

JUDUL ARTIKEL: The Effectiveness of Digital Psychoeducation Malnutrition in Children Under 6 Years Old in Indonesia

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1. Riwayat Submit
2. Manuskrip yang disubmit
3. Riwayat Review/review substansi
4. Manuskrip setelah revisi
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1. RIWAYAT SUBMIT

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Abstract:
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Keyword(s):
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2. MANUSKRIP YANG DISUBMIT

The Effectiveness of Digital Psychoeducation Malnutrition in Children Under 6 Years Old in Indonesia

Fitriani Nur Damayanti¹, Lia Mulyanti², Novita Nining Anggraini³, Yuliana Noor Setiawati Ulvie⁴,
Lawitra Khiakham⁵

Abstract— Introduction: Stunting is still a problem in Indonesia. Slowing down toddlers requires special attention because it can slow down children's physical growth, mental development and health. The purpose of this study is to find out a comparison of the effectiveness of digital psychoeducation of malnutrition in children under 6 years of age in Indonesia and Thailand. **Methods:** This research was conducted in the city of Semarang. Sampling was done using non-probability sampling technique using purposive sampling. **Results:** Psychoeducation about stunting is effective in increasing parental knowledge about stunting, especially nutrition for children so as to prevent stunting in children under 6 years of age. **Conclusion:** Stunting psychoeducation is an activity to increase the understanding of individuals, groups, and communities about stunting in children.

Keywords—Digital Psychoeducation, Malnutrition, Children Under 6 Years

1. Introduction

Stunting is still a problem in Indonesia. Stunting is a developmental disorder in children due to chronic malnutrition and repeated infections characterized by substandard length or height. Indonesia has a high

prevalence of stunting compared to other middle-income countries [1] . The Study on the Nutritional Status of Indonesian Toddlers (SSGI) in 2020 and 2021 was 24.1% and 24.4% and is expected to decrease to 14% in 2024. The prevalence of stunting in Central Java in 2021 is 20.9% respectively. The prevalence of stunting in Semarang City is 21.3%. Bangetayu Village is one of the stunting loci in Semarang City with 78 stunting cases in 2020, 77 in 2021 and 96 in 2022 [2] .

The incidence of stunting is not only in Indonesia, but in other countries such as Thailand. Recent data show that malnutrition remains a major health problem in Thailand with a prevalence of 10.5% of stunting and >5% prevalence of stagnation in children under 5 years of age. The prevalence of stunting in Thailand is 10-12% [3] .

Stunting in young children requires special attention as it can lead to stunting, mental development and poor health in children. Recent studies have shown that stunting is associated with poorer academic performance, lower academic performance, and lower incomes in adults. Stunted children are more likely to grow up to be unhealthy and poor adults. Childhood stunting is also associated with increased susceptibility of children to both communicable and non-communicable diseases (NCDs) and increased risk of overweight and obesity. Prolonged overweight and obesity can increase the risk of degenerative diseases. Cases of child stunting can be used as an indicator of the poor quality of a country's human resources. Stunting causes cognitive decline, lower productivity and increased disease risk, resulting in long-term losses to Indonesia's economy [4] . Stunting can be caused by several factors, namely parental height, food intake, birth weight [5] . The effects of low birth weight infants continue from generation to generation, and low birth weight infants have delayed anthropometric development. [6] . In addition, parenting in terms of children's health can have an impact on the incidence of stunting in children. This is because parents have different backgrounds both in terms of education, work, family nutrition and the number of family members [7] .

Policies to accelerate stunting reduction, based on many influencing factors, need to be formulated with specific and sensitive interventions [8] . The government has been working through general health centers (Posyandu), but this is sub-optimal as it does not involve all aspects of the community. Cadres and traditional midwives are an important part of the community who are strategic enough to participate in this activity because they are so close to mothers and the community. [9] . Effective policy and program responses to address the nutrition challenges in Indonesia require an understanding of the key drivers of the increasing dual burden of malnutrition in these countries, which have yet to be established. The management of stunting cases in a country is different from one another. It all depends on the regulations in each country. Each country has indicators in accelerating stunting reduction [10] .

Preventing and overcoming stunting can be done by providing education on parenting patterns related to child nutrition, including the amount of nutritional intake and the quality of the food to be given. Rahmandiani (2019) stated that nutrition is very important for the growth process and development of children. Maternal nutritional knowledge is very important for the prevention and treatment of stunting, as a variety of foods can provide adequate nutrition. [11] . Parents should be informed about the nutrition and nutrients that should be given to their children, including those related to food hygiene and environmental hygiene, and the appropriate use of health facilities to overcome the problems they face, especially those related to their nutrition. It is necessary to understand. [12] . Psychoeducation in the form of providing information about stunting can help prevent stunting in children and help the community better understand the material for increasing knowledge and support for self-protection [13] .

2. Method

This research will be conducted in Semarang City. Sampling was done using non-probability sampling technique using purposive sampling. The sample in this study were 100 people. By using a questionnaire that will be used as an instrument in the research process, the validity and reliability are tested first. The data will be analyzed using a statistical test, namely SPSS and will then be described quantitatively and qualitatively.

3. Ethical Clearance

This study was approved by the Research Bioethics Committee of the Faculty of Medicine, Sultan Agung Islamic University, Semarang No. 396/X/2022/Commission on Bioethics

4. Results

Characteristics of Respondents Based on Mean

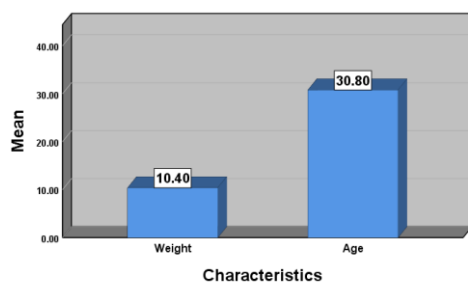


Figure 1. Characteristics of Respondents Based on the Mean

Based on Figure 1. Characteristics of Respondents Based on the above average, it can be seen that the average weight of the respondents (children aged 6 years and under) is 10.40 kilograms while the average age of the respondents is 30.80 months. So the following are the characteristics of respondents based on variance as follows:

Characteristics of Respondents Based on Variance

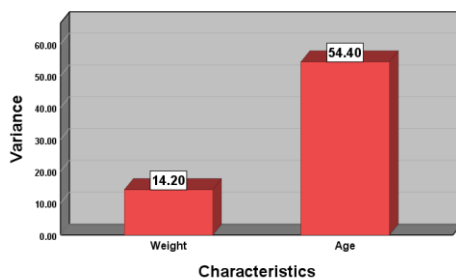


Figure 2. Characteristics of Respondents Based on Variance

Based on Figure 2. Characteristics of Respondents Based on the variance above, it can be seen that the weight variance of the respondents (children aged 6 years and under) is 14.20 kilograms while the age variance of the respondents is 54.40 months. This shows that the age of the respondent has a more varied value than the respondent's weight.

The following in Figure 3 contains a description of the respondents based on the education of the respondents' parents:

Characteristics of Respondents Based on Parents' Education

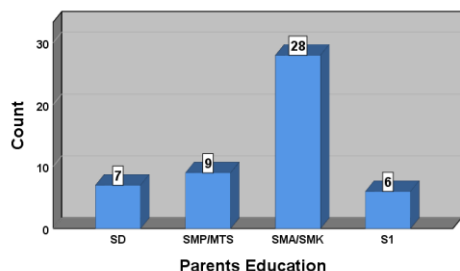


Figure 3. Characteristics of Respondents Based on Parents' Education

Based on Figure 3. Characteristics of Respondents Based on Parental Education, 7 respondents' parents had a basic education level (SD), then 9 respondents' parents had a junior high school education level (SMP/MTS), and 28 respondents' parents had a high school education level. SMA/SMK education and as many as 6 respondents' parents have a bachelor's level of education (S1).

The following in Figure 4 contains a description of the respondents based on the occupations of the respondents' parents:

Characteristics of Respondents Based on Parents Job

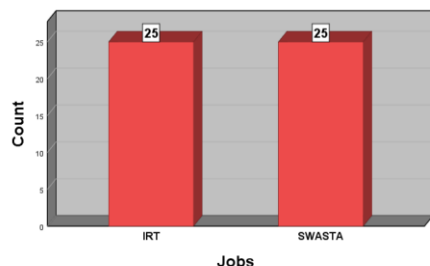


Figure 4. Characteristics of Respondents Based on Parents' Occupation

Based on Figure 4. Characteristics of Respondents Based on Parents' Occupation, 25 respondents' parents have jobs as housewives, then 25 respondents' parents have jobs in the private sector.

This section provides an overview of the respondents' correct answers. There were two groups described including the pre-test group and the post-test group. The following is a description of the correct answers of respondents in the pre-test group as follows in Figure 5. Based on Figure 5 it can be seen that the lowest is 5 correct answers as many as 1 respondent and the most correct answer is 15 correct answers, 9 respondents are correct. The most correct answers are 12 correct answers, as many as 14 respondents. Furthermore, a detailed description of the results of respondents' answers in the pre-test is given in Figure 5 below:

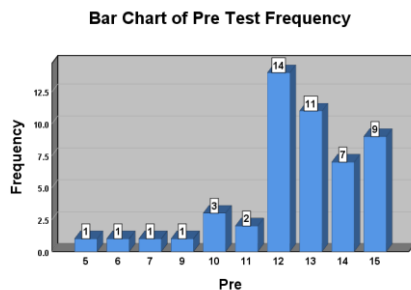


Figure 5. Respondents' correct answers in the pre-test group

The following is a description of the correct answers of respondents in the post-test group as follows in Figure 6. Based on Figure 6 it can be seen that the lowest correct answers are 10 correct answers as many as 1 respondent and the most correct answers are 20 correct answers, answers as many as 4 respondents. The most correct answers are 17 correct answers, as many as 9 respondents. Furthermore, a detailed description of the results of respondents' answers in the post test group is given in Figure 6 below:

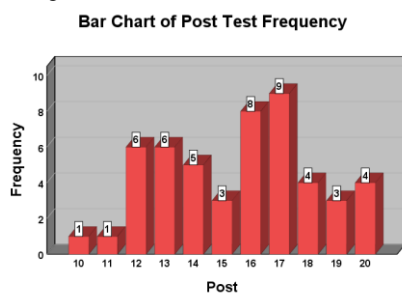


Figure 6. Respondents' correct answers in the post-test group

5. Discussion

There are many factors that contribute to stuttering. Several studies address socioeconomic inequalities, geographic differences, dietary patterns, food security, education, and childhood morbidity, infection, and the environment. [14]. Factors associated with growth, birth length, LBW, protein intake and access to sanitation in children aged 6-59 months [15].

The proportion of stunting problems is greater at the age of less than 2 years. Ideally children who are exclusively breastfed until the age of 6 months. Usually these toddlers will experience rapid growth in both weight and height. After more than 6 months of age, children start receiving complementary foods (MP-ASI) and their motor development improves. That is why children need more food. However, there are some common problems nowadays. Among them, babies have feeding difficulties with the quality and quantity of breast milk decreasing with age. So until the age of 24 months, it can be said that it is an adaptation period to be able to eat foods according to your diet. Usually, after weaning a toddler of 24 months and older, a toddler starts eating more than before weaning. Therefore, nutritional problems, including stunting, do not occur in children >24 months [6].

Stunting may result infection, food intake, birth weight, parental education, parental occupation, and family economic status [17]. The level of education affects a person in receiving information. Better educated people are more receptive to information than people with lower levels of education [7]. The level of education, especially the education level of the mother, has an influence on the nutritional status of family members. Mother's education also affects parenting in children, because mothers are the first and main builder of children's health, food managers in the family and have a big role in improving the nutritional status of family members [5].

According to Nurmalar's (2020) study, stunting in young children is more common in mothers with low education. This is because the community continues to develop a perception that education is not important and is related to family support for higher education, which is still not optimal. Indirectly, the mother's education level affects the mother's ability and knowledge about health services, especially in understanding nutrition information. [8].

Work is an important factor in determining the quality and quantity of food in the family. Parents' work is related to family income, so it can be said that the type of work can also affect the ability to meet the nutritional needs of the family. Working mothers have less time to care for their children compared to mothers who do not work, so it will affect the quality of parenting that affects the nutritional status of children. Mothers who work from morning to evening do not have much time to pay attention to the food and nutritional needs of their children [9].

The work of parents affects the upbringing of children. Maternal parenting is the behavior of a mother caring for or taking care of her child. The mother's behavior includes giving breast milk or supplementary food, teaching appropriate feeding methods, offering foods with high nutritional value, the ability to control the amount of portions eaten, preparing hygienic food, correcting eating habits so that nutrient absorption is achieved. children take it well. At the same time, it is also important to note that the diet must be versatile, so that it makes children happy and they like versatile, healthy and nutritious food. Parenting habits that have been carried out properly and correctly are more common in toddlers with normal height or not experiencing stunting compared to short toddlers who have the same family economic level [10].

Psychoeducation is an activity to increase the understanding of individuals, groups, and communities. Psychoeducation by providing new knowledge about the importance of the 1000 HPK period for children's lives, child development, and parenting patterns. The three information plays an important role in the process of child development in the 1000 HPK period. Psychoeducation in the form of providing information about stunting can help prevent stunting in children and help the community better understand the material to increase knowledge and support to protect themselves from stunting [13]. And can change parenting patterns that often emphasize eating so that it has an impact on children's eating behavior that is different from other children under normal conditions [21].

More effective psychoeducation efforts are carried out continuously and continuously. Methods that are expected to be effective in addition to psychoeducational webinars are to form a forum for youth associations, create WhatsApp groups for sharing [22], or conduct counseling at village halls, counseling Muslim women and door-to-door counseling [23]. In addition, it can also be done with psychoeducational methods on nutrition to help identify, overcome and make correct decisions in overcoming nutritional problems in early childhood or counseling on parenting that can provide benefits regarding parenting activities about nutrition, preparing food, providing food. complementary

breastfeeding, exclusive breastfeeding and care regarding the prevention of various diseases for child growth and development [24, 25] .

6. Conclusion

Stunting psychoeducation is an activity to increase the understanding of individuals, groups, and communities about stunting in children. It can help the community better understand the material to increase knowledge and support to protect themselves from stunting. Effective psychoeducation is carried out on an ongoing basis by forming a forum for youth groups, creating WhatsApp groups for sharing, or conducting counseling at the village hall, counseling for Muslim women and door-to-door counseling.

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3. RIWAYAT REVIEW/REVIEW SUBSTATANSI

Ringkasan Review Substansi:

Comments to the Author:

1. Tidy up the writing by using justify paragraphs
2. Place the figure in the center
3. The writing layout is not quite right

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9. Method

This research will be conducted in Semarang City. Sampling was done using non-probability sampling technique using purposive sampling. The sample in this study were 100 people. By using a questionnaire that will be used as an instrument in the research process, the validity and reliability are tested first. The data will be analyzed using a statistical test, namely SPSS and will then be described quantitatively and qualitatively.

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11. Results

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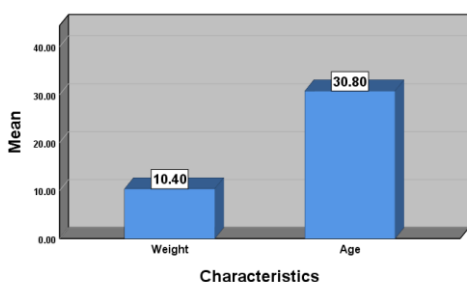


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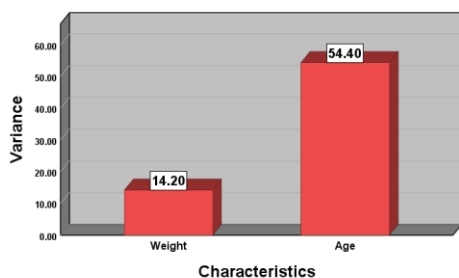


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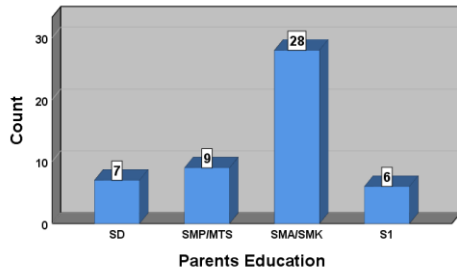


Figure 3. Characteristics of Respondents Based on Parents' Education

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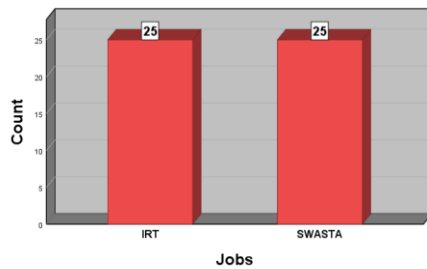


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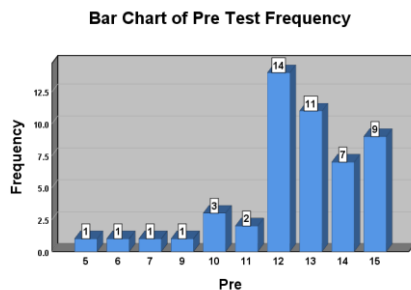


Figure 5. Respondents' correct answers in the pre-test group

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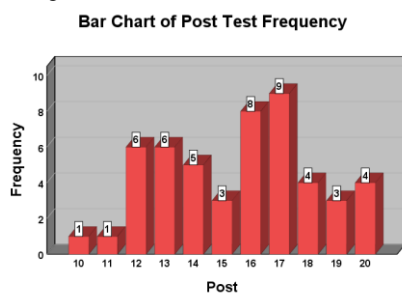


Figure 6. Respondents' correct answers in the post-test group

12. Discussion

There are many factors that contribute to stuttering. Several studies address socioeconomic inequalities, geographic differences, dietary patterns, food security, education, and childhood morbidity, infection, and the environment. [14]. Factors associated with growth, birth length, LBW, protein intake and access to sanitation in children aged 6-59 months [15].

The proportion of stunting problems is greater at the age of less than 2 years. Ideally children who are exclusively breastfed until the age of 6 months. Usually these toddlers will experience rapid growth in both weight and height. After more than 6 months of age, children start receiving complementary foods (MP-ASI) and their motor development improves. That is why children need more food. However, there are some common problems nowadays. Among them, babies have feeding difficulties with the quality and quantity of breast milk decreasing with age. So until the age of 24 months, it can be said that it is an adaptation period to be able to eat foods according to your diet. Usually, after weaning a toddler of 24 months and older, a toddler starts eating more than before weaning. Therefore, nutritional problems, including stunting, do not occur in children >24 months [6].

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Stunting may result infection, food intake, birth weight, parental education, parental occupation, and family economic status [17]. The level of education affects a person in receiving information. Better educated people are more receptive to information than people with lower levels of education [7]. The level of education, especially the education level of the mother, has an influence on the nutritional status of family members. Mother's education also affects parenting in children, because mothers are the first and main builder of children's health, food managers in the family and have a big role in improving the nutritional status of family members [5].

According to Nurmalar's (2020) study, stunting in young children is more common in mothers with low education. This is because the community continues to develop a perception that education is not important and is related to family support for higher education, which is still not optimal. Indirectly, the mother's education level affects the mother's ability and knowledge about health services, especially in understanding nutrition information. [8].

Work is an important factor in determining the quality and quantity of food in the family. Parents' work is related to family income, so it can be said that the type of work can also affect the ability to meet the nutritional needs of the family. Working mothers have less time to care for their children compared to mothers who do not work, so it will affect the quality of parenting that affects the nutritional status of children. Mothers who work from morning to evening do not have much time to pay attention to the food and nutritional needs of their children [9].

The work of parents affects the upbringing of children. Maternal parenting is the behavior of a mother caring for or taking care of her child. The mother's behavior includes giving breast milk or supplementary food, teaching appropriate feeding methods, offering foods with high nutritional value, the ability to control the amount of portions eaten, preparing hygienic food, correcting eating habits so that nutrient absorption is achieved. children take it well. At the same time, it is also important to note that the diet must be versatile, so that it makes children happy and they like versatile, healthy and nutritious food. Parenting habits that have been carried out properly and correctly are more common in toddlers with normal height or not experiencing stunting compared to short toddlers who have the same family economic level [10].

Psychoeducation is an activity to increase the understanding of individuals, groups, and communities. Psychoeducation by providing new knowledge about the importance of the 1000 HPK period for children's lives, child development, and parenting patterns. The three information plays an important role in the process of child development in the 1000 HPK period. Psychoeducation in the form of providing information about stunting can help prevent stunting in children and help the community better understand the material to increase knowledge and support to protect themselves from stunting [13]. And can change parenting patterns that often emphasize eating so that it has an impact on children's eating behavior that is different from other children under normal conditions [21].

More effective psychoeducation efforts are carried out continuously and continuously. Methods that are expected to be effective in addition to psychoeducational webinars are to form a forum for youth associations, create WhatsApp groups for sharing [22], or conduct counseling at village halls, counseling Muslim women and door-to-door counseling [23]. In addition, it can also be done with psychoeducational methods on nutrition to help identify, overcome and make correct decisions in overcoming nutritional problems in early childhood or counseling on parenting that can provide benefits regarding parenting activities about nutrition, preparing food, providing food. complementary

breastfeeding, exclusive breastfeeding and care regarding the prevention of various diseases for child growth and development [24, 25] .

13. Conclusion

Stunting psychoeducation is an activity to increase the understanding of individuals, groups, and communities about stunting in children. It can help the community better understand the material to increase knowledge and support to protect themselves from stunting. Effective psychoeducation is carried out on an ongoing basis by forming a forum for youth groups, creating WhatsApp groups for sharing, or conducting counseling at the village hall, counseling for Muslim women and door-to-door counseling.

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4. MANUSKRIP SETELAH REVISI

The Effectiveness of Digital Psychoeducation Malnutrition in Children Under 6 Years Old in Indonesia

Fitriani Nur Damayanti¹, Lia Mulyanti², Novita Nining Anggraini³, Yuliana Noor Setiawati Ulvie⁴,
Lawitra Khiakham⁵

Abstract— Introduction: Stunting is still a problem in Indonesia. Slowing down toddlers requires special attention because it can slow down children's physical growth, mental development and health. The purpose of this study is to find out a comparison of the effectiveness of digital psychoeducation of malnutrition in children under 6 years of age in Indonesia and Thailand. Methods: This research was conducted in the city of Semarang. Sampling was done using non-probability sampling technique using purposive sampling. Results: Psychoeducation about stunting is effective in increasing parental knowledge about stunting, especially nutrition for children so as to prevent stunting in children under 6 years of age. Conclusion: Stunting psychoeducation is an activity to increase the understanding of individuals, groups, and communities about stunting in children.

Keywords—Digital Psychoeducation, Malnutrition, Children Under 6 Years

15. Introduction

Stunting is still a problem in Indonesia. Stunting is a developmental disorder in children due to chronic malnutrition and repeated infections characterized by substandard length or height. Indonesia has a high prevalence of stunting compared to other middle-income countries [1]. The Study on the Nutritional Status of Indonesian Toddlers (SSGI) in 2020 and 2021 was 24.1% and 24.4% and is expected to decrease to 14% in 2024. The prevalence of stunting in Central Java in 2021 is 20.9% respectively. The prevalence of stunting in Semarang City is 21.3%. Bangetayu Village is one of the stunting loci in Semarang City with 78 stunting cases in 2020, 77 in 2021 and 96 in 2022 [2].

The incidence of stunting is not only in Indonesia, but in other countries such as Thailand. Recent data show that malnutrition remains a major health problem in Thailand with a prevalence of 10.5% of stunting and >5% prevalence of stagnation in children under 5 years of age. The prevalence of stunting in Thailand is 10-12% [3].

Stunting in young children requires special attention as it can lead to stunting, mental development and poor health in children. Recent studies have shown that stunting is associated with poorer academic performance, lower academic performance, and lower incomes in adults. Stunted children are more likely to grow up to be unhealthy and poor adults. Childhood stunting is also associated with increased

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Policies to accelerate stunting reduction, based on many influencing factors, need to be formulated with specific and sensitive interventions [8]. The government has been working through general health centers (Posyandu), but this is sub-optimal as it does not involve all aspects of the community. Cadres and traditional midwives are an important part of the community who are strategic enough to participate in this activity because they are so close to mothers and the community. [9]. Effective policy and program responses to address the nutrition challenges in Indonesia require an understanding of the key drivers of the increasing dual burden of malnutrition in these countries, which have yet to be established. The management of stunting cases in a country is different from one another. It all depends on the regulations in each country. Each country has indicators in accelerating stunting reduction [10].

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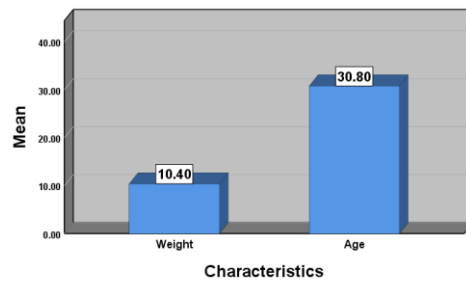


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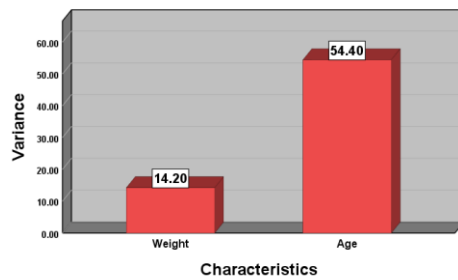


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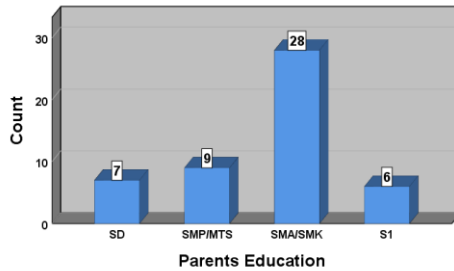


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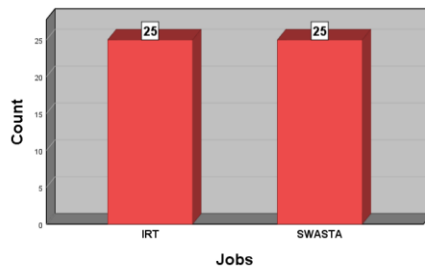


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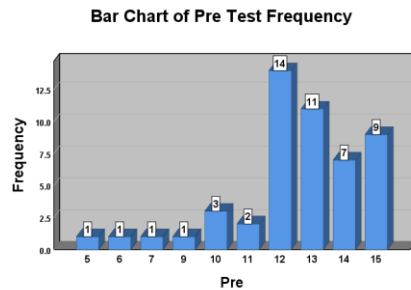


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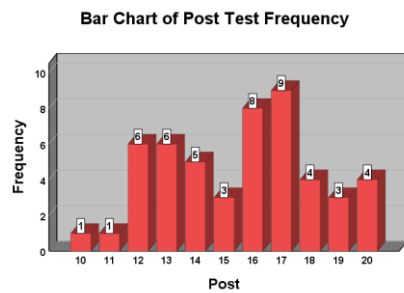


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19. Discussion

There are many factors that contribute to stuttering. Several studies address socioeconomic inequalities, geographic differences, dietary patterns, food security, education, and childhood morbidity, infection, and the environment. [14]. Factors associated with growth, birth length, LBW, protein intake and access to sanitation in children aged 6-59 months [15].

The proportion of stunting problems is greater at the age of less than 2 years. Ideally children who are exclusively breastfed until the age of 6 months. Usually these toddlers will experience rapid growth in both weight and height. After more than 6 months of age, children start receiving complementary foods (MP-ASI) and their motor development improves. That is why children need more food. However, there are some common problems nowadays. Among them, babies have feeding difficulties with the quality and quantity of breast milk decreasing with age. So until the age of 24 months, it can be said that it is an adaptation period to be able to eat foods according to your diet. Usually, after weaning a toddler of 24 months and older, a toddler starts eating more than before weaning. Therefore, nutritional problems, including stunting, do not occur in children >24 months [6].

Stunting may result infection, food intake, birth weight, parental education, parental occupation, and family economic status [17]. The level of education affects a person in receiving information. Better educated people are more receptive to information than people with lower levels of education [7]. The level of education, especially the education level of the mother, has an influence on the nutritional status of family members. Mother's education also affects parenting in children, because mothers are the first and main builder of children's health, food managers in the family and have a big role in improving the nutritional status of family members [5].

According to Nurmalasar's (2020) study, stunting in young children is more common in mothers with low education. This is because the community continues to develop a perception that education is not important and is related to family support for higher education, which is still not optimal. Indirectly, the mother's education level affects the mother's ability and knowledge about health services, especially in understanding nutrition information. [8].

Work is an important factor in determining the quality and quantity of food in the family. Parents' work is related to family income, so it can be said that the type of work can also affect the ability to meet the nutritional needs of the family. Working mothers have less time to care for their children compared to mothers who do not work, so it will affect the quality of parenting that affects the nutritional status of children. Mothers who work from morning to evening do not have much time to pay attention to the food and nutritional needs of their children [9].

The work of parents affects the upbringing of children. Maternal parenting is the behavior of a mother caring for or taking care of her child. The mother's behavior includes giving breast milk or supplementary food, teaching appropriate feeding methods, offering foods with high nutritional value, the ability to control the amount of portions eaten, preparing hygienic food, correcting eating habits so that nutrient absorption is achieved. children take it well. At the same time, it is also important to note that the diet must be versatile, so that it makes children happy and they like versatile, healthy and nutritious food. Parenting habits that have been carried out properly and correctly are more common in toddlers with normal height or not experiencing stunting compared to short toddlers who have the same family economic level [10].

Psychoeducation is an activity to increase the understanding of individuals, groups, and communities. Psychoeducation by providing new knowledge about the importance of the 1000 HPK period for children's lives, child development, and parenting patterns. The three information plays an important role in the process of child development in the 1000 HPK period. Psychoeducation in the form of providing information about stunting can help prevent stunting in children and help the community better understand the material to increase knowledge and support to protect themselves from stunting [13]. And can change parenting patterns that often emphasize eating so that it has an impact on children's eating behavior that is different from other children under normal conditions [21].

More effective psychoeducation efforts are carried out continuously and continuously. Methods that are expected to be effective in addition to psychoeducational webinars are to form a forum for youth associations, create WhatsApp groups for sharing [22], or conduct counseling at village halls, counseling Muslim women and door-to-door counseling [23]. In addition, it can also be done with psychoeducational methods on nutrition to help identify, overcome and make correct decisions in overcoming nutritional problems in early childhood or counseling on parenting that can provide benefits regarding parenting activities about nutrition, preparing food, providing food. complementary

breastfeeding, exclusive breastfeeding and care regarding the prevention of various diseases for child growth and development [24, 25] .

20. Conclusion

Stunting psychoeducation is an activity to increase the understanding of individuals, groups, and communities about stunting in children. It can help the community better understand the material to increase knowledge and support to protect themselves from stunting. Effective psychoeducation is carried out on an ongoing basis by forming a forum for youth groups, creating WhatsApp groups for sharing, or conducting counseling at the village hall, counseling for Muslim women and door-to-door counseling.

21. Reference

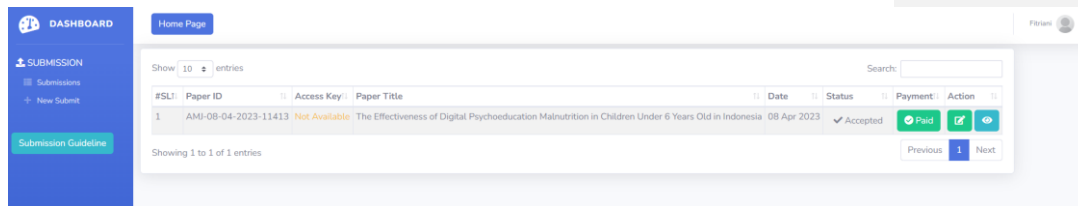
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5. IN PRESS/ACCEPTED



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Azerbaijan Medical Journal

Date: 09 Apr 2023
Sub: Paper Accepted
Paper ID: **AMJ-08-04-2023-11413**

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The current condition of the paper is fully ok and need no further edit for the publications. The editor is really pleased to see this kind of paper and the research applications. In order to proceed for publication, kindly send the Application process charge of the publication within 7 days and submit the completed copyright Agreement paper into your Author Dashboard or through the mail. you can submit it as soon as your payment is done.

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6. ARTIKEL SUDAH PUBLISH

The Effectiveness of Digital Psychoeducation Malnutrition in Children Under 6 Years Old in Indonesia

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Keywords:

Digital Psychoeducation,
Malnutrition, Children Under 6
Years

ABSTRACT

Stunting is still a problem in Indonesia. Slowing down toddlers requires special attention because it can slow down children's physical growth, mental development and health. The purpose of this study is to find out a comparison of the effectiveness of digital psychoeducation of malnutrition in children under 6 years of age in Indonesia and Thailand. This research was conducted in the city of Semarang. Sampling was done using non-probability sampling technique using purposive sampling. Psychoeducation about stunting is effective in increasing parental knowledge about stunting, especially nutrition for children so as to prevent stunting in children under 6 years of age. Stunting psychoeducation is an activity to increase the understanding of individuals, groups, and communities about stunting in children.



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1. Introduction

Stunting is still a problem in Indonesia. Stunting is a developmental disorder in children due to chronic malnutrition and repeated infections characterized by substandard length or height. Indonesia has a high prevalence of stunting compared to other middle-income countries [1]. The Study on the Nutritional Status of Indonesian Toddlers (SSGI) in 2020 and 2021 was 24.1% and 24.4% and is expected to decrease to 14% in 2024. The prevalence of stunting in Central Java in 2021 is 20.9% respectively. The prevalence of stunting in Semarang City is 21.3%. Bangetayu Village is one of the stunting loci in Semarang City with 78 stunting cases in 2020, 77 in 2021 and 96 in 2022 [2].

The incidence of stunting is not only in Indonesia, but in other countries such as Thailand. Recent data show that malnutrition remains a major health problem in Thailand with a prevalence of 10.5% of stunting and >5% prevalence of stagnation in children under 5 years of age. The prevalence of stunting in Thailand is 10-12% [3].

Stunting in young children requires special attention as it can lead to stunting, mental development and poor

health in children. Recent studies have shown that stunting is associated with poorer academic performance, lower academic performance, and lower incomes in adults. Stunted children are more likely to grow up to be unhealthy and poor adults. Childhood stunting is also associated with increased susceptibility of children to both communicable and non-communicable diseases (NCDs) and increased risk of overweight and obesity. Prolonged overweight and obesity can increase the risk of degenerative diseases. Cases of child stunting can be used as an indicator of the poor quality of a country's human resources. Stunting causes cognitive decline, lower productivity and increased disease risk, resulting in long-term losses to Indonesia's economy [4]. Stunting can be caused by several factors, namely parental height, food intake, birth weight [5]. The effects of low birth weight infants continue from generation to generation, and low birth weight infants have delayed anthropometric development [6]. In addition, parenting in terms of children's health can have an impact on the incidence of stunting in children. This is because parents have different backgrounds both in terms of education, work, family nutrition and the number of family members [7].

Policies to accelerate stunting reduction, based on many influencing factors, need to be formulated with specific and sensitive interventions [8]. The government has been working through general health centers (Posyandu), but this is sub-optimal as it does not involve all aspects of the community. Cadres and traditional midwives are an important part of the community who are strategic enough to participate in this activity because they are so close to mothers and the community [9]. Effective policy and program responses to address the nutrition challenges in Indonesia require an understanding of the key drivers of the increasing dual burden of malnutrition in these countries, which have yet to be established. The management of stunting cases in a country is different from one another. It all depends on the regulations in each country. Each country has indicators in accelerating stunting reduction [10].

Preventing and overcoming stunting can be done by providing education on parenting patterns related to child nutrition, including the amount of nutritional intake and the quality of the food to be given. Rahmandiani (2019) stated that nutrition is very important for the growth process and development of children. Maternal nutritional knowledge is very important for the prevention and treatment of stunting, as a variety of foods can provide adequate nutrition [11]. Parents should be informed about the nutrition and nutrients that should be given to their children, including those related to food hygiene and environmental hygiene, and the appropriate use of health facilities to overcome the problems they face, especially those related to their nutrition. It is necessary to understand [12]. Psychoeducation in the form of providing information about stunting can help prevent stunting in children and help the community better understand the material for increasing knowledge and support for self-protection [13].

2. Method

This research will be conducted in Semarang City. Sampling was done using non-probability sampling technique using purposive sampling. The sample in this study were 100 people. By using a questionnaire that will be used as an instrument in the research process, the validity and reliability are tested first. The data will be analyzed using a statistical test, namely SPSS and will then be described quantitatively and qualitatively.

3. Ethical Clearance

This study was approved by the Research Bioethics Committee of the Faculty of Medicine, Sultan Agung Islamic University, Semarang No. 396/X/2022/Commission on Bioethics

4. Results

Characteristics of Respondents Based on Mean

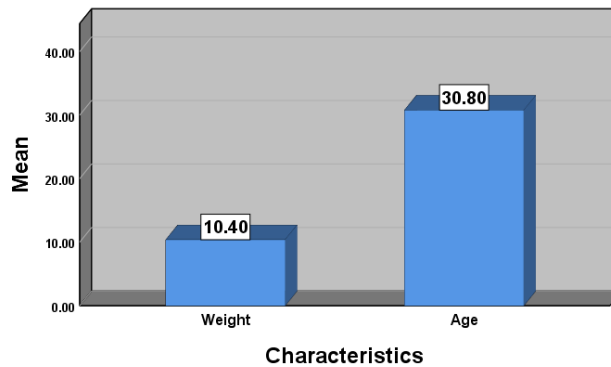


Figure 1. Characteristics of Respondents Based on the Mean

Based on Figure 1. Characteristics of Respondents Based on the above average, it can be seen that the average weight of the respondents (children aged 6 years and under) is 10.40 kilograms while the average age of the respondents is 30.80 months. So the following are the characteristics of respondents based on variance as follows:

Characteristics of Respondents Based on Variance

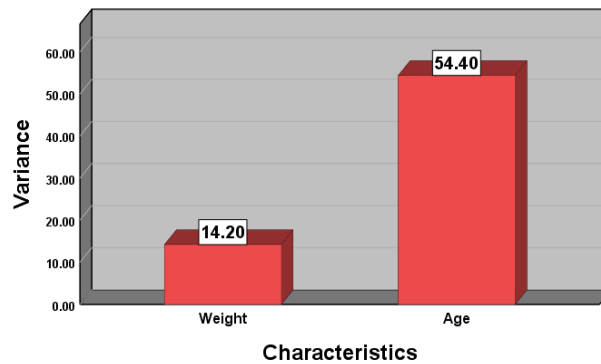


Figure 2. Characteristics of Respondents Based on Variance

Based on Figure 2. Characteristics of Respondents Based on the variance above, it can be seen that the weight variance of the respondents (children aged 6 years and under) is 14.20 kilograms while the age variance of the respondents is 54.40 months. This shows that the age of the respondent has a more varied value than the respondent's weight.

The following in Figure 3 contains a description of the respondents based on the education of the respondents' parents:

Characteristics of Respondents Based on Parents' Education

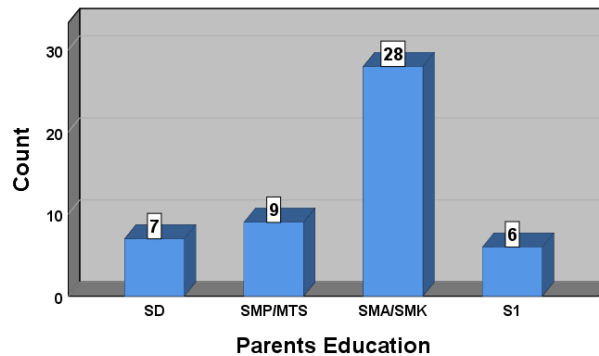


Figure 3. Characteristics of Respondents Based on Parents' Education

Based on Figure 3. Characteristics of Respondents Based on Parental Education, 7 respondents' parents had a basic education level (SD), then 9 respondents' parents had a junior high school education level (SMP/MTS), and 28 respondents' parents had a high school education level. SMA/SMK education and as many as 6 respondents' parents have a bachelor's level of education (S1).

The following in Figure 4 contains a description of the respondents based on the occupations of the respondents' parents:

Characteristics of Respondents Based on Parents Job

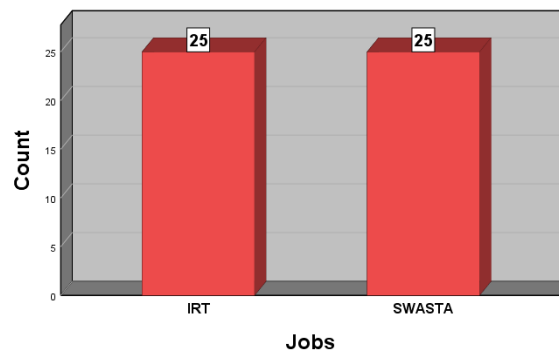


Figure 4. Characteristics of Respondents Based on Parents' Occupation

Based on Figure 4. Characteristics of Respondents Based on Parents' Occupation, 25 respondents' parents have jobs as housewives, then 25 respondents' parents have jobs in the private sector.

This section provides an overview of the respondents' correct answers. There were two groups described including the pre-test group and the post-test group. The following is a description of the correct answers of respondents in the pre-test group as follows in Figure 5. Based on Figure 5 it can be seen that the lowest is 5 correct answers as many as 1 respondent and the most correct answer is 15 correct answers, 9 respondents are correct. The most correct answers are 12 correct answers, as many as 14 respondents. Furthermore, a detailed description of the results of respondents' answers in the pre-test is given in Figure 5 below:

Bar Chart of Pre Test Frequency

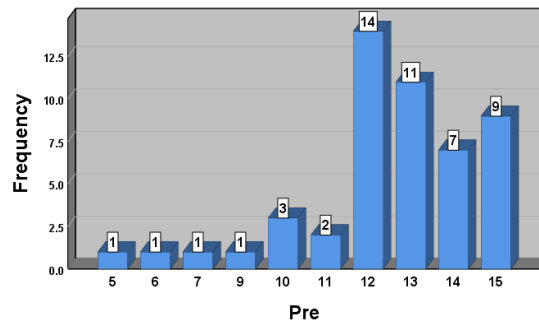


Figure 5. Respondents' correct answers in the pre-test group

The following is a description of the correct answers of respondents in the post-test group as follows in Figure 6. Based on Figure 6 it can be seen that the lowest correct answers are 10 correct answers as many as 1 respondent and the most correct answers are 20 correct answers, answers as many as 4 respondents. The most correct answers are 17 correct answers, as many as 9 respondents. Furthermore, a detailed description of the results of respondents' answers in the post test group is given in Figure 6 below:

Bar Chart of Post Test Frequency

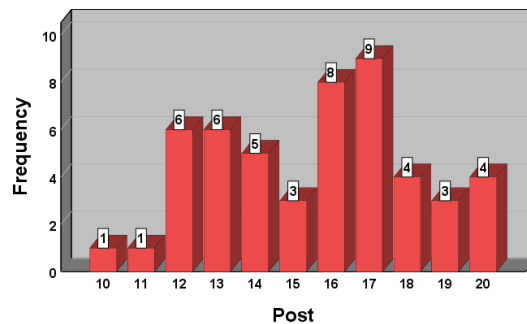


Figure 6. Respondents' correct answers in the post-test group

5. Discussion

There are many factors that contribute to stuttering. Several studies address socioeconomic inequalities, geographic differences, dietary patterns, food security, education, and childhood morbidity, infection, and the environment [14]. Factors associated with growth, birth length, LBW, protein intake and access to sanitation in children aged 6-59 months [15].

The proportion of stunting problems is greater at the age of less than 2 years. Ideally children who are exclusively breastfed until the age of 6 months. Usually these toddlers will experience rapid growth in both weight and height. After more than 6 months of age, children start receiving complementary foods (MP-ASI) and their motor development improves. That is why children need more food. However, there are some common problems nowadays. Among them, babies have feeding difficulties with the quality and quantity of breast milk decreasing with age. So until the age of 24 months, it can be said that it is an adaptation period to be able to eat foods according to your diet. Usually, after weaning a toddler of 24 months and older, a toddler starts eating more than before weaning. Therefore, nutritional problems, including stunting, do not occur in children >24 months [6].

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According to Nurmalasar's (2020) study, stunting in young children is more common in mothers with low education. This is because the community continues to develop a perception that education is not important and is related to family support for higher education, which is still not optimal. Indirectly, the mother's education level affects the mother's ability and knowledge about health services, especially in understanding nutrition information [8].

Work is an important factor in determining the quality and quantity of food in the family. Parents' work is related to family income, so it can be said that the type of work can also affect the ability to meet the nutritional needs of the family. Working mothers have less time to care for their children compared to mothers who do not work, so it will affect the quality of parenting that affects the nutritional status of children. Mothers who work from morning to evening do not have much time to pay attention to the food and nutritional needs of their children [9].

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More effective psychoeducation efforts are carried out continuously and continuously. Methods that are expected to be effective in addition to psychoeducational webinars are to form a forum for youth associations, create WhatsApp groups for sharing [22], or conduct counseling at village halls, counseling Muslim women and door-to-door counseling [23]. In addition, it can also be done with psychoeducational methods on nutrition to help identify, overcome and make correct decisions in overcoming nutritional problems in early childhood or counseling on parenting that can provide benefits regarding parenting activities about nutrition, preparing food, providing food. complementary breastfeeding, exclusive breastfeeding and care regarding the prevention of various diseases for child growth and development [24],

[25].

6. Conclusion

Stunting psychoeducation is an activity to increase the understanding of individuals, groups, and communities about stunting in children. It can help the community better understand the material to increase knowledge and support to protect themselves from stunting. Effective psychoeducation is carried out on an ongoing basis by forming a forum for youth groups, creating WhatsApp groups for sharing, or conducting counseling at the village hall, counseling for Muslim women and door-to-door counseling.

7. Reference

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