

# Relationship between Utilization of the MCH Handbook and Mother's Knowledge and Attitudes in Early Detection of Stunting

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## Abstract

It is important to pay attention to the prevalence of under-five nutritional problems in Indonesia in 2022 which will still reach 21.6%, especially related to stunting and underweight. This disorder has far-reaching consequences, including increased morbidity and mortality. As a result, it is critical to recognize stunting early, and one way that can be done is to employ Maternal and Child Health (MCH) books as a source of information for moms of toddlers. Through this MCH guide, mothers can independently monitor their toddlers' growth and development, as well as expand their understanding and attitudes about toddler nutrition. The purpose of this study is to examine the association between the use of the MCH handbook and the mother's knowledge and attitudes about early stunting identification. The study was a quantitative study that was done out utilizing cross-sectional research methodologies on 88 moms who had toddlers and MCH books. The results showed that the use of the MCH handbook as a communication tool was the factor that had the most influence on mother's knowledge (OR=12,007) and one of the factors that had a significant impact on mother's attitude in early detection of stunting.

**Keywords:** *Utilization of the MCH Handbook, Mother's Knowledge, Mother's Attitude, Early Detection of Stunting.*



## A. INTRODUCTION

Toddlers or more commonly known as under five years have the meaning as individuals who are in the age range of 0 to 5 years. The ages of 24 to 60 months are often known as the golden age, so that at this time children should receive better stimulus in terms of health, nutrition, parenting and education (Permatasari et al, 2020). The condition of toddlers at this age must always be monitored to determine their growth and development. This is because at this age, toddlers are prone to problems with growth and development. if children are born and grow up in a situation of chronic malnutrition, they will become stunted/dwarf children (De Onis & Branca, 2018)

Stunting is a linear growth disorder caused by recurrent chronic malnutrition, as indicated by the z-score for height for age (TB/U) -2SD (Maleta et al, 2015). The problem of short toddlers (stunting) refers to the prevalence of chronic nutritional issues, which are influenced by the condition of the mother or prospective mother, the fetus, infancy or toddlerhood, as well as diseases suffered during toddlerhood. As with other nutritional issues, it is not only associated with health issues but also influenced by a variety of other conditions that indirectly affect health (Black et al., 2013).

According to the Indonesian Nutritional Status Survey (SSGI) conducted by the Ministry of Health, the prevalence of under-five malnutrition in Indonesia will reach 21.6% in 2022. In Indonesia, the prevalence of stunting still exceeds the WHO threshold of 20 percent (MOH, 2022). There are 18 provinces with a higher prevalence of under-five malnutrition than the national average. The remaining 16 provinces have malnutrition rates below the national average. East Nusa Tenggara (NTT) has the highest malnutrition rate among toddlers, at 35.3%. On the other hand, Bali has the lowest prevalence of infant stunting in the nation. The percentage is only 8%, which is significantly lower than the national stunting rate in 2022 (MOH, 2022).

A region with a high prevalence of childhood stunting will have a devastating effect on both stunted children and society. Several studies have demonstrated that toddler-aged children who are stunted will have limited cognitive, learning, and psychosocial development (Achadi, 2012). Children who experience severe stunting in their first two years of life have a significant correlation with cognitive delays in childhood, which will have a lasting effect on human resources (Brinkman et al., 2010; Martorell et al., 2010). Stunting events that have persisted since childhood are associated with slower motor development and lower intelligence levels in locomotor, hand and eye coordination, hearing, speech, and performance when compared to typically developing children (Chang et al., 2010).

Because of the large impact of *stunting* on the quality of the younger generation, it is important for us to make efforts to prevent and treat nutritional problems in toddlers (Rahayu et al, 2018). One of the efforts to prevent and overcome the problem of stunting is through the role of early detection of *stunting* by mothers who have toddlers. One of the things that is closely related to this is the knowledge and attitude of mothers of toddlers towards *stunting*. The results of research at Glugur Darat 1, Medan stated that only 18% of mothers under five knew the meaning of the KMS growth chart and 91% of mothers under five, their level of knowledge was not good at reading growth charts in KMS (Mastari, ES, 2009). The results of this study are only aimed at growth charts that focus on measuring body weight based on the child's age. The low knowledge of mothers regarding toddler growth charts through KMS is something that needs attention. Factors related to the mother's knowledge and attitude in early detection of the growth of her toddler include age, education, occupation, as well as awareness of the use of the MCH handbook.

The benefits derived from using the MCH handbook include that mothers and children have complete health records, from the time the mother becomes pregnant until the child is five years old, instruments for recording and monitoring nutritional status and child growth and development, information, communication and health counseling on nutrition, early detection presence of maternal and child health problems or disorders (MOH, 2016). However, the utilization of the MCH handbook has not been maximized, based on research at the Ajibarang Health Center, Banyumas it was found that mothers who have children aged less than 5 years, the coverage of the MCH book is only 72.34%. The results of this study also stated that 44% of the function of recording the MCH book was not good, the educational function of the

book (Sistiarani et al, 2014). Only 57.1% of MCH books were good, the communication function of MCH handbooks was poor around 38.5% and good about 61.5% and mothers' knowledge of good MCH handbooks was only about 56% (Sistiarani et al 2014). The utilization of the MCH handbook was also not optimal for posyandu cadres according to the results of the study (Sistiarani et al, 2013) which stated that only 59.7% of cadres had good knowledge of the MCH handbook and only 53.7% of cadres had a good role in using the MCH handbook in Kalibagor District. Therefore, this study wanted to find out the relationship between the use of the MCH handbook and the knowledge and attitudes of mothers under five towards early detection of *stunting*.

## **B. LITERATURE REVIEWS**

### **1. Knowledge**

Knowledge is the formation of thoughts that connect thoughts with reality or other people's thoughts. Knowledge can come from repeated experiences without understanding universal qualities (causes) (Pritchard, 2016). There are also those who say that knowledge is the result of "knowing" which is obtained from the results of sensing certain objects. So, knowledge is a person's thoughts that he gets from continuous experience and there is also a learning process from that (Zagzebski, 2017)

Education level has a significant impact on one's knowledge. A higher level of education makes it simpler for an individual or community to assimilate information and incorporate it into their behavior and daily routine (Istiningtyas, 2010). The greater a mother's understanding of toddler nutrition, the more closely she will monitor, calculate, and comprehend the food consumed by all family members, including toddlers. Similarly, if the mother has a strong understanding of *stunting*, she will be more likely to use the MCH handbook as an early detection aid for *stunting* (Maywita, 2018).

### **2. Attitude**

Saifudin Azwar (2010) elaborates on the definition of attitude. Attitude is defined as an individual's reaction or response to an object, which leads to the individual's behavior toward the object in particular ways. Additionally, Gerungan (2004) defines attitude as an individual's reaction to their views or emotions regarding a particular object. Even though the object is identical, not all individuals have the same attitude, which can be influenced by individual circumstances, experience, and information, and whose needs vary.

A person's attitude greatly influences behavior, because behavior will occur due to an attitude towards a particular object. A positive attitude towards health is needed to produce behavior that supports health, but a negative attitude towards something will result in a person not behaving as expected or will behave indifferently towards certain objects. Attitudes towards health are people's opinions or judgments about matters related to health maintenance (Susilowati, 2016).

### 3. Utilization of the MCH Handbook

The Maternal and Child Health Book (MCH Book) contains integrated health records for mothers (pregnancy, childbirth, and postpartum) and children (newborns to 6-year-olds) as well as information on how to maintain and care for the health of mothers and children (MOH, 2016). Every pregnant woman receives one MCH Handbook. If the mother is pregnant or gives birth to twins, then the mother needs an additional MCH book. The MCH handbook is available at Posyandu, Polindes/Poskesdes, Sub-Puskesmas, Community Health Centers, practicing midwives, practicing doctors, maternity homes and hospitals. It is hoped that this MCH handbook will continue to exist and will become a record of developments until after birth, when the child is 6 years old.

The benefits of the MCH handbook in general are that mothers and children have complete health records, from the time the mother is pregnant until her child is 6 years old, while the specific benefits are:

- a. Recording and monitoring of maternal and child health .
- b. tools that are equipped with important information for mothers, families and communities about health, nutrition and KIA service package (standard).
- c. Tool for early detection disorders or health problems of mothers and children.
- d. C records of nutrition services and maternal and child health including referrals.

### 4. Early Detection of Stunting

Monitoring the growth of toddlers at posyandu is a strategic effort to detect early growth disturbances. Early prevention is one of the best ways to reduce the prevalence of stunting. The most important procedures for early prevention are routine screening and follow-up of children's height. Early detection of stunting can be done by monitoring the growth of children under five at Posyandu to detect early growth disturbances. The most important procedures for early detection are routine screening and follow-up height of children under five. The Posyandu program can be used as a tool for routine screening and follow-up height of children under five, and can be used as a good solution to reach all levels of society. The better the services provided by Posyandu, the better the quality of health in the community will be (Setyowati & Astuti, 2015).

## C. METHODS

Quantitative research with cross sectional research methods. The population in this study were all mothers who had children under five in Tambora District, West Jakarta. The sample in this study amounted to 88 people with a purposive sampling technique. In this study the data used is primary. Primary data obtained from interviews with research instruments in the form of questionnaires. Data analysis was carried out through 2 3 analytical techniques, namely univariate, bivariate, and multivariate analysis. Univariate analysis was performed to determine the frequency distribution and independent or dependent variables . Bivariate and multivariate

analysis was carried out to see the relationship between the independent variables and the dependent variable.

## D. RESULTS AND DISCUSSION

### 1. Description of Research Data

The World Health Organization (WHO) itself classifies malnutrition into underweight, stunting, and wasting. Table 1 presents the results of the analysis of testing the relationship between age, education, parity, occupation, income, utilization of the MCH handbook, and information sources with mother's knowledge in early detection of stunting.

**Table 1 Relationship between age, education, parity, occupation, income, utilization of the MCH handbook, and information sources with mother's knowledge in early detection of stunting**

Variable	Knowledge		n	P-value	95% CI
	Less	Good			
<b>Age</b>					
<20th and >35th	11 (52.4%)	10 (47.6%)	21	0.905	(0.451-3.210)
20-35th	32 (47.8%)	35 (52.2%)	67		
<b>Education</b>					
Low ( $\leq$ junior high school and below)	31 (60.8%)	20 (39.2%)	51	0.016*	3,229
High (senior high school and above)	12 (32.4%)	25 (67.6%)	37		(1.328-7.853)
<b>Parity</b>					
1-2 children	28 (50.9%)	27 (49.1%)	55	0.783	(0.524-2.957)
>2 children	15 (45.5%)	18 (54.5%)	33		
<b>Occupation</b>					
Housewife	39 (52.7%)	35 (47.3%)	74	0.172	(0.801-9.685)
Employee	4 (28.6%)	10 (71.4%)	14		
<b>Family income</b>					
Low (<UMR)	29 (59.2%)	20 (40.8%)	49	0.050*	2,589
High ( $\geq$ UMR)	14 (35.9%)	25 (64.1%)	39		(0.650-11.959)
<b>Utilization of the MCH Book</b>					
<b>Height recorder</b>					
Not good	36 (51.4%)	34 (48.6%)	70	0.493	(0.578-4.789)
Good	7 (38.9%)	11 (61.1%)	18		
<b>Communication tool</b>					
Not good	40 (63.5%)	23 (36.5%)	63	0.000*	12,754
Good	3 (12%)	22 (88%)	25		(3,438-47,304)
<b>Early detection</b>					
Not good	29 (58%)	21 (42%)	50	0.080	(0.996-5.628)
Good	14 (36.8%)	24 (63.2%)	38		
<b>Information sources</b>					
No	25 (64.1%)	14 (35.9%)	39	0.019*	3,075
Yes	18 (36.7%)	31 (63.3%)	49		(1.282-7.376)

Mothers who have less knowledge in early detection of stunting, 52.4% in the age group less than 20 years and more than 35 years, 60.8% have low education, 50.9%

have 1-2 children, 52.7% as housewives, 59.2% are low-income families (below the regional minimum wage (UMR)). Mothers who state the benefits of the MCH handbook as a tool for recording height are of poor value, 51.4% have poor knowledge of early detection of *stunting*. Mothers who had less knowledge about early detection of *stunting* consisted of 63.5% of mothers who stated that the MCH handbook as a communication (counseling) tool was not good, 58% of mothers stated that the MCH handbook as an early detection tool was not good and 64.1% had no source information about early detection of *stunting*. Factors related to mother's knowledge in early detection of *stunting* were education, family income, the MCH handbook as a communication tool (p-value = 0.000 < 0.05) and a source of information (p-value = 0.019 < 0.05).

Furthermore, to show the relationship between age, education, parity, occupation, income, utilization of the MCH handbook, and information sources with mother's attitude in early detection of *stunting* can be seen from Table 2 below:

**Table 2 Relationship between age, education, parity, occupation, income, utilization of the MCH handbook, and information sources-with mother's attitude in early detection of *stunting***

Variable	Attitude		n	P-value	95% CI
	Negative	Positive			
<b>Age</b>					
<20th and >35th	15 (71.4%)	6 (28.6%)	21	0.158	(0.840-7.011)
20-35th	34 (50.7%)	33 (49.3%)	67		
<b>Education</b>					
Low ( junior high school and below)	25 (49.0%)	26 (51.0%)	51	0.208	(0.218-1.243)
High (senior high school and above)	24 (64.9%)	13 (35.1%)	37		
<b>Parity</b>					
1-2 children	30 (54.5%)	25 (45.5%)	55	0.956	(0.370-2.112)
>2 children	19 (57.6%)	14 (42.4%)	33		
<b>Occupation</b>					
Housewife	43 (58.1%)	31 (41.9%)	74	0.447	(0.583-5.869)
Employee	6 (42.9%)	8 (57.1%)	14		
<b>Family income</b>					
Low (< UMR)	23 (46.9%)	26 (53.1%)	49	0.102	(0.185-1.056)
High (≥ UMR)	26 (35.9%)	13 (64.1%)	39		
<b>Utilization of the MCH Book</b>					
<b>Height recorder</b>					
Not good	38 (54.3%)	32 (45.7%)	70	0.800	(0.262-2.177)
Good	11 (61.1%)	7 (38.9%)	18		
<b>Communication tool</b>					
Not good	30 (47.6%)	33 (52.4%)	63	0.029*	0.287
Good	19 (76%)	6 (24%)	25		(0.101-0.814)
<b>Early detection</b>					
Not good	26 (52%)	24 (48%)	50	0.561	(0.300-1.661)
Good	23 (60.5%)	15 (39.5%)	38		



Information sources					
No	16 (41%)	23 (59%)	39	0.024*	0.337
Yes	33 (67.3%)	39 (44.3%)	49		(0.141-0.808)

Mothers who have a negative attitude in early detection of *stunting*, 71.4% in the age group less than 20 years and more than 35 years, 64.9% have higher education, 57.6% have >2 children, 58.1% mothers do not work, 46.9% low-income families. Mothers who stated the benefits of the MCH book as a means height record were of poor value, 54.3% had a negative attitude in early detection of *stunting*. Mothers who had a negative attitude in early detection of *stunting* consisted of 47.6% mothers who stated that the MCH handbook as a communication (counseling) tool was not good, 52% of mothers stated that the MCH handbook as an early detection tool was not good and 41% had no source of information about early detection of *stunting*. Factors related to the attitude of mothers in early detection of *stunting* were MCH books as a communication tool (p-value = 0.029 < 0.05) and a source of information (p-value = 0.024 < 0.05).

## 2. Bivariate and Multivariate Analysis on Mother's Knowledge in Early Detection of Stunting

Bivariate analysis was carried out to see the relationship between the independent (free) variables and the dependent (dependent) variable. The results of the bivariate test can be seen from Table 3 below:

**Table 3 Results of bivariate selection of mother's knowledge in early detection of *stunting***

Variable	p-value
Age	0.712
Education	0.008
Parity	0.620
Occupation	0.093
Family income	0.029
The MCH book as a height recorder	0.341
The MCH handbook as a communication tool	0.000
The MCH handbook as an early detection tool	0.048
Information sources	0.011

The results of the bivariate selection, the variables that meet the requirements of multivariate modeling are mother's education, occupation, family income, the MCH handbook as a communication tool, the MCH handbook as an early detection tool, a source of information (p-value < 0.25). The MCH book as a height recorder is included in the multivariate because it is substantial.

Multivariate analysis was aimed to find the most dominant variable and see the role of the dependent variable when interacting together. The results of the multivariate test can be seen from Table 4 below:

**Table 4 Logistic regression prediction model of mother's knowledge in early detection of stunting**

Variable	p-value	OR (95% CI)
Education	0.215	2.086
Occupation	0.677	1.405
Family income	0.088	2.486
The MCH book as a height recorder	0.966	1.031
The MCH handbook as a communication tool	0.001	10.484
The MCH handbook as an early detection tool	0.851	1.116
Information sources	0.260	1.880

Variables with a p-value > 0.05 are the MCH Handbook as a height recorder and an early detection tool, mother's occupation, source of information and education and family income. Sources of information after being removed from the modeling caused a change in the OR of the MCH handbook as a communication tool of more than 10%, therefore it was included back in the multivariate modeling. After modeling, the final modeling results are as follows:

**Table 5 Logistic regression last model predictions of mother's knowledge in early detection of stunting**

Variable	p-value	OR (95% CI)
Family income	0.034	2.963 (1.087 – 8.077)
The MCH handbook as a communication tool	0.000	12.007 (3.033 – 47.540)
Information sources	0.202	1.910 (0.707 – 5.159)

Variables that are significantly related to mother's knowledge in early detection of stunting are MCH books as a means of communication and family income, while sources of information are confounding factors.

### 3. Bivariate and Multivariate Analysis on Mother's Attitude in Early Detection of Stunting

The result of mother's attitude in early detection of stunting in bivariate test can be seen from Table 6 below:

**Table 6 Results of bivariate selection of mothers' attitudes in early detection of stunting**

Variable	p-value
Age	0.091
Education	0.138
Parity	0.782
Occupation	0.294
Family income	0.063
The MCH book as a height recorder	0.603
The MCH handbook as a communication tool	0.013
The MCH handbook as an early detection tool	0.424
Information sources	0.013



The results of bivariate selection, variables that meet the requirements of multivariate modeling are mother's age, mother's education, family income, the MCH Handbook as a communication tool, the source of information (p-value <0.25). The MCH handbook as a height recorder and the MCH handbook as an early detection tool are included in the multivariate because they are substantial.

**Table 7 Logistic regression prediction model of mothers' attitudes in early detection of stunting**

Variable	p-value	OR (95% CI)
Age	0.073	2,889 (0.904 – 9.232)
Education	0.633	0.784 (0.289 – 2.128)
Family income	0.075	0.407 (0.151 – 1.096)
The MCH book as a height recorder	0.572	0.692 (0.193 – 2.482)
The MCH handbook as a communication tool	0.094	0.364 (0.111 – 1.190)
The MCH handbook as an early detection tool	0.674	1.260 (0.430 – 3.687)
Information sources	0.098	0.427 (0.156 – 1.170)

Variables with p-value >0.05 are the MCH Handbook as an early detection tool, mother's education, the MCH Handbook as a tool of height record. After modeling, the final modeling results are as follows:

**Table 8 Logistic Regression Last Model Prediction of mothers' attitudes in early detection of stunting**

Variable	p-value	OR (95% CI)
Age	0.053	3.074 (0.986 – 9.585)
Family income	0.043	0.379 (0.148 – 0.968)
The MCH handbook as a communication tool	0.019	0.274 (0.093 – 0.810)

Variables that are significantly related to and influence the attitude of the mother in early detection of stunting are the mother's age, the MCH handbook as a communication tool and family income.

Stunting is a short and very short stature caused by: prolonged (chronic) malnutrition as indicated by a z-score for height for age (TB/A) less than -2 standard deviations (SD) based on World Health Organization (WHO) standards. Stunting that occurs in infancy can result in impaired intelligence in children and low productivity as adults. Therefore, it is necessary to have early detection carried out by all elements of society, both health workers and parents of toddlers against stunting.

Parents, especially mothers of toddlers, have an important role in early detection of the presence or absence of stunting in their toddlers. Early detection of stunting is actually very easy to do because the chart for monitoring height/age in toddlers has been included in the MCH handbook. However, implementing early detection of stunting requires commitment from health workers, cadres and mothers of toddlers. The thing that can make early detection of toddler stunting optimal is the awareness of the importance of early detection in toddler mothers. Knowledge and attitudes of mothers of toddlers towards early detection of stunting are closely related to optimal results of early detection of stunting.

The results of research by Mastari, ES (2009) stated that only 18% of mothers knew the meaning of growth charts in health card (Kartu Menuju Sehat/KMS) and 91% of mothers under five had poor knowledge of reading growth charts. The results of his research are in accordance with the results of this study which stated that 48.9% of mothers had insufficient knowledge in early detection of stunting in the Tambora sub-district area. This study also stated that 58% of mothers were unable to assess the nutritional status of their children from the MCH handbook, 60.2% of mothers could not answer correctly how to detect a toddler's height or not and 64.8% of mothers could not show the part of the MCH handbook that could assess stunting underfives. In fact, Indonesia is high. How can mothers of toddlers prevent their toddlers from experiencing *stunting*, if they lack knowledge about early detection of stunting itself?

Factors related to mother's knowledge in early detection of stunting were mother's education (OR=3.229), family income (OR=2.589), MCH handbook as a communication tool (OR=12.754) and source of information (OR=3.075). Based on multivariate analysis, the factor that most influenced mothers' knowledge of early detection of stunting was the use of the MCH handbook as a communication tool (OR=12,007), besides other significant factors was family income (OR=2,963), while sources of information were confounding factors.

The results of this study, apart from the low knowledge of mothers of toddlers regarding early detection of stunting, mothers of toddlers in Tambora sub-district also have a high negative attitude of 55.7% towards early detection of stunting. Factors related to the mother's attitude in early detection of stunting include the MCH handbook as a communication tool (OR=0.287) and a source of information (OR=0.337). Based on the multivariate analysis, the factor most related to the mother's attitude was the mother's age (OR=3.074), other factors were family income (OR=0.379) and the use of the MCH handbook as a communication tool (OR=0.274). The results of this study indicate that stunting in toddlers is still not considered a nutritional problem, in contrast to underweight toddlers. This is evidenced from the results of this study that 72.7% of mothers under five stated that stunting was not a nutritional problem, wasting was a nutritional problem by 94.3% of mothers under five. 47.7% of mothers under five in this study agreed that height is destiny and 46.6% agreed that shortness is not a nutritional problem.

The results of this study have shown that the knowledge and attitudes of mothers in early detection are closely related to optimizing the use of the MCH handbook as a medium of communication between health workers and cadres and mothers with toddlers. The effective use of the MCH handbook can increase knowledge which is expected to form a positive attitude for mothers of toddlers in early detection of stunting even though it takes a long time to change one's attitude .

Other factors in this study related to mother's knowledge in early detection of stunting based on bivariate analysis were education (OR=3.229), family income (OR=2.589) and information sources (OR=3.075). Based on multivariate analysis, the factor that has the most influence on mother's knowledge in early detection of stunting

besides the benefits of the MCH handbook as a communication tool is family income and also as a confounding factor is the source of information.

In this study, 67.6% of mothers with higher education had good knowledge of early detection of stunting. This is in accordance with research by Abuya et.al (2011) which states that educated mothers will more easily receive and process health information compared to mothers who are not educated. Education greatly influences the reception of information about nutrition including stunting. Communities with low education will be more likely to maintain traditions related to actions that sometimes conflict with children's health. The higher a person's education level, it is hoped that it will be easier for him to absorb information, receive this knowledge and change his attitude as needed, including regarding early detection of stunting or nutrition. Mothers with a higher educational background also have higher self-confidence to ask about health information, what is written in the MCH handbook, to health workers compared to mothers with low education. This is illustrated from the results of this study that mothers who never asked health workers, 76.7% had low education and 61.1% mothers who often asked health workers with higher education.

In addition to education, a factor related to knowledge is family income. In this study, 64.1% of families with high incomes (above the minimum wage) had good knowledge about early detection of stunting. High income is expected to increase the accessibility of mothers under five and their families to obtain child health information including stunting from various sources of information, not only from health workers at the posyandu but also from health workers at clinics, hospitals and other sources of information such as social media, media electronics such as television, radio and mass media such as newspapers, magazines.

This is consistent with the results of this study that 63.3% of mothers have good knowledge of information sources regarding early detection of stunting. Even so, the results of this study still show that information regarding stunting in toddler mothers in the Tambora sub-district area is still very rare, as illustrated by 88.6% of mothers who have never heard or read or seen about stunting, but when asked about short toddlers only 47.7% answered never heard/read/seen toddler short. Generally, mothers who have heard about stunting or short toddlers get information from television, health workers (midwives/doctors) (3.4%), the surrounding community and social media.

In this study, another factor that was bivariately related to the mother's attitude in early detection of stunting was the mother's age. Based on multivariate analysis, the factors that most influenced the mother's attitude were age, family income and the use of the MCH handbook as a communication tool. In this study, 49.3% of mothers aged 20-35 years had a positive attitude, while 71.4% of mothers aged <20 years and >35 years had a negative attitude in early detection of stunting.

Of the mothers aged 20-35 years in this study, 70.1% had 1-2 children, while in the group of mothers aged <20 years and > 35 years, 61.9% had children >2 children. This might make the 20-35 years old group have a more positive attitude towards early detection of stunting. Those who have just had 1-2 children have more time to pay

attention to the growth and development of their children, want the best for their children and negative views from society if their children are judged to have problems with nutrition make this group of mothers more careful and enthusiastic about caring for their children's health. In the age group <20 years, thinking maturity and readiness to become a mother are more or less so that this age group is very dependent on caring for their toddlers from other family members, especially grandmothers (mother's mothers), while in the age group > 35 years who have children > 2 children, time to pay less attention to each child, the feeling of having experience in taking care of children and so far their children have had no problems making mothers in this group feel less worried about their child's growth and development.

## E. CONCLUSION

Utilization of the MCH handbook as a communication tool is the factor that has the most influence on mother's knowledge (OR=12,007) and one of the factors that has a significant impact on mother's attitude in early detection of stunting. Another factor that has a significant impact on mother's knowledge in early detection of stunting is family income, while the source of information is a confounding factor. The factor that has the most influence on the mother's attitude in early detection of stunting is age (OR=3.074) and another factor is family income. In this study, the authors suggest the role of health workers, especially midwives, in posyandu activities to be further enhanced, especially in providing health education regarding child growth and development by optimizing the use of MCH books that are owned by toddlers, especially for early detection of stunting and nutritional status based on height/age. It is hoped that the skills, knowledge and motivation of Posyandu cadres will be further improved, especially the quality of recording not only the weight but also the height of children under five, which should be recorded regularly in the MCH book, not on the UPGK card sheet. Cadres are also expected to record the growth chart for toddlers to height/age, not just recording weight/age. Finally, there is a need for health education for mothers of toddlers and families regarding the importance of using the MCH handbook to monitor the growth and development of toddlers and training on how to monitor toddler growth through height/age, weight/age and weight/height charts.

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