



# AISCH 2023

## The 4<sup>th</sup> AI Insyirah International Scientific Conference on Health

### THE INFLUENCE OF MOTHER'S KNOWLEDGE AND WORK ON TODDLER WEIGHTING ACTIVITIES AT POSYANDU WORK AREA PUBLIC HEALTH CENTER TENAYAN RAYA PEKANBARU CITY

<sup>1</sup>Rendi Randika, <sup>2</sup>Fitria Elgi, <sup>3</sup>Rika Mianna

<sup>1,2,3</sup>Bachelor of Public Health, Faculty of Health AI Insyirah Institute of Health and Technology (IKTA), Jl. Parit Indah No.38 Pekanbaru City

<sup>1</sup>rendi.randika@ikta.ac.id

<sup>2</sup>elgi.fitria@gmail.com

<sup>3</sup>rika.mianna@ikta.ac.id

#### ABSTRACT

*Integrated Service Post (Posyandu) is a form of Community-Based Health Efforts (UKBM) carried out by, from and with the community, to empower and provide facilities for the community to obtain health services for mothers, babies and toddlers. One of the factors that influences the activity of weighing toddlers at the posyandu is the mother's knowledge about the benefits of the posyandu and the mother's occupation. The Tenayan Raya Health Center is the health center with the highest birth rate in the city of Pekanbaru but has the lowest achievement in toddler visits at the posyandu. The aim of this study was to determine the effect of mother's knowledge and occupation on the activity of weighing toddlers at the Posyandu in the Working Area of the Tenayan Raya Health Center. This type of research is analytical correlation with a quantitative research design and cross-sectional methods. The research sample was mothers under five who were in the working area of the Tenayan Raya Health Center as many as 95 people. The sampling technique is stratified random sampling. The data collection instrument was in the form of a respondent's identity questionnaire, knowledge and activity of weighing toddlers at the posyandu. Data analysis in this study used the chi square test with a 95% degree of confidence. The results showed that through the chi square statistical test there was an effect of mother's knowledge ( $p$  value = 0.002,  $\alpha < 0.05$ ) and mother's work ( $p$  value = 0.032,  $\alpha < 0.05$ ) on the activity of weighing toddlers in posyandu in the working area of the Tenayan Raya Health Center. Suggestions for cadres to always explain the benefits of weighing and examining toddlers at the posyandu, so that the activity of weighing toddlers at the puskesmas will also increase.*

**Keywords:** Activeness, Work, Knowledge, Posyandu

#### INTRODUCTION

Health care is one of the efforts to reduce morbidity and mortality among children under five. Toddlers, namely children aged one to five years, are a period called the golden age. Growth and development experienced a rapid increase in this period. Health care for children and toddlers prioritizes prevention efforts, improving health services and treatment and rehabilitation. Health services for children and toddlers can be carried out at community health centers, supporting community health centers, village clinics,

especially at posyandu. (Syahrir et al, 2013).

Integrated service post (Posyandu) is a form of community-based health business (UKBM) which is managed and organized by the community together in an effort to implement health development, in order to empower the community by making it easier to obtain basic health services in order to accelerate the reduction in maternal mortality and children (Nain Umar, 2015). Posyandu was established with the aim of reducing infant and toddler mortality rates, which is implemented by competent health

cadres who have received education and training from the community health center (Saepudin, Rizal and Rusman, 2017).

According to Indonesian Ministry of Health data, in 2017 the number of toddlers in Indonesia reached 23,848,283 toddlers. With the number of posyandu in Indonesia being 294,428 Posyandu for toddlers, of the total number of posyandu for toddlers, 57.43% are active posyandu and 42.57% are inactive posyandu. This data shows that there is still a gap between the active posyandu target of 100% and the achievements of active posyandu which have not yet reached 100%.

The activity of weighing toddlers at Posyandu is a government strategy established by the Ministry of Health to find out early about growth disorders in toddlers so that appropriate action can be taken immediately (Mubarak, 2012). Coverage of toddler weighing in Indonesia in 2020 was 61.3%. Meanwhile, in 2021 this coverage will increase, namely 69.0%. Based on the profile of districts/cities in Riau Province in 2021, coverage of toddler weighing in Riau Province is 48.2% in 2021. The 2020-2024 Ministry of Health Strategic Plan has determined that at least 80% of children will be weighed at Posyandu. (RI Ministry of Health, 2021).

The number of toddlers recorded at the Pekanbaru City Health Service in 2019 was 111,586 people and the number of posyandu recorded was 647 posyandu. The availability of posyandu in 2019 for the number of children under five is quite good, however, community participation in accessing this service needs to be increased and likewise the capacity of the posyandu cadre itself also needs to be increased (Pekanbaru City Health Office Profile, 2019).

The percentage of mothers participating in posyandu activities can be seen from the data on coverage of visits by toddlers at posyandu in the work area of the Tenayan Raya Community Health Center, Tenayan Raya sub-district, Pekanbaru City. Recap of data on the implementation of

posyandu for toddlers in the working area of the Tenayan Raya Community Health Center in January – December 2022, there were 356 toddlers weighed at the posyandu out of 1,731 targets, meaning that the weighing coverage was only 21% of the 75% target to be achieved (Profile of the Tenayan Raya Community Health Center, 2022).

The gap between the achievement of community participation in visiting posyandu and the target visit is possible due to several factors. One of them is the mother's knowledge about toddler posyandu. Knowledge is a very important domain for the formation of one's actions. Good knowledge is expected to influence mothers' participation in bringing their children to posyandu (Notoatmodjo, 2018). Apart from mother's knowledge, employment status is also one thing that influences the behavior of mothers of toddlers, because they are busy working, so mothers ignore growth, development and health problems in their toddlers, namely by ignoring visits to Posyandu. So that for working mothers this has an influence on inactivity in visits by toddlers to the posyandu, this can cause the frequency of mothers who have toddlers to visit the posyandu to decrease (Kurnia Nita, 2011).

The impact that occurs if the participation or visits of toddlers do not reach the predetermined targets is that the growth and development of toddlers is not monitored, which risks worsening nutritional conditions or growth disorders. The low participation of mothers in bringing toddlers to posyandu can be increased.

Based on the data obtained, researchers are interested in conducting research on the influence of maternal knowledge and work on the activity of weighing toddlers at posyandu in the working area of the Tenayan Raya Community Health Center, Pekanbaru City.

## METHOD

This research uses a quantitative approach with an analytical type, using a *cross-sectional research design*. The research was carried out in February – July 2023 in the Tenayan Raya Community Health Center Work Area, Pekanbaru City, with the population p is mothers who have children under five in the work area of the Tenayan Raya Community Health Center, Pekanbaru City, namely 1,731 people. The number of samples considered to represent the population was 95 people taken in each unit obtained through *stratified random sampling techniques*. The research data used was a questionnaire containing questions related to knowledge about *stunting*, work and maternal activity in weighing toddlers at posyandu .

## RESULTS

### 1. Univariate Analysis

#### Mother's Job Description

Table 1. Frequency Distribution  
Mother's Job

No	Work	f	%
1	Work	23	24.2
2	Doesn't work	72	75.8
<b>Total</b>		<b>95</b>	<b>100</b>

Based on Table 1, the frequency distribution of maternal employment is obtained 72 respondents (75.8%) were not working.

#### Description of Mother's Knowledge

Table 2. Frequency Distribution  
Mother's Knowledge

No	Mother's Knowledge	N	%
1	Good	59	62.1
2	Enough	17	17.9
3	Not enough	19	20
<b>Total</b>		<b>95</b>	<b>100</b>

Based on Table 2, it was found that the frequency distribution of mothers' knowledge was visible, the majority had good knowledge, 59 respondents (62.1%).

## Description of Toddler Weighing Activities

Table 3. Toddler Weighing Activities

No	Toddler Weighing Activities	f	(%)
1	Active ( $\geq 9$ times in 1 year)	68	71.6
2	Inactive ( $< 9$ times in 1 year)	27	28.4
<b>Total</b>		<b>95</b>	<b>100</b>

Based on Table 3, it was found that the frequency distribution of active toddler weighing activities ( $\geq 9$  times in 1 year) was 68 respondents (71.6%).

### 2. Bivariate Analysis

Table 4. The Influence of Mother's Knowledge on Toddlers' Weighing Activities at Posyandu Tenayan Raya Community Health Center Work Area, Pekanbaru City  
Year 2023

Year 2023								
No	Knowledge	Toddler Weighing Activities at Posyandu				Total		<i>p value</i>
		Active		Not active				
		f	%	f	%	f	%	
1	Good	49	83.1	10	16.9	59	100	0.002
2	Enough	7	41.2	10	58.8	17	100	
3	Not enough	12	63.2	7	36.8	19	100	
Total		68	71.6	27	28.4	95	100	

Based on table 4 It is known that of the 59 respondents who have good knowledge, 10 of them are not active in weighing toddlers at the posyandu (16.9%) and 49 of them are active in weighing toddlers at the posyandu (83.1%), of the 17 respondents who have sufficient knowledge, 10 of them were not active in weighing toddlers at the posyandu (58.8%) and 7 of them were active in weighing toddlers at the posyandu (41.2%) while of the 19 respondents who had less knowledge, 7 of them were not active in weighing toddlers in the posyandu. posyandu (36.8%) and 12 of them were active in weighing toddlers at the posyandu (63.2%). The *chi square* test results obtained *p value* = 0.002 ( $\alpha < 0.05$ ), then there is an influence of mother's knowledge on the activeness of

weighing toddlers at the posyandu Tenayan Raya Community Health Center working area Pekanbaru City.

Table 5. Effects of Mother's Knowledge on Toddler Weighing Activities at Posyandu Tenayan Raya Community Health Center Work Area, Pekanbaru City Year 2023

City Year 2023									
No	Work	Toddler Weighing Activities at Posyandu				Total	<i>p value</i>	<i>OR</i>	
		Active		Not active					
		f	%	f	%	f			%
1	Work	21	91.3	2	8.7	72	100	0.032	5.58 (1.2-25.7)
2	Doesn't work	47	65.3	25	34.7	23	100		
Total		68	71.6	27	28.4	95	100		

Based on table 5 It is known that of the 23 respondents who have jobs, 2 of them are not active in weighing toddlers at posyandu (8.7%) and 21 of them are active in weighing toddlers at Posyandu (91.3%) and of the 72 respondents who do not have jobs, 25 of them were not active in weighing toddlers at the posyandu (34.7%) and 47 of them were active in weighing toddlers at the posyandu (65.3%). *The chi square* test results obtained *p value* = 0.032 (  $\alpha < 0.05$  ), then there is an influence of the mother's work on the activity of weighing toddlers at the posyandu Tenayan Raya Community Health Center working area Pekanbaru City.

## DISCUSSION

### The Influence of Mother's Knowledge on Toddlers' Weighing Activities at Posyandu Tenayan Raya Community Health Center Working Area Pekanbaru City in 2023

Through research, it is known that there is an influence of mother's knowledge on the activeness of weighing toddlers at the posyandu Tenayan Raya Community Health Center working area Pekanbaru City with *p value* = 0.002 ( $\alpha < 0.05$ ). Knowledge is the result of knowing that occurs after

people sense a particular object. Knowledge is an important domain in the formation of a person's actions (Notoatmodjo, 2018). Researchers concluded that the higher the mother's level of knowledge about posyandu, the higher the mother's compliance with visits and activeness in weighing toddlers at the posyandu in the working area of the Tenayan Raya Community Health Center, Pekanbaru City.

Government monitoring of posyandu has not gone as expected, because public awareness of the role and existence of posyandu is still far from expectations. The community is not yet fully aware that posyandu has benefits that need to be developed, with empowerment from and for the community, health workers and community health centers for implementing posyandu activities (RI Ministry of Health, 2020).

*Laurence Green's* theory in Kurniason (2016), there is a relationship between knowledge and a person's behavior. Increasing knowledge does not always cause changes in behavior, but there is a relationship related to changes in behavior. The results of this research are in accordance with research by Sugihartiningsing (2014) that there is a relationship between knowledge and maternal compliance in visiting toddlers at posyandu. Someone who has good knowledge about posyandu will create trust and regularly visit the posyandu.

The results of this research are also in line with research by Mawarti (2020) where there is a relationship between the mother's level of education, employment and knowledge with visits by toddlers at the Tunas Baru posyandu in the working area of the Sungai Ulin Community Health Center (*p value* = 0.000 < 0.05). Research by Pristiani (2019) also proves that there is a relationship between the knowledge and attitudes of mothers of toddlers and the frequency of weighing toddlers at the posyandu. (*p value* = 0.000 < 0.05).

Based on research by Khoirunissa & Sholichah (2020), there is a relationship

between the level of maternal knowledge regarding toddler growth and toddler visits to posyandu in Suren Village, Kutoarjo District, Purworejo Regency with a  $p$  value = 0.000. Through the research, it was found that respondents' knowledge about the growth of toddlers was in the category of either having toddler visits to active posyandu (95.4%) or having toddler visits to inactive posyandu (4.6%). Respondents who had less knowledge about toddler growth had less active toddler visits (21.4%) and less active toddler visits (78.6%).

Researchers concluded that the majority of respondents who had good knowledge tended to be more active in visiting and weighing toddlers at the posyandu, while mothers who were less knowledgeable tended to be less active in visiting and weighing toddlers at the posyandu. So, maternal knowledge influences compliance with toddler visits posyandu, but it does not rule out the possibility that mothers who have good knowledge are not obedient in bringing their toddlers to the posyandu due to various obstacles such as activities that are too busy, access to the posyandu that is too far and so on.

### **The Influence of Mother's Work on Toddlers' Weighing Activities at Posyandu Tenayan Raya Community Health Center Working Area Pekanbaru City in 2023**

Through research, it is known that there is an influence of the mother's work on the activity of weighing toddlers at the posyandu Tenayan Raya Community Health Center working area Pekanbaru City with  $p$  value = 0.032 (  $\alpha < 0.05$  ) with an Odds Ratio (OR) of 5.58 (1.2-25.7) means that someone who does not have a job has 5.58 times (minimum activity is 1.2 times and maximum activity is 25.7 times) will be more active in weighing toddlers at the posyandu Tenayan Raya Community Health Center Work Area, Pekanbaru City compared to someone who has a job.

In today's global world, many mothers work to earn a living, both for themselves and their families. Work factors will influence the role of mothers who have toddlers, both their activity and inactivity in visiting and weighing toddlers at the Posyandu. Mothers who work but are still active in visiting the posyandu show that exposure to information in the work area causes someone to feel that visiting is important to do, but for someone who does not have enough time due to busy work and lack of information will cause the mother to be inactive in visiting and weighing toddlers at posyandu (Ministry of Health of the Republic of Indonesia, 2022).

Mothers of toddlers who work but have a sufficient frequency of weighing their toddlers can be linked to the knowledge, attitudes and type of work of mothers of toddlers. The mother's knowledge and attitude are sufficient to make the mother continue to take her toddler to Posyandu because the mother has great attention and concern for her toddler. Apart from that, the mother's type of work can also influence the mother's activity in bringing her toddler to the posyandu. Based on the results of the analysis, mothers who have jobs as self-employed and housewives, where the mother's work can be arranged according to the mother's wishes, have sufficient frequency of weighing toddlers. On weighing day, mothers can postpone their work activities to take their toddler to the posyandu and can return to work after leaving the posyandu (Pristiaini and Paridah, 2016).

This research is in line with research conducted by Isnoviana and Yudit (2020) on relationship between employment status and activity Mothers' visits to posyandu at Posyandu The statistical test results show  $p$  value = 0.000 and  $r = 0.465$ , so there is a relationship between work and the activeness of visits by mothers of toddlers in posyandu activities at Posyandu X Surabaya.

Based on researchers' assumptions, mothers of toddlers who do not work but

have less frequency of weighing their toddlers could be caused by distance from residence and access to transportation. The distance where the mother lives is far from the Posyandu location and the lack of transportation to take the mother to the posyandu location is the reason why mothers do not take their toddlers to the posyandu.

## CONCLUSION

1. There is an influence of maternal knowledge on the activeness of weighing toddlers at the posyandu in the working area of the Tenayan Raya Community Health Center, Pekanbaru City with a *p value* = 0.002 ( $\alpha < 0.05$ ).
2. There is an influence of mother's work on the activeness of weighing toddlers at the posyandu in the working area of the Tenayan Raya Community Health Center, Pekanbaru City with a *p value* = 0.032 ( $\alpha < 0.05$ ).

## REFERENCES

- [1] Isnoviana, Meivy and Yudit, Jesica. (2020). The relationship between employment status and the activity of mothers visiting Posyandu at Posyandu X Surabaya. ISSN 1978-2071 (Print); ISSN 2580-5967. Wijaya Kusuma Medical Scientific Journal 9(2): 112-122.
- [2] Ministry of Health of the Republic of Indonesia. (2021). Indonesia Health Profile in 2021. Jakarta
- [3] Indonesian Ministry of Health. (2020). Technical Guidelines for Monitoring Nutritional Status. Jakarta: Indonesian Ministry of Health.
- [4] Indonesian Ministry of Health. (2022). Basic Health Research 2021. Jakarta: Health Research and Development Agency, Ministry of Health of the Republic of Indonesia.
- [5] Khoirunissa, T. J & Sholichah, N. (2020). The relationship between the level of mother's knowledge about toddler growth and toddler visits to posyandu in Suren Village, Kutoarjo District, Purworejo Regency. Bhakti Putra Bangsa Purworejo Midwifery Academic Vol 11 No 2 (2020): Journal of Health Communication . Retrieved on February 25, 2023 from <https://ejurnal.ibisa.ac.id/index.php/jkk/article/download/172/170/699>
- [6] Kurniason. (2016). Lawrence Green's Theory with Formulas & Examples. Yogyakarta: Graha Ilmu
- [7] Matanah, Lia. (2017). The relationship between the level of education and knowledge of mothers about Posyandu with the level of participation in Posyandu Anggrek VII, Sidorejo Lor Village, Sidorejo District, Salatiga City. Thesis. Faculty of Health Sciences, Muhammadiyah University of Surakarta
- [8] Nain, Umar. (2015). Community Based Health Effort Posyandu. Yogyakarta: Student Library
- [9] Notoadmojo, S. (2018). Health Promotion and Behavioral Science. Jakarta: PT. Rineka Cipta.
- [10] Notoatmodjo, S. (2018). Public Health Science, Basic Principles. Jakarta: Rineka Cipta
- [11] Pristiaini, Junaid and Paridah. (2016). Relationship between Knowledge, Attitudes and Employment Status of Mothers of Toddlers and Weighing Frequency Toddlers Go to Posyandu in the Working Area of the Pramuka Health Center, South Konawe Regency. Faculty of Public Health, Halu Oleo University. Retrieved on July 1, 2023 from <http://ojs.uho.ac.id/index.php/JIMKESMAS/article/view/661>
- [12] Saepudin, E, Rizal, E and Rusman, A. (2017). The role of Posyandu as a maternal and child health information center. Volume 3, Number 2, July – December 2017. e-ISSN 2442-5168. Library Science Study Program, Faculty of Communication Sciences, Padjadjaran University. Retrieved on July 11, 2023 from <https://e->

journal.unair.ac.id/RLJ/article/viewFile/7338/%204439

- [13] Sugihartiningsih. (2014). Level Relationships Mother's Knowledge of Obedience Participate in Posyandu Toddler Activities At Posyandu Wijaya Kusuma Vi Desa Jombor, Semarang Regency. Retrieved on February 17 from <https://www.neliti.com/id/publications/161373/besar-angkat-knowledge-ibu-dengan-kepatuhan-mengikuti-kegiatan-posyandu-ba>.
- [14] Syahrir, L. M, et al. (2013). Factors related to the visit of mothers with toddlers to the Posyandu in the Tamanlarea Makassar Health Center working area. *Journal of Scientific Health Diagnosis* 2(2): 118-128.