

The Relationship between Parental Feeding Style with Toddler Diet in the Locus Stunting Area in West Java

¹Ratna Jatnika, ²Lucia Voni Pebriani, ³Siti Nur Fatimah, ⁴Mustofa Haffas

Abstract--*This research is a correlational study to find out the relationship between Parental Feeding Style with Toddler Diet in the Locus Stunting Area in West Java. Parental Feeding Style consists of Encouragement Feeding Style, Instrumental Feeding Style, Emotional Feeding Style, and Control Feeding Style. The Diet of Toddlers is measured using "Isi Piringku" nutritional program, which consists of Proper Feeding and Nutritional Composition. Data was collected in 4 districts which are locus stunting areas in West Java, which consisted of 173 health workers. The data obtained were processed using the Pearson product-moment correlation. The results of data processing showed a relationship between Control Feeding Style with Nutritional Composition ($r = 0.183$; $p = 0.023$) and Encouragement Feeding Style with Nutritional Composition ($r = 0.166$; $p = 0.036$). This result shows that according to the perception of health workers in the locus stunting area, parents who provide food with the right nutritional composition are parents who apply the Control Feeding Style and Encouragement Feeding Style.*

Key words-- *Parental Feeding Style, Toddler Diet, West Java, Nutritional Composition.*

I. INTRODUCTION

Stunting is considered to be a major public health problem among children globally. Stunting or being too short for one's age, is defined as below two standard deviations (SD) from the median height-for-age z-score (HAZ), as determined by the World Health Organization (WHO) Child Growth Standard. The consequences of child stunting are both immediate and long term and include increased morbidity and mortality, poor child development and learning capacity, increased risk of infections and noncommunicable diseases in adulthood, and reduced productivity and economic capability (Stewart, Iannotti, Dewey, Michaelsen, & Onyango, 2013).

The prevalence of stunting in Indonesia is based on the results of the 2013 Basic Health Research was 37.2%. The stunting rate in West Java reached 29.2% or 2.7 million children under five, including in eight districts/cities that have a high prevalence of stunting. They are Garut Regency (43.2%), Sukabumi Regency (37.6%), Cianjur Regency (35.7%), Tasikmalaya Regency (33.3%), West Bandung Regency (34.2%), Tasikmalaya City (33.2%), Majalengka Regency (30.2%), and Purwakarta Regency (30.1%). Nationally, the stunting rate is around 32%. (Bappeda Jabar, 2018).

¹Faculty of Psychology, Universitas Padjadjaran, Bandung, Indonesia, ratna@unpad.ac.id

²Faculty of Psychology, Universitas Padjadjaran, Bandung, Indonesia

³Faculty of Medicine, Universitas Padjadjaran, Bandung, Indonesia

⁴Faculty of Law, Universitas Padjadjaran, Bandung, Indonesia

Stunting can be caused by both direct and indirect factors. The immediate factor consists of food intake/ nutrition and infectious disease, whereas indirect factors consist of parents' level of education, mother's occupation, mother's age, economic status, environmental sanitation, history of exclusive breastfeeding and parenting.

Nutrition became one of the significant factors that contribute directly to stunting in children. Nutritional stunting is a common problem of the pediatric population, especially in developing countries, including in West Java, Indonesia. Meanwhile, based on the 2013 Basic Health Research (Riskesdas, 2013) West Java, the prevalence of child malnutrition was equal to 15.7%. The prevalence number of short children in West Java in 2013 was 35.3% and the prevalence of lean children was 10.9%.

Indonesia Ministry of Health states the nutrition program for children under 5 years that is called "*Isi Piringku*". "*Isi Piringku*" consists of food guidelines that must be consumed by children based on nutritional needs in one plate. "*Isi Piringku*" portion of children is consist of carbohydrate with a portion of 2/3 of 1/2 plate, a source of protein with a portion of 1/3 of 1/2 plate, vegetables (source of vitamins and minerals) with a portion of 2/3 of 1/2 a plate and fruits (source of vitamins and minerals) with a portion of 1/3 of 1/2 a plate.

The implementation of "*Isi Piringku*" nutritional program in children is also determined by a parenting process. Parenting is one of the indirect factors related to the nutritional status of children, including stunting. Parents play an important role in shaping children's eating behaviours, through parental feeding style (Wang, Lu, 2017). Wardle (2002) stated the term "parental feeding style" that describes how parents can be a major influence on children's food habits as they shape their eating environment as providers models and regulators. The influence of parental feeding style on eating is often conceptualised as a system based on the quality of the parent-child relationship and with dynamically-interrelated dimensions.

Wardle (2002) designed an instrument to asses parenting feeding style that consists of 4 tpestyles: (1) instrumental feeding style (style of feeding that using food as a reward or withholding food as a punishment) (2) emotional feeding style (parenting practices of using food in between meals to regulate a child's emotions or (offering food to soothe the child's negative emotions) (3) encouragement feeding style (encouraging the child to eat a variety of foods) (4) control over eating (controlling the child's food intake) (Wang, Lu, 2017)

The study that examined the relationship between the nutritional program and parental feeding style in Indonesia was not found. Most existing research is about nutrition status in general. Based on this phenomenon, this research was conducted to know the relationship between Parental Feeding Style with Toddler Diet in the Locus Stunting area in West Java. Furthermore, this study is aimed to test the hypothesis that the implementation of "*Isi Piringku*" nutritional program is related to Parental Feeding Style.

II. METHOD

This study is a cross-sectional correlation study to find out the relationship between Parental Feeding Style with Toddler Diet ("*Isi Piringku*" nutritional program) in the Locus Stunting area in West Java. The variables in this study are:

- Parental Feeding Style
- "*Isi Piringku*" Nutritional Program

Parental Feeding Style is measured using a questionnaire consists of four aspects:

- Instrumental feeding style
- Emotional feeding style
- Encouragement feeding style
- Control overeating

The “*Isi Piringku*” Nutritional Program was measured using a questionnaire consisting of aspects:

- Proper Feeding
- Nutritional Composition

The sample consisted of 173 health workers in four cities which are locus stunting areas in West Java. In each city, the data were taken in 10 villages. The respondents were posyandu cadres, village midwives, puskesmas officers and PKK officers. They were asked to assess their perceptions of their foster mothers regarding parental feeding style and “*Isi Piringku*” nutritional program.

The data obtained were analysed using Pearson Product Moment Correlation using SPSS 25 for Windows.

III. RESULT

Data processing was carried out and gave the following results:

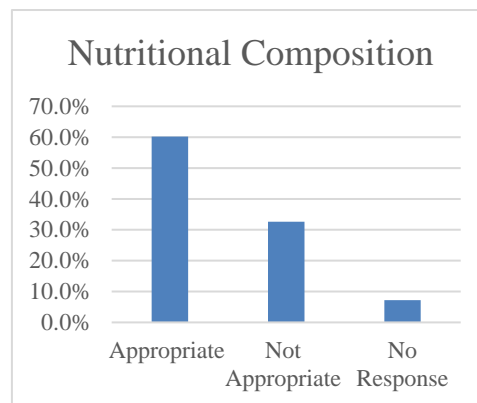


Figure 1. Percentage of Nutritional Composition

Based on Diagram 1 Percentage of Nutritional Composition, the respondents (health worker officers) perceive that 60,2 % parents in West Java have an appropriate nutritional composition of their children’s food, 32,6% of parents in West Java do not have any appropriate nutritional composition of their children’s food.

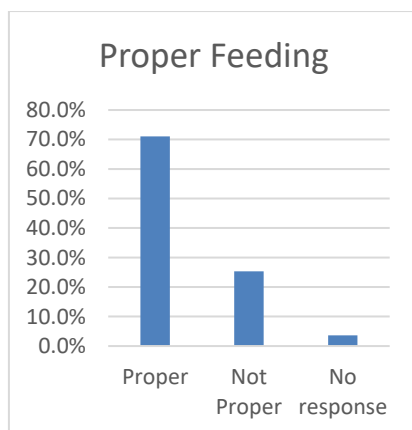


Figure 2. Percentage of Proper Feeding

Diagram 2 Percentage of Proper Feeding shows that health workers perceive that 71,1% of parents in West Java give proper feeding to their children, and 25,3% of parents in West Java do not.

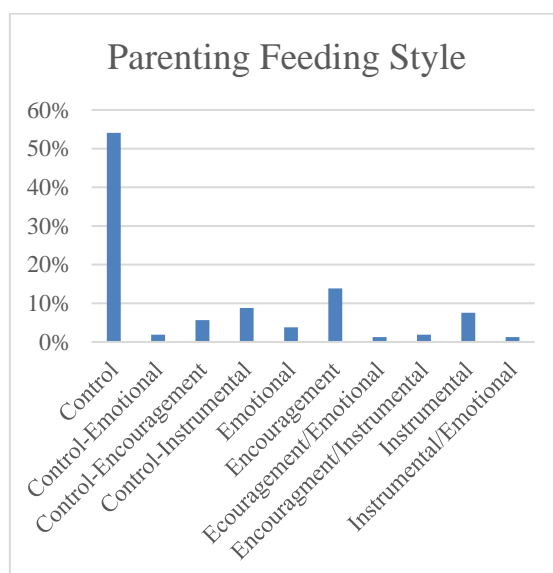


Figure 3. Percentage of Parental Feeding Style

Based on Diagram 3. Percentage of Parenting Feeding Style, 54% of parents, apply Controlling Feeding Style to their children. The second-highest percentage of parenting feeding styles is Encouragement Feeding Style (14%).

Table 1. Correlation between Parental Feeding Style and “Isi Piringku” Nutritional Program

		Control	Emotional	Encouragement	Instrumental
Proper Feeding	r	.131	-.141	.114	-.064
	p	.106	.078	.155	.424
Nutritional Composition	r	.183*	-.116	.166*	-.080
	p	.023	.146	.036	.319
*: p<0.05					

Based on Table 1, it appears that there is a significant relationship between nutritional composition with Control Feeding Style ($r = 0.183$, $p = 0.023$) and nutritional composition with Encouragement Feeding Style ($r = 0.166$, $p = 0.036$).

IV. DISCUSSION

Diagram 1 and 2 show that most parents in West Java have given appropriate food in nutritional composition, such as protein, carbohydrate and vitamin, and time-serving, such as breakfast. It means that parents in West Java have known and implemented Isi Piringku nutritional program from Indonesia Health of Ministry. They also have been aware of the importance of nutrition for children.

Based on Diagram 2. Percentage of Parenting Feeding Style, 54% of parents, use Controlling Feeding Style to their children. Most parents control food (meals, snack) intake to their children, insist the children take meals on the table, regulate time to eat very strictly and set the rules such as the children are not allowed to wander while they are taking food. The second-highest percentage of parenting feeding styles is Encouragement Feeding Style (14%) which means that 14% of parents in West Java encourage the child to eat a variety of food that they have not tasted before. To encourage the child, the parents also present food in attractive ways. After encouraging the children, they also praise their children when they eat what the parents give. The interesting result is some parents in West Java combine more than one kind of parenting feeding style, such as controlling and emotional feeding style, controlling and encouragement feeding style, controlling and instrumental feeding style. Controlling-instrumental feeding style means the parents sometimes control food intake, eating rules and time to eat as well as use the food as a reward or withhold the food as a punishment (food as an instrument).

Table 1 show that nutritional composition aspect from Isi Piringku Nutritional Program is related to Control Feeding Style ($r=0.183$, $p= 0.23$). Nutritional composition aspect of “Isi Piringku” nutritional program is also related to Encouragement Feeding Style ($p=0.166$, $r= 0.36$). This result means that parents in West Java who control food (meals, snack) intake to their children, insist the children to take meals on the table, regulate time to eat very strictly and set the rules such as the children are not allowed to wander while they are taking food-related to nutritional composition determined the nutrition of food as “Isi Piringku” program. Another result shows that the parents in West Java which encourage the children to eat a variety of foods tend to pay attention to the nutritional composition of children’s food as stated in “Isi Piringku” Nutritional Program.

Although the correlation significance of the other kind of parental feeding style and the aspect of proper feeding and nutritional composition is small, the result shows that the aspects of proper feeding and nutrition composition are negatively related to Emotional Feeding Style and Instrumental Feeding Style. This result means that the Emotional Feeding Style (parenting practices of using food in between meals to regulate a child’s emotions or (offering food to soothe the child’s negative emotions) and Instrumental Feeding Style (parenting practices of giving food to children as a reward or withhold the food as a punishment) tend to provide unhealthy nutrition to the children.

V. CONCLUSION

Parenting Feeding Style is related to the toddler diet” Isi Piringku” Program. The results show the relationship between Control Feeding Style with Nutritional Composition ($r = 0.183$; $p = 0.023$) and Encouraging Feeding Style with Nutritional Composition ($r = 0.166$; $p = 0.036$). This result means that according to the perception of health workers in the Locus Stunting Area in West Java, the parents who provide food with the suggested nutritional composition are parents which apply the Control Feeding Style and Encouragement Feeding Style.

REFERENCES

1. Bappeda Jabar 2018 *Cegah Stunting: Jabar Akan Gelar Kampanye Zero Stunting 2023*. (Bandung: Bappeda Jabar)
2. Darling N 2014 ED427896 1999-03-00 Parenting Style and Its Correlates *ERIC Digest* no. January 1999
3. Darling N, Toyokawa T 1997 *Construction and Validation of the Parenting Style Inventory II (PSI-II)* pp. 1–8
4. Gafoor A, Kurukkan, A 2014 *Guru Journal of Behavioral and Social Sciences* Construction and Validation of Scale of Parenting Style **24** 315–323
5. Kimble AB 2014 *Am. J. Psychiatry* The parenting styles and dimensions questionnaire: A reconceptualization and validation
6. Riskerdas 2013 *Riset Kesehatan Dasar* (Jakarta: Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI)
7. S., K., K., B.-B., L., F., R., L., Knappe, S., Beesdo-Baum, K., ... Wittchen, H.-U 2012 *J. of Anxiety Disorders* Characterizing the association between parenting and adolescent social phobia **265** 608–616
8. Sahithya BR, Manohari SM, Vijaya R 2019 *Mental Health, Religion & Culture* 0(0), 1–27
9. [Stewart CP1](#), [Iannotti L](#), [Dewey KG](#), [Michaelsen KF](#), [Onyango AW](#) 2013 *Contextualising complementary feeding in a broader framework for stunting prevention. Matern Child Nutr.* Suppl 2:27-45
10. Wang, L., Gaar, V. M. Van De, Jansen, W., Mieloo, C. L., Grieken, A. Van, & Raat, H. 2017 *Feeding styles , parenting styles and snacking behaviour in children attending primary schools in multiethnic neighbourhoods : a cross- sectional study*, 1–10.