), then the lowest score was 16 (enough) and the highest score was 25 (good), and most of them had good knowledge as many as 44 respondents (75.9%) and 14 respondents (24, 1%) sufficient knowledge. Based on the age of 36-45 years as many as 30 respondents (51.7%). Female gender as many as 31 respondents (53.4%). Jobs as private employees were 28 respondents (48.3%). SMA / SMK education as many as 22 respondents (37.9%). The conclusion of this study is that the level of knowledge of parents is still 24% of sufficient value and the others have a good level of knowledge. It is recommended to improve educational programs as a basis for preventing dengue fever in the family.

**Keywords:** knowledge level of parents; prevention of DHF; children 5-14 years;

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### **INTRODUCTION**

The background of this research is because the problem of dengue fever still often causes extraordinary events (KLB), in Indonesia DHF still has a high morbidity and death rate, especially in the case of children aged 5-14 years and in the research site in 2020 there were 318 cases of Dengue Fever. According to data from the Ministry of Health, on November 30, 2020, there were an additional 51 cases and an additional 1 death. The highest proportion of DHF is at the age of 15-44 years

(37.5%), then in the case of children aged 5-14 years (34.13%), aged 1-4 years (14.88%), and the death rate / Case Fatality Rate (CFR) per age group with the highest cases at the age of 5-14 years (34.13), then aged 1-4 years (28.57%) (Kementerian Kesehatan RI, 2020). Dengue hemorrhagic fever attacks all ages, most of which attack children aged <15 years as much as 95% and about 5% attack infants (NLK Sulisnadewi, Ni Made Ayu Chintya Dewi, 2016).

According to data from the Denpasar City Health Office in 2019 the Incident Rate (IR) of Denpasar City in 2019 was 128.8/100,000 residents, which increased significantly compared to 2018 of 12.3/100,000 residents in Denpasar City. Bali Province has a high incidence rate (IR) compared to the case fatality rate (CFR). Data from Puskesmas II Denpasar Selatan, which covers Sanur Village, Sanur Kaja Village, Sanur Kauh Village, and Renon Village, obtained data on the incidence of dengue hemorrhagic fever in the age range of <1 years - ≤45 years, for the last 3 years, namely 2018, 2019 and 2020, the results of a significant increase in the incidence of dengue hemorrhagic fever, namely, in 2018 as many as 2 cases, In 2019 there were 228 cases, and in 2020 there were 318 cases.

Data on the age of children 5-14 years old who have suffered from DHF in January-December 2019-2020 at Puskesmas II South Denpasar is 58 people. Based on this, it indicates the need for more parental attention to children with that age range, parental knowledge in this case will greatly affect an action they take, actions related to prevention efforts are important steps for the community, especially parents to take an action that can help in avoiding the occurrence of dengue hemorrhagic fever. Lack of knowledge can influence a person to act in maintaining his health, which will pose a great risk of spreading a disease, especially in the spread of dengue hemorrhagic fever which has a higher risk. The results of interviews conducted with 10 parents in the working area of Puskesmas II Denpasar Selatan regarding knowledge about dengue prevention, of the 10 parents interviewed as many as 6 people said they did not understand about dengue prevention and 4 people said they were familiar with dengue prevention. By paying attention to personal hygiene, children, and the environment, then increasing knowledge related to efforts to prevent dengue hemorrhagic fever is needed such as, carrying out 3M Plus actions launched by the government, namely closing tightly water reservoirs, draining places that are often water reservoirs, such as bathtubs, jugs, and drums, utilizing/recycling waste waste that has the potential to be a breeding ground for aedes aegypti mosquitoes, Then you can also do fogging, giving abate powder, using mosquito repellent, planting mosquito repellent plants, and raising larva-eating fish (Kemenkes RI, 2017). Eradication of mosquito nests (PSN) that is not optimal is one of the causes of the high morbidity rate of dengue hemorrhagic fever which can cause extraordinary events (KLB).

## RESEARCH METHODS

This type of research is descriptive quantitative with a cross sectional approach method. The study was conducted in February-April 2021. The population in this study was all parents whose children aged 5-14 years had suffered from dengue hemorrhagic fever in January-December 2019-2020 at Puskesmas II South Denpasar as many as 58 people. The sampling technique in this study is a total sampling technique so that the number of samples in this study is 58 respondents. Data was obtained from filling out questionnaires given online using google form to respondents.

## RESULT AND DISCUSSION

Table 1.

Frequency distribution of parental age characteristics At Puskesmas II Denpasar South Tahun 2021

Age	Frequency (f)	Percentage (%)
25 – 35 years	21	36.2
36 – 45 years old	30	51.7
46-55 years old	7	12.1
Sum	58	100.0

In table 1, it shows that the characteristics of respondents were studied based on age, the majority were aged 36-45 years as many as 30 respondents (51.7%), and the minority aged 46-55 years as many as 7 respondents (12.1%)

Tabel 2.

Frequency Distribution of Parental Sex Characteristics at Puskesmas II South Denpasar in 2021

Gender	Frequency (f)	Percentage (%)
Man	27	46.6
Woman	31	53.4
Sum	58	100.0

Table 2 data shows that the characteristics of respondents based on gender, most of the respondents studied were female (53.4%), and some were male 27 respondents (46.6%)

Table 3.

Frequency Distribution of Parents' Work Characteristics at Puskesmas II South Denpasar in 2021

Work	Frequency (f)	Percentage (%)
Employees Swasta	28	48.3
Wiraswasta	11	19.0
Civil servants	3	5.2
Housewives	15	25.9
Not Working	1	1.7
Sum	58	100.0

Table 3 data shows that the characteristics of respondents based on occupation are the majority of working as private employees as many as 28 respondents (48.3%), and a minority of 1 respondent is not working (1.7%)

**Table 4.**

**Frequency Distribution of Parental Education Characteristics at Puskesmas II South Denpasar in 2021**

Education	Frequency (f)	Percentage (%)
SD	2	3.4
JUNIOR	2	3.4
High School / Vocational School	22	37.9
Diploma	15	25.9
Strata (S1/S2/S3)	17	29.3
Total	58	100.0

Table 4 data shows that the characteristics of respondents studied based on education, the majority are high school / vocational schools as many as 22 respondents (37.9%), and minorities, namely elementary and junior high schools, each as many as 2 respondents (3.4%)

**Tabel 5.**

**Frequency Distribution of Characteristics of Parents' Knowledge Level About Dengue Hemorrhagic Fever Prevention in Children 5-14 Years at Puskesmas II South Denpasar in 2021**

Average	Minimum Value	Maximum Value
20,57	16	25

Based on table 5, it shows that the average score obtained by respondents is with a score of 20.57 (good), and the lowest score of all respondents is a score of 16 (enough), and the highest score is 25 (good).

**Tabel 6.**

**Frequency Distribution of Parents' Knowledge about the Prevention of Dengue Hemorrhagic Fever in Children 5-14 Years Di Puskesmas II South Denpasar in 2021**

Category	Frequency (f)	Percentage (%)
Good	44	76
Enough	14	24
Less	0	0.0
Total	58	100.0

Based on table 6, it shows that of the 58 respondents studied, most of them have good knowledge, as many as 44 respondents (75.9%) and 14 respondents (24.1%) have sufficient knowledge .

**Based on the character of the age of respondents,** it shows that the majority of respondents aged in the range of 36-45 years as many as 30 respondents (51.7%), have good knowledge as many as 24 respondents (41.4%), then have knowledge of cuku p as many as 6 respondents (10.3%). The results of this study are in line with research (Rohmah, Susanti, & Haryanti, 2019), most of the respondents in this study are late adults aged 36-45 years as many as 124 respondents (37.3) and most have a good level of knowledge. According to research (Monintja, n.d.)

states that there is a close relationship between age and dengue prevention measures.

The theory according to (Notoatmodjo, 2012) that age affects a person's comprehension and mindset, the older the person is, the more comprehension and mindset he will develop, so that the knowledge possessed is getting better, but in mental development, age will also affect the power Remember, so that at a certain age, especially towards old age the ability to accept or remember knowledge tends to decrease, but the older a person gets, the more experience he has with a m or object that he has died.

According to the assumption of researchers, age is one of the factors that can affect a person's level of knowledge, the more mature a person's age, the higher the level of knowledge possessed, but on the contrary, there is an age category that is close to old age will result in a decrease in memory owned.

**Based on gender**, there were 31 female respondents, 23 respondents (39.7%) had a good level of knowledge, and 8 respondents (13.8%) had sufficient knowledge. Then the male gender as many as 27 respondents have good knowledge as many as 21 respondents (36.2%), and have sufficient knowledge as many as 6 respondents (10.3%). This research is in line with the results of the study (Rojali, 2020) that most of the respondents were 87 women (81.3%) and men (20%), in this study most respondents had a good level of knowledge (91.6%) in preventing DHF. In line with research (Aritonang, Nadapdap, & Supeno, 2016) that the majority of genders in this study are 77 women (77%) with most having a good level of knowledge related to DHF prevention efforts.

According to Green's theory in (Notoatmodjo, 2012) says that gender includes predisposing factors or possible factors that can influence a person's behavior in carrying out the actions to be performed. Women tend to be more concerned about their condition and surroundings, especially in terms of health. In addition, women have traditionally been the main role in protecting their homes and environments, so if women do not have enough knowledge about DHF prevention efforts, they are at high risk of high dengue cases in children.

The number of female respondents in the results of this study, related to the time of the visit made by the researcher with the Monitoring Officer General (Jumantik) Puskesmas II Denpasar Selatan, during the visit of this researcher many respondents, namely mothers as parents of children who have been exposed to DHF are more at home in the morning, besides that there are some male respondents / fathers who hand over the responsibility in filling out questionnaires to female respondents / mothers. Therefore, according to the assumption of researchers, gender is not closely related to the level of knowledge of parents about the prevention of DHF in children.

**Based on employment**, the majority of respondents work as private employees 28 respondents (48.3), have good knowledge as many as 24 respondents (41.4%) and as many as 4 respondents (6.9%) have sufficient knowledge. Then housewives as many as 15 respondents, have good knowledge as many as 10 respondents (17.2%) and enough as many as 5 respondents (8.6%). This research is in line with the results of the study (Rohmah et al., 2019) the majority of respondents' jobs are private employees 114 respondents (34.3%) and housewives 79 respondents (23.8%). Work for society will have an influence on his family life, someone who has worked then the level of ability to think will

affect knowledge. From the results of the study, the majority of respondents' jobs were as private employees and housewives, and the knowledge of respondents who worked as private employees and housewives was mostly good. With jobs as private employees and housewives, respondents interact more with the environment and surrounding residents. This will also affect the information obtained, for example knowledge about DHF (Rohmah et al., 2019).

According to (Notoatmodjo, 2012) good knowledge can also be obtained from the work environment of an individual, for example: someone who works in a health environment, they will directly or indirectly get information or knowledge related to the health sector, but ice someone who works does not necessarily have better knowledge Compared to people who do not work, people who do not work tend to get information from others, so they can copyg exchange information and knowledge that they have with each other.

Therefore, according to researchers, work has a close relationship that can affect the level of knowledge a person has, people who work will tend to get more information and experience so that they are able to apply it in their lives, especially in the prevention of DHF in children.

**Based on education**, the majority of respondents had high school / vocational **education** as many as 22 respondents (37.9%), with good knowledge as many as 15 respondents (25.9%) and 7 respondents (12.1%) had sufficient knowledge. In line with the results of the study (Rezki Putri, 2016) showed that most respondents had higher education (SMA/SMK, Diploma and College) as many as 78 respondents, of whom had a good level of knowledge of dengue prevention as many as 55 respondents, and 23 respondents had a lack of knowledge of DHF prevention, in this study stated that there was a close relationship between the level of education and the level of knowledge about dengue prevention. In line with research (Wira Setyawati Zendrato, Bistok Saing, 2018) that most respondents have high school and higher education, the majority of their knowledge levels are good.

All responses given by an individual to the object observed are strongly influenced by the tin gkat education, the response given can later be in the form of new knowledge possessed by an individual (Notoatmodjo, 2012)(Notoatmodjo, 2012). Education is an effort to develop one's personality and abilities, both inside and outside school, and will last a lifetime. Therefore, according to the assumption of researchers, the higher the education, the learning process in receiving information will be easier, the more knowledge obtained, especially about health, it is expected that the knowledge possessed will be wider and able to be applied in everyday life, especially in efforts to prevent DHF.

Knowledge is a result obtained from remembering something or events that have been experienced either intentionally or unintentionally (Mubarak, 2015). This usually occurs when someone makes an observation of a certain object. Knowledge of parents in the family is the basis for determining the attitudes and behaviors they will carry out regarding efforts to prevent dengue hemorrhagic fever (Asiah, Wahyuni, & Suzanni, 2014). Knowledge of dengue hemorrhagic fever and how to prevent it is very important that parents must have, so that this will be able to reduce the risk of *dengue* hemorrhagic fever that occurs especially in children (WHO, 2011).

Based on table 6 data, it shows that of the 58 respondents studied, most of them have good knowledge, as many as 44 respondents (75.9%) and 14 respondents (24.1%) have sufficient knowledge. The results of this study are in line with research conducted by (Sandi & Kartika, 2017), showing that out of 100 respondents, most of the respondents' knowledge level is good (85%), then 15 respondents (15%) have less knowledge level related to dengue prevention efforts. Knowledge about dengue fever prevention and prevention, which is an important thing that must be known by the community, especially parents, should parents who have the right to manage the household can know about dengue fever *and prevention* efforts that can be done in their families (Sandi & Kartika, 2017).

In line with research (Wahyu Nur Cahyo, 2014), out of 92 respondents, as many as 55 respondents had a good level of knowledge, while 37 respondents had a level of knowledge less. Based on the results of this study states that there is a meaningful relationship between parental knowledge and the incidence of dengue hemorrhagic fever in children. The results of this study are also in line with research conducted by (Wati, Astuti, & Sari, 2016), which shows that there is a meaningful relationship between parents' knowledge about the implementation of dengue prevention and the incidence of dengue fever in children at Banjarbaru Regional Hospital in 2015. Knowledge is one of the important factors that influence public health behavior, so in this case health knowledge needs to be improved in society, especially in families.

Based on table 5 data, it shows that the average score obtained by respondents is with a score of 20.57 (good), while the scores obtained from all respondents are the lowest score of 16 (sufficient) and the highest score of 25 (good). From the results of this study shows that most respondents have good knowledge about dengue prevention. According to the researchers' assumptions, parents' knowledge of DHF will affect the way of thinking in taking action so that their family members, especially children, do not contract DHF, and if anyone has been infected, it is hoped that later they will be able to know the prevention efforts so as not to get dengue again. This is very expected, because if parents with good knowledge will be able to help reduce the morbidity and mortality rate of children affected by DHF. According to (Notoatmodjo, 2012), that behavior is not a reflection of one's attitude, but one's own attitude is influenced by the knowledge possessed. Good knowledge will be able to influence behavior in dengue prevention, behavior based on knowledge will be more lasting than behavior that is not based on knowledge. With the results of this research, the community, especially parents, is expected to be able to apply the knowledge they have in making efforts to prevent DHF, especially in the family. In addition, in this case, Puskesmas as a forum for improving public health, to always provide health education to the community, especially to parents related to DHF prevention efforts, so that later this can be used as something that can help improve public health programs that will be applied, especially within families.

## **CONCLUSION**

Based on the age characteristics of most of the age of 36-45 years, which is as many as 30 respondents (51.7%). Based on the sex of the most female sex is 31 respondents (53.4%). Based on employment, most of them work as private

employees as many as 28 respondents (48.3%). Based on education, most of them had high school / vocational education as many as 22 respondents (37.9%).

The level of knowledge of respondents shows that the average score obtained is with a score of 20.57 (good), while the scores obtained from all respondents are the lowest score of 16 (enough) and the highest score of 25 (good), and most of them have good knowledge as many as 44 respondents (75.9%) and 14 respondents (24.1%) have sufficient knowledge.

The level of parental knowledge based on age, most respondents aged in the range of 36-45 years as many as 30 respondents (51.7%), have good knowledge as many as 24 respondents (41.4%), then have sufficient knowledge as many as 6 respondents (10.3%). Based on gender, female gender respondents were 31 respondents, had a good level of knowledge as many as 23 respondents (39.7%), and had sufficient knowledge as many as 8 respondents (13.8%). Based on employment, most respondents work as private employees 28 respondents (48.3), have good knowledge as many as 24 respondents (41.4%) and as many as 4 respondents (6.9%) have sufficient knowledge. Based on education, at most 22 respondents (37.9%) had high school / vocational education, with good knowledge as many as 15 respondents (25.9%) and 7 respondents (12.1%) had sufficient knowledge.

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