

Knowledge Relationship With The Implementation Of Tt Wus Immunization At Padangmatinggi Health Center Padangsidimpuan City

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ABSTRACT

Tetanus Toxoid (TT) immunization coverage in Women of Childbearing Age (WUS) at the Padangmatinggi Puskesmas Padangsidimpuan city in 2021 amounted to 0.5% but in fact, the target achieved was not by the national target of 80%. The purpose of the research is to find out the relationship of knowledge with the implementation of TT WUS immunization at the Padangmatinggi Health Center in Padangsidimpuan City. The type of research used is quantitative research with a cross-sectional design. The research population is all wus who are married in the working area of Padangmatinggi Health Center Padangsidimpuan city amounted to 305 people with a sample of 75 people. Data analysis using the Chi-Square test. The results showed a knowledge related to the implementation of TT WUS immunization at the Padangmatinggi Health Center with a p-value of 0.001 (< 0.05). It is recommended to health workers to hold socialization about immunization in women of childbearing age and provide motivation to get TT immunization to prevent tetanus disease and consideration to the Padangsidimpuan City Health Office in determining policies and input materials in planning to improve the quality of health services in the TT WUS immunization program.

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1. Introduction

Immunizations that are recommended to be given to women of childbearing age and pregnant women in the form of TT immunization are useful for immunity to diseases that can harm the fetus, one of which is tetanus. Tetanus cases are found in several tropical countries and countries that still have low health conditions. In 2018 the World Health Organization (WHO) estimated 59,000 infant deaths due to tetanus, a figure that has decreased by 90% when compared to 2019 when there were 787,000 deaths due to Tetanus Neonatorum (TN). According to ASEAN data, Indonesia ranks second after Filipina with several sufferers more than 100 people. In addition, the rate of cases and deaths due to TN disease caused by TT in Indonesia is also still quite high from 2018 (average with CFR > 50%) (Abu Khoiri, 2019).

In Indonesia in 2017, there were reported 25 cases from 7 provinces with a death toll of 14 cases or CFR of 56%. The number of tetanus neonatorum cases in 2017 decreased from the previous year, which was 33 cases in 2016. However, the CFR in 2017 increased from the previous year which was 42.4%. The highest number of TN cases spread equally in three provinces, namely Riau, Banten, and West Kalimantan Provinces. Provinces with 100% CFR are Aceh, Central Kalimantan, and Papua Provinces. In 2016, there were 33 cases reported from 7 provinces including North Sumatra province with a death toll of 14 cases or CFR 42.4%. Most cases of TN occurred in East Java province as many as 19 cases. In Indonesia in 2017 Women of Childbearing Age (WUS) who immunized TT-1 reached (23.4%), TT-2 reached (21.8%), TT-3 reached (9.4%), TT-4 reached (7.8%), TT-5 reached (8.2%), and TT2+ reached (47.3%) (Ministry of Health, 2018).

This immunization used to be intended for women in rural and remote areas. However, in the field, rural women are more likely to immunize than in urban areas because some women do not

get tetanus toxoid injections because of forced marriage (being pregnant) and are afraid of harmful ingredients contained in the tetanus toxoid vaccine (Ministry of Health, 2019). The target set regarding the Tetanus Toksoid immunization program in WUS is 80%, but in fact, the target achieved is not by the national target that has been set, which is as much as 4.45%. TT immunization coverage in WUS in North Sumatra at 0.25% (North Sumatra Health Office, 2020). The prevalence of Tetanus Toxoid Immunization in WUS in Padangsidempuan City in 2020 was only About 0.8% of the number of Women of Childbearing Age who claimed to have received Tetanus Toxoid Immunization, while in Padangmatinggi Puskesmas Padangsidempuan City in 2021 the prevalence of WUS that got Tetanus Toxoid amounted to 0.5% (Padangsidempuan City Health Office, 2021).

The program of providing TT immunization to WUS by health workers from the educated and trained government and adequate health facilities only must be supported by a good knowledge of TT immunization and the behavior of the community is also important. Healthy behavior by the family especially the mother in this case contributes greatly to the status of the degree of health. The behavior of a person or society includes immunization behavior (Mulyadi, 2017).

Previous research was conducted by Aswan. Y, Sri Sartika Sari Dewi. S.S.S., and Harahap. W (2020) with the title of research On the relationship of knowledge and attitude of Women of Childbearing Age towards the immunization of Tetanus Toxoid in Batang Baruhar Jae Village, Padang Bolak District, North Padang Lawas Regency in 2020 with a value of $p = 0.002$. This is due to indifference and lack of awareness to immunize TT even though it basically has good knowledge and already knows the specified schedule. It is hoped that WUS who live in Batang Baruhar village have a good understanding of the benefits of Immunization and is willing to carry out TT Immunization. Knowledge is obtained from education, observation, or information obtained by a person. The restraint of a person can carry out changes so that the behavior of people can develop (Adhanyah, 2017).

This research is in line with the research conducted by Handayani. N (2021) with the title Relationship of knowledge and attitude of Women of Childbearing Age towards the immunization of Tetanus Toxoid in Palopat Pijorkoling Village, with a value of $p = 0.002$ ($p < 0.05$). The better the knowledge of pregnant women about TT Immunization, the higher the likelihood of pregnant women getting TT Immunization. Azizah (2017) also conducted a study entitled The Relationship of Knowledge and Attitudes Towards TT Immunization at BPS Hj. Salmah in Kauman Village shows that of the 23 mothers, 17 mothers (74%) had good knowledge, with a value of $P = 0.005$, which means that there is a relationship between knowledge and complete immunization activeness.

Factors that affect immunization are maternal knowledge where the level of knowledge will affect the attitude of the individual. The better WUS's knowledge of the importance of immunization, the higher the level of WUS awareness to participate in posyandu or immunization activities. The TT immunization program can be successful if there is a real effort from people who have high knowledge and commitment to immunization (Utaya, 2018).

Based on the results of the initial survey conducted on October 13, 2021, at the Padangmatinggi Health Center in Padangsidempuan, the number of real WUS registered at the Puskesmas in 2021 was as many as 305 married WUS attached files, and only 137 who had carried out tetanus toxoid immunization (TT) (Health Profile of Padangmatinggi Health Center, 2021). Researchers conducted an interview related to knowledge to 10 WUS with the provision of tetanus toxoid immunization (TT) in the Padangmatinggi Health Center Work Area, 5 WUS people did not carry out TT immunization due to a lack of knowledge of lack of understanding of tetanus toxoid immunization (TT) and 2 WUS stated that they did not know what tetanus toxoid (TT) immunization was. This is very important to secure and protect against tetanus infection against your self. From the description above, the author is interested in conducting research that aims to find out the relationship of knowledge with the implementation of TT WUS immunization at the Padangmatinggi Health Center in Padangsidempuan City in 2021.

2. Method

The type of research used in this research is quantitative research. Cross-sectional research design. The research site was carried out in the Working Area of Padangmatinggi Health Center of Padangsidempuan City. This study took place from September 2021 to March 2022. The population is all wus who are married in the working area of Padangmatinggi Health Center padangsidempuan

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city amounted to 305 people and a sample of 75 people. Sampling techniques are carried out by accidental sampling in determining the respondents. Measuring instrument using a questionnaire, Analysis channeled through SPSS Software Version 23.0.

3. Results and Discussion

3.1 Results

TABLE 1
DISTRIBUTION OF RESPONDENT FREQUENCY BASED ON AGE, EDUCATION, EMPLOYMENT, FAMILY INCOME, KNOWLEDGE, AND IMPLEMENTATION OF TT WUS IMMUNIZATION AT PADANGMATINGGI HEALTH CENTER PADANGSIDIMPUAN CITY IN 2021

No.	Variable	F	%
1	Age		
	Not at risk (20-35 years old)	46	61,3
	At-risk (< 20 years or >35 years)	29	38,7
2	Education		
	Low (Not in school, Graduating from elementary school, Graduating junior high school/equivalent)	40	53,3
	High (High School Graduation / Equivalent, D3 / College)	35	46,7
3	Work		
	Not Working (Housewife)	24	32,0
	Working (PNS / TNI / POLRI, Private Employees, Self-Employed, Laborers, Farmers)	51	68,0
4	Family income		
	Low (<Rp2,903,042)	45	60,0
	High (>/ Rp2,903,042,)	30	40,0
5	Knowledge		
	Less	27	36,0
	Enough	26	34,7
	Good	22	29,3
6	Implementation of TT WUS Immunization		
	Not	46	61,3
	Yes	29	38,7
Total		75	100,0

Based on table 1 shows based on the age group of respondents, the majority in the age category of 20-35 years as many as 46 people (61.3%) and minorities in the age category < 20 years or >35 years as many as 29 people (38.7%). Based on the respondents' education, the majority in the low education category (Not schooling, Graduating from elementary school, graduating junior high school/equivalent) as many as 40 people (53.3%), and minorities in the higher education category (High School Graduation/equivalent, Graduating D3 / PT) as many as 35 people (46.7%). Based on the work of respondents, the majority in the working category (PNS / TNI / POLRI, Self-Employed, Farmers, Workers) as many as 51 people (68.0%), and minorities in the category of not working (IRT) as many as 24 people (32.0%). Based on the income of the respondents' families, the majority in the low-income category (< Rp 2,903,042.00,-) as many as 45 people (60.0%) and minorities in the high-income category (≥, Rp 2,903,042,00,-) as many as 30 people (40.0%). Based on respondents' knowledge, the majority in the category were less than 27 people (36.0%), enough as many as 26 people (34.7%) and minorities in the good category as many as 22 people (29.3%). Based on the Implementation of TT WUS Immunization, the majority of respondents were not as many as 46 people (61.3%), and the minority of respondents were 29 people (38.7%).

TABLE 2
CROSS-TABULATION OF KNOWLEDGE RELATIONS WITH THE IMPLEMENTATION OF TT WUS IMMUNIZATION AT PADANGMATINGGI HEALTH CENTER PADANGSIDIMPUAN CITY IN 2021

No.	Variable	Implementation of TT WUS Immunization				Amount	p value
		Not		Yes			
		F(46)	%	F(29)	%		
Knowledge							
1	Less	23	30,7	4	5,3	27	36,0
2	Enough	16	21,3	10	13,3	26	34,7
3	Good	7	9,3	15	20,0	22	29,3

Based on the results of cross-tabulation between knowledge and the implementation of TT WUS immunization at the Padangmatinggi Health Center in Padangsidempuan City, it shows that of the 27 respondents of knowledge, there are less than 23 people (30.7%) who do not carry out TT WUS immunization and 4 people yes. Meanwhile, of the 26 respondents who have sufficient knowledge, there are 16 people (21.3%) who do not carry out TT WUS immunization, and 10 people (13.3%) yes. Meanwhile, of the 22 well-informed respondents, there are 7 people (9.3%) who do not carry out TT WUS immunization, and 15 people (20.0%) yes. Chi Square's analysis showed that the p-value of 0.001 ($p < 0.05$) means that H_a is accepted and H_0 is rejected. The results prove that there is a significant relationship between knowledge and the implementation of TT WUS immunization at the Padangmatinggi Health Center in Padangsidempuan City in 2021.

3.2 Discussion

a. Characteristics

Based on univariate analysis obtained by the results of the respondent age group, the majority in the age category of 20-35 years as many as 46 people (61.3%) and minorities in the age category of < 20 years or >35 years as many as 29 people (38.7%). This result is in line with Azizah's research (2017) at BPS Hj. Salmah in Kauman Village, showing that of the 23 mothers in the 20-35 age category and minorities in the age category of < 20 years or >35 years as many as 25 people. Pus age is an indicator in maturity in every decision-making to do something that refers to each experience. A person's age will affect behavior so much, because the older he is, the more responsible, more orderly, more moral, more filial than a young age (Notoatmodjo, 2013). The age of pus, especially women of childbearing age who are relatively young and productive, does not tend to put the interests of children and families ahead of themselves. Most of those who are of productive age have very little knowledge about TT WUS immunization in the body that will be given to WUS in caring for themselves.

According to Thomson's theory in Notoatmodjo (2013) which states that age is an important indicator in determining a person's productivity compared to older people, young people have higher productivity, because the physical condition and health of young people are still excellent so that it prioritizes the interests of children and their families over oneself. Meanwhile, based on Handayani's research (2020) states that the higher a person's age the higher the level of knowledge. Based on the analysis of univariate obtained by the results of respondents' education, the majority in the category of low education (Not school, Graduating from elementary school, graduating junior high school/equivalent) as many as 40 people (53.3%), and minorities in the higher education category (High School Graduation / Equivalent, Graduating D3 / PT) as many as 35 people (46.7%).

Education means the guidance that a person gives towards the development of others towards certain ideals to determine what human beings to do and fill life to achieve salvation and happiness. Education is needed to get information, such as things that support health so that they get quality of life (Notoadmojo, 2013). Education also affects pragmatic and rational thinking patterns towards customs, with higher education a person can more easily accept new ideas or problems such as acceptance, restrictions on the number of children, and desire for a certain gender. Education will also increase a woman's awareness of the benefits that can be enjoyed if she has a small number of children. Higher-educated women tend to limit the number of births compared to the uneducated or poorly educated (Notoadmojo, 2013). Education is the guidance that a person gives to people towards something so that they can understand. It is undeniable that the higher a person's education, the easier it is for them to receive information and have a better understanding of disease prevention and have a higher awareness of health problems so that in the end the more yearning they have. Conversely, if a person's level of education is low, it will hinder the development of one's attitude towards acceptance, information and new values introduced (Iqbal, 2017).

Based on the analysis of univariate obtained the results of respondents' work, the majority in the working category (PNS / TNI / POLRI, Self-Employed, Farmers, Workers) as many as 51 people (68.0%) and minorities in the category of not working (IRT) as many as 24 people (32.0%). According to Sastrohadiwiryono (2013), a job is a group or group of tasks and responsibilities that will, are, and have been done by the workforce within a certain period. The influence of this type of work on nutritional status stated according to Notoatmodjo (2013), several social aspects affect health status, including age, gender, occupation, and socioeconomic. According to Ahadi (2012),

efforts to combat poverty can only be successful if done by providing work that provides decent income to the poor so that not only income is raised but self-esteem as a human being, and also with employment can provide opportunities for people to work and stimulate various activities in economic sectors.

According to Sayogya's income (2014), which states that low income is a hurdle that causes people to be unable to afford the necessary amount of food. The low income may be due to being unemployed or underemployed because of the difficulty of obtaining employment—staying in accordance with the desired. Adequate family income will support the growth and development of children because parents can provide all the needs of children both primary and secondary (Soet-jiningsih, 2013). According to Sajogyo quoted by Himawan (2016), the purchasing power of the family is largely determined by the level of family income. Poor people will usually spend most of their income on food. Low incomes are a hurdle that causes people to be unable to afford the amount of food needed. Based on univariate analysis obtained by respondents' knowledge, the majority in the category is less than 27 people (36.0%), enough as many as 26 people (34.7%) and minorities in the good category as many as 22 people (29.3%).

This result is in line with Suhartatik and Rusni Mato (2018) with the title of research factors related to tetanus toxoid immunization in women of childbearing age in Puskesmas Mandai Maros Regency there is a knowledge relationship with tetanus toxoid immunization in women of childbearing age at the Mandai Health Center Maros Regency by showing the results of the value of $p = 0.002 < \alpha = 0.05$. From the results showed that of the 48 respondents who had sufficient knowledge and did not get TT immunization as many as 27 respondents (56.2%), respondents who had good knowledge but did not get TT immunization as many as 12 respondents (25.0%), respondents who had sufficient knowledge but got TT immunization as many as 1 respondent (2.1%), while respondents who had good knowledge and received TT immunization as many as 8 respondents (16.7%).

b. Knowledge Relationship with the Implementation of TT WUS Immunization

Based on univariate analysis obtained by respondents' knowledge, the majority in the category is less than 27 people (36.0%) and minorities in the good category as many as 22 people (29.3%). Chi Square's analysis showed that the p-value of 0.001 ($p < 0.05$) means that H_a is accepted and H_0 is rejected. The results prove that there is a significant relationship between knowledge and the implementation of TT WUS immunization at the Padangmatinggi Health Center in Padangsidimpuan City in 2021.

Knowledge is the result of knowing, and this happens after people have sensed a particular object. Knowledge-based behavior will be more lasting than behavior that is not based on knowledge, it is based on experience (Notoadmodjo, 2013). This is in line with research conducted by Kasmawati (2013) under the title Relationship of Knowledge Level, Education and Information of Women of Childbearing Age With Tetanus Toksoid Immunization in the Working Area of Ulee Kareng Health Center Doy Banda Aceh Village which states that there is a knowledge relationship of women of childbearing age with TT immunization in the Work Area of Ulee Kareng Puskesmas Doy Banda Aceh Village in 2013 and obtained a value of $p = 0.001 < \alpha = 0.05$. This is also in line with the research conducted by Aswan, Y, Sri Sartika Sari Dewi, S.S.S., and Harahap, W (2020) with the title of research On the relationship of knowledge and attitude of Women of Childbearing Age towards the immunization of Tetanus Toxoid in Batang Baruhar Jae Village, Padang Bolak District, North Padang Lawas Regency in 2020 with a value of $p = 0.002$. This is due to indifference and lack of awareness to immunize TT even though it basically has good knowledge and already knows the specified schedule.

Knowledge is obtained from education, observation, or information obtained by a person. With the restraint of a person can carry out changes so that the behavior of people can develop (Adhanyah, 2017). This research is in line with the research conducted by Handayani, N (2021) with the title Relationship of knowledge and attitude of Women of Childbearing Age towards the immunization of Tetanus Toxoid in Palopat Pijorkoling Village, with a value of $p = 0.002$ ($p < 0.05$). The better the knowledge of pregnant women about TT Immunization, the higher the likelihood of pregnant women getting TT Immunization. This study is in line with Azizah's research (2017) entitled Knowledge and Attitudes Towards TT Immunization at BPS Hj. Salmah in Kauman Village, shows that of 23 mothers, 17 mothers (74%) have good knowledge, with a value of $P = 0.005$, which means that there is a relationship between knowledge and complete immunization active-

ness. Factors that affect immunization are maternal knowledge where the level of knowledge will affect the attitude of the individual. The better WUS's knowledge of the importance of immunization, the higher the level of WUS awareness to participate in posyandu or immunization activities. The TT immunization program can be successful if there is a real effort from people who have high knowledge and commitment to immunization (Utaya, 2018).

According to this theory, researchers assume, that mothers who live in the Padangmatinggi Health Center of Padangsidempuan City are still many who know less about TT immunization, this is influenced by the lack of sources of information from various media, such as TV, radio, or newspapers obtained by the community. So it is expected that the participation of health workers or posyandu cadres must be more monitoring so that residents want to immunize TT. In addition, researchers also assume that WUS who have less knowledge is caused by WUS reading less books related to Tetanus Toxoid immunization. According to the assumptions of researchers, based on the results of research and theory basically the knowledge possessed by a person will change a person from not knowing to knowing. Knowledge about tetanus toxoid immunization is very important for women of childbearing age because with good knowledge it will be known the benefits and purpose of giving tetanus toxoid immunization. and disadvantages of service in Posyandu so that it does not give a bad effect on the mother and provide comfort in using it.

4. Conclusion

Based on the age characteristics of respondents, the majority in the age category of 20-35 years as many as 46 people (61.3%), education the majority of low education as many as 40 people (53.3%), the majority of work as many as 51 people (68.0%), the income of low-income majority families as many as 45 people (60.0%), the majority knowledge is less than 27 people (36.0%) and the implementation of TT WUS immunization is not as much as 46 people (61.3%). There is a knowledge related with the implementation of TT WUS immunization at the Padangmatinggi Health Center of Padangsidempuan City, where the p-value is 0.001 ($p < 0.05$).

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