School for Parents: Family Education Development throughout the First 1000 days of Life for Accelerating Stunting Reduction in Brebes Regency

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Abstract

The First 1000 Days of Life is the foundation for the afterlife in the human life cycle. Determination of the quality of human resources starts from the conception period to the age of two years. The purpose of this research was to develop family education in the first 1000 days of life as an effort to accelerate stunting with design of "school to parent" in Brebes Regency. The development research was designed through a preliminary study conducted with a qualitative descriptive approach to see the potential and problems that occurred, followed by a model development design and carried out design validation and design improvement, followed by a limited trial of the model design by applying the experimental method, continued product revisions and final product development. Based on the results, the model developed is declared very valid so that it can be used in the field; while the results of the limited trial show that the model is declared very practical and gets a very good response with a score. The effectiveness test is stated that the level of practicality is in the very practical category and gets very good response.

Keywords:

Family education, 1000 days of life, stunting.

1. Introduction

Childhood is a period or stage of age that determines the quality of humans at a later age. The critical period of a child occurs until the age of the first two years which is often known as the First 1000 Days of Life (HPK). The process of growth and development requires full attention from the family and surrounding environment because it does not rule out growth and development deviations (Borg & Gall, 1983). The incidence of stunting starts from the time the fetus is in the womb to the age of two years after birth. The long-term impact of stunting is physical and neurocognitive growth disorders. On this basis, stunting becomes a global health problem (A Rahmawati. et al., 2013). Inaccurate anthropometric measurements and the assumption that short children are natural are the challenges in overcoming stunting. In Indonesia, human resource development through reducing the stunting rate is included in the five national development priorities (Marchianti et al., 2017). Efforts have been made to reduce the stunting rate in each district/city in the form of Ministry of Health programs and across Ministries. Sensitive intervention is a form of crossministerial program covering food security, social networking, women's empowerment, maternal and child health, environmental sanitation, child protection and education in the form of classes (Djauhari, 2017).

The highest prevalence of stunting in Central Java Province in 2017 was in Brebes Regency at 32.7%. In 2018, Brebes Regency became one of the districts that received direct intervention from the Ministry of Health. There were obstacles in alleviating stunting in Brebes Regency; one of which is the improper behavior of the community/ toddler's family in terms of feeding babies and children. This shows that parents have a big share in reducing the stunting rate (S. Nurkomala, 2017).

The involvement of parents is already in the education unit with the aim that parents understand the abilities of children, can support student achievement and support the success of school programs. Parents are the heart of a family's life. The family described by Ki Hajar Dewantara is a collection of individuals who have a sense of unconditional devotion, for the benefit of all individuals who take shelter in it (Fitri, 2018). Family education is the process of providing positive values for child development for the next (Khoeroh & Indriyanti, 2017). On the basis of

this family education, it is important to know that parents are a subject that needs to be prepared in order to strengthen family functions as the foundation for human resource development.

One of the benchmarks for the success of human resource development is the reduction in the prevalence of stunting. There are two interventions in handling stunting at this time, namely sensitive and specific interventions. Both interventions are strongly influenced by the role of the family, and the role of parents is the strongest leverage in the success of sensitive stunting interventions. It is interesting to study that the development of family education with the design of schools for parents is expected to be able to contribute to accelerating the reduction of stunting. This study was aimed to develop a family education model in the First 1000 Days of Life (HPK) as an effort to accelerate the decline in stunting in Brebes Regency.

1.1 Objectives

Currently, stunting is one of the threats in the development of superior quality human resources, it is based on research that a person can experience neurocognitive disorders when suffering stunting (Onis & Branca, 2016). The breakthrough that can be done is to develop family education within 1000 HPK through the school desan to become a parent. This research is expected to be able to form the design of schools for parents that have an impact on the decreasing stunting rates in Brebes Regency.

2. Literature Review

Based on BPS data (2018), the percentage of poor people in September 2017 in Indonesia was 10.12%, and more than 60% of poor families are in rural areas. Poverty has an impact on family life, including decreased income and purchasing power so that the fulfillment of the needs for education, health and food is inadequate. Stunting is one of the nutritional problems in Indonesian society that has not been resolved to date. Based on the nutritional status monitoring data, the Ministry of Health (2018), the prevalence of short children under five has increased from 27.5% in 2016 to 29.6% in 2017.

The most appropriate treatment for stunting is in the first 1000 days of life from pregnancy to the age of 2 years old. The main foundation of human life in the future can be influenced by parenting in the first 1000 days of life starting from the beginning of conception or during 270 days of gestation and 730 days after birth (up to 2 years old). In that period, there is fast brain development, body growth, and development of the body's metabolic system and the formation of the immune system. In addition, 200 days before conception must be prepared properly such as consuming vitamin B3, folic acid, and DHA (BKKBN, 2020). Nutritional deficiencies in early life can result in impaired brain growth that lasts into adulthood due to loss of brain function, the followings are the short-term and long-term impacts (Goergieff et al., 2018). Short term: Morbidity increases; Mortality increases; Disability increases Long-term; Size short stature; Intellectual limitations; Low productivity; Reproduction; Metabolic and cardiovascular diseases.

Globally, stunting is one of the problems that hinder human development. Some of the causes of stunting are the lack of nutritional intake from the womb to after birth, lack of access to health services and access to clean water and sanitation. Stunting can also be caused by the nutritional status of mother during pregnancy, a long history of short birth weight, a history of Low Birth Weight Infants (LBW), a history of breastfeeding, a history of complementary foods, maternal height, number of families, economic status, educational level and parental occupation related to parenting (Nurkomala et al., 2018; Kanto et al., 2020; Umanailo, 2020). The causes of stunting were the presence of Chronic Energy Deficiency (CED) in pregnant women which was 17.3% in 2018 related to the incidence of anemia and LBW (Low Birth Weight Babies) which was 10.2% in 2015, social inequality, exclusive breastfeeding, parental income and education, and maternal factors and parenting (Agritubella & Delvira, 2020).

"Childhood stunting is the impact of chronic malnutrition or past growth failure and a long-term indicator of malnutrition in children. Stunting is chronic malnutrition caused by insufficient nutritional intake for a long time due to feeding that is not in accordance with nutritional needs13. Impaired growth in the body is one form of stunting. According to a study conducted in Indonesia, male babies are at twice the risk of suffering from stunting than female ones14. A research conducted in Nigeria also showed that boys are more at risk of suffering from stunting. The other research also states that children are strong predictors of stunting and severe stunting in children aged 0-23 months and 0-59 months (Ali et al., 2017)."

The role of the family in various aspects of child's life is very important. Family for every child is the realm of early education, not just an action (process), but it is present in practice and implementation carried out by parents with the value of education in the family. According to Berns, the function of family is the functions of reproduction, carrying out education and socialization in society, building social rules, taking economic action and building support for children's emotional development processes (Rahmawati et al., 2013). Parenting education programs are included in adult education. Adult education, according to Sudjana, is for adults in their community so that they can develop their abilities, enrich their knowledge, improve their skills and professions, acquire new ways and change adult attitudes and behavior. Family is the smallest unit in society that plays an important role in the development of children. Parents have an obligation to care for a child. Nurturing is the tasks of leading, guiding, and managing. Parenting means educating and caring for children; taking care of eating, drinking, clothing, and success in the first period to adulthood (Rahmawati et al., 2013). Parenting style is one of the factors indirectly related to the nutritional status of children, which includes stunting. The quantity and quality of nutrition in children's food really needs attention because malnutrition causes delayed body and brain growth, and low resistance to infection (Antari, 2020). Family education on the care of 1000 HPK is something given by the family to build a prosperous family and efforts to form quality resources. Caring includes activities to support optimal children's development and be able to survive (Putri et al., 2020). Parenting is a long process in a child's life and its care from prenatal to adulthood with the aim of achieving optimal children's competence such as physical competence, nutrition, children's health, intellectual competence, emotional, social, moral, and self-confidence (Hastuti, 2015). The Toddler Family Development Program (BKB) is a socialization or counseling service for parents and other family members in caring for and fostering growth and development of children aged 0 to 5 years through physical, mental, intellectual, spiritual, emotional, social and moral stimulation activities to create Quality human resources. BKB cadres are members of community who receive education or training and carry out their duties voluntarily in fostering and providing counseling to parents and family members on how to properly and appropriately care for children (Kosasih, 2020).

"Presidential Regulation number 42/2013 concerning the National Movement for Nutrition Improvement is one of the efforts to support the policies in concern for accelerating improvement of nutrition in 1000 HPK. With the issuance of this Presidential Decree, more concrete efforts are needed, focusing on 1000 HPK and integrating activities across programs (specific efforts) and across sectors (sensitive efforts) by all stakeholders (Kemensos Indonesia, 2015). Therefore, stunting prevention can be implemented from the start through monitoring 1000 HPK which is the responsibility of all parties, including policy makers, health workers, and surrounding community. Health cadres are the most important source of information for the community and play an important role in providing correct information to the public to shape the behaviors in health sector, such as health knowledge and counseling. In addition, health cadres must also have the skills in conveying information (Rahmawati et al., 2013). Technically, the duties of cadres related to nutrition are to collect data on toddlers, to conduct nutrition education, and to visit homes of breastfeeding mothers and the mothers with children under five. The cadres in charge receive special training in order to provide knowledge and skills as trainers. Cadres are expected to be able to become motivators, initiators, and community extension agents in order to increase their ability to provide information on how to care for and fulfill nutrition and child development, particularly two-year-old babies (baduta) (Kosasih, 2020).

"The use of IHC are expected to solve the problems of stunting in accordance with the health ministry's vision to create a healthy society, independent, and fair with a mission to improve public health, community empowerment, including the private sector and civil society (Kemenkes, 2012; Megawati & Wiramihardja, 2019). 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 (Peraturan Menteri Kesehatan Republik Indonesia No.65 Tahun 2013 Tentang Pedoman Pelaksanaan dan Pembinaan Pemberdayaan Masyarakat Bidang Kesehatan, 2013). Posyandu target communities are in accordance with the targets of specific nutrition interventions for stunting treatment. It is a place for pregnant and breastfeeding women, infants and toddlers to get services, which include maternal and child health in the form of monitoring growth and development, giving vitamin A capsules, immunization, prevention and control of diarrhea, nutritional counseling according to the problem, and family planning."

3. Methods

This research was an educational research with a development approach (Research and Development / R & D). The Research and Development research is a research method used to produce certain products and to test the effectiveness of the products.

3.1 Research Design

The development research was designed through a preliminary study conducted with a qualitative descriptive approach to see the potential and problems that occurred, followed by the design of model development, design validation, and design improvements. Then, it was followed by limited trial model design by applying the experimental method (*one group pretest posttest design*), continued with product revisions if any and with the development of the final product. The research design is described as follows:

Table 1. The research design of one group pretest posttest design

Class	Pre-test	Treatment	Post-test
Experiment	O_1	X	O_2

Where: O1: pre-test for experimental class; O2: post-test for experimental class; X: treatment, treatment with family education model

3.2 Data Collection Technique

The data collection techniques used during the preliminary study used observation, interviews and document studies. These techniques were used to see the potential and existing problems during the development study using product design. Then, during limited trials, the tests and questionnaires were used to find out and measure the success of the product.

3.3 Data Analysis

The data analysis in this research was descriptive statistical analysis. The data analyzed were: Analysis of Expert Validation Sheet Results; The validation questionnaire was analyzed using a Likert scale with a score scale of 1 to 5, with the following conditions: poor = 1, fair = 2, good enough = 3, good = 4, very good = 5. After the questionnaire was validated by the validator, the questionnaire was analyzed and presented. Sugiyono (2010) states that the average percentage of each component is calculated using the formula:

Table 2. Guidelines for Assessment on the Validity of Development Products

Percentage (%)	Criteria for Validity	Information
80 - 100	Very valid	No revision
66 - 79	Valid	No revision
55 - 65	Quite valid	No revision
40 - 55	Less valid	Revision
30 - 39	Not valid	Revision

The product of family education model is valid when it gets a minimum score from the validator on valid criteria. Analysis of Product Effectiveness of Family Education Model; Analysis of the Level of Implementation/ Practicality The implementation was observed by providing an assessment on a scale of values and rating categories as follows: not implemented = 1, less implemented = 2, sufficiently implemented = 3, implemented = 4, highly implemented = 5. The compliance data were analyzed using descriptive percentages according to Trianto (Khumaedah, 2013). From the percentage obtained, it was then transformed into a table so that the reading of the research results are easy. Family education model is implemented when it is minimum at the criteria of implemented. The interpretation of the calculation is as follows:

Table 3. Interpretation of Implementation Scores (Arikunto, 2009)

Percentage (%)	Criteria
80-100	Highly implemented
66 - 79	Implemented
55 - 65	Quite implemented
40 - 55	Less implemented
30 - 39	Not implemented

User Response Analysis; The data obtained from the user response questionnaire were then analyzed to test the feasibility of the family education model developed by the researchers. The user response questionnaires were also analyzed using a Likert scale with a scale ranging from a score of 1 to a score of 5 with the following conditions: poor

= 1, fair = 2, good enough = 3, good = 4, very good = 5. After the questionnaires were filled in by the students, the questionnaires were analyzed using the following formula:

From the percentages obtained, they were then transformed into a table so that the reading of the research results wass easy. The family education model is successful when it gets a minimum response from the users on the criteria of Good. The interpretation of the calculation is as follows:

Table 4. Interpretation of User Response Scores (Arikunto, 2009)

Percentage (%)	Criteria
80 - 100	Very good
66 - 79	Good
55 - 65	Quite good
40 - 55	Fair
30 - 39	Poor

4. Results and Discussion

Parenting School (SMO) is an effort to provide education related to parenting to reduce the prevalence of stunting in children during the first 1000 days of life (HPK). In realizing the school to become a parent, three stages were needed: Preparation stage: analyzing needs based on the problem, determining the location and subject of Cigadung Village, Brebes regency with a stunting rate of 79 cases; Implementation stage; Implementing the Annual SMO action plan / program by optimizing all available resources. Implementation of the parenting-based SMO program in the form of project-based classes and cross-sector collaboration.

The developments of the family education model in the first 1000 days of life (HPK) were in the following stages: Define Stage; At this stage, the components to be included in the family education model were determined. Content information was obtained through focus group discussions with selected parents in Brebes Regency. Input and suggestions from parents were the main things because the purpose of this tool was for the needs of parents to assist children in the family; Design stage. The design of the family education model was made by paying attention to the characteristics of family education. The material and media content were made based on input from parents. Development Stage. At this stage, the development of parental education model was carried out. The steps taken were as follows: Determining the components of the family education model. The results of the meeting with parents determined that the components that need to be included in the parental education model were the introduction, competence, material, evaluation and function of the parental assistance; Developing the model based on the agreed content; Conducting expert validity test. Expert validity test was conducted to measure whether the parental education model developed is appropriate for publication in the community or not. Based on the results of the expert validity test, it can be said that the device developed is valid and can be used in accordance with the input from the validator. The following are the suggestions from the validator.

Table 5. Validator Suggestion

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	Validator%	Notes	Suggestions / Feedback
Academician	96.0%	Very Valid	The model has been good, there needs to be an additional explanation of competence, materials, evaluation, and function models
Practitioners	98.4%	Very Valid	The model has been good, language and structure are easy to understand. In its implementation, it is expected that there will be more elements who feel the model.
Means	90.96	Very Valid	

The results of the validator's input state that the family education model is valid but there are still parts that need to be added or revised according to the notes in the table. After repairs are made, the model is ready to use for stunting management purposes.

After declared valid by the validator, the model was tested on a limited basis to 5 respondents consisting of the elements of PAUD educators, housewives, midwives and Posyandu / BKB cadres. The results of the limited trial are in the following table:

Table 6. Limited trial of the Family Education Model

Indicator	%	Ket
Level of practicality	85.33	Very practical
Teacher's response	85.11	Very good
Means	84.33	

The purpose of conducting this limited trial test was to see whether the model is practical to use and to determine the user response to the family education model or not.

The effectiveness of the family education model can be seen from two indicators; the level of practicality and the user response to the family education model. Based on the trials from the users of the family education model extensively in Brebes Regency, the following results were obtained:

Table 7. Practicality Level of Learning Instruments

Indicator	%	Notes
Clarity of instructions	89.63	Very Practical
Competency Achievement	90.89	Very Practical
Time Achievement	84.44	very Practical
Means	88.32	very Practical

Family is the smallest unit in society that plays an important role in the development of children. Parents have an obligation to care for a child, and parenting is the duty to lead, guide and manage. According to Drajat (in (Rahmawati et al., 2013), parenting means educating and caring for children, taking care of eating, drinking, clothing, and their success in the first period to adulthood.

Indra (2020) states that parenting is one of the factors that is indirectly related to the nutritional status of children, which includes stunting. The quantity and quality of nutrition in children's food really needs attention because malnutrition causes delayed body and brain growth and low resistance to infection. Hoghughi (in Putri et al., 2020) said that family education about the care of 1000 HPK is something given by families to build a prosperous family and efforts to form quality resources. Care includes activities to support optimal children's development and the ability to survive.

The presence of good parenting styles (paying attention to food and maintaining children's health) affects their nutritional status. It needs to be underlined that, in children care, mother is the person who is most involved, so she has a huge influence on her child's development (Milah et al., 2019). Maternal knowledge on poor child nutrition is influenced by various factors, including educational factors and lack of care or mother's curiosity on nutrition so that it has a negative impact on the growth and development of their children who will experience a period of growth such as stunting. Continuous nutrition improvement is supported by the national movement for the first 1000 days of life. Nutritional status in the first thousand days of life (1000 HPK) is a critical period because the consequences are permanent and cannot be repaired. This 1000 HPK group includes pregnant women, nursing mothers, and children less than 2 years of age. Therefore, the nutrition program policy is focused on the 1000 HPK group.

Marchiati et al (Marchianti et al., 2017) explain that the efforts that can be made to improve nutritional quality for the 1000 HPK group are carried out by providing knowledge of nutrition, production, diversification, and consuming nutritious food ingredients. Presidential Regulation number 42/2013 concerning the National Movement for Nutrition Improvement is an effort to support the policies in concern for the acceleration of nutrition improvement in 1000 HPK. With the issuance of this Presidential Decree, more concrete efforts are needed, focusing on 1000 HPK and integration of activities across programs (specific efforts) and cross-sectoral (sensitive efforts) by all stakeholders (Ministry of Social Affairs of the Republic of Indonesia, 2015). Therefore, stunting prevention can be applied from the start by monitoring 1000 HPK which is the responsibility of all parties, both policy makers, health workers, and the surrounding community.

According to the Millennium Challenge Account Indonesia (in Djauhari (Djauhari, 2017)) stunting may occur starting from a fetus that is still in the womb and only appears when the child is two years old. Some of the causes of stunting are inadequate intake of nutrients that are absorbed by the body from the womb to after birth, lack of access to health services, access to clean water and sanitation. Stunting may also be caused by nutritional status of mother during pregnancy, a long history of short birth weight, a history of Low Birth Weight Infants (LBW), a history of breastfeeding, a history of complementary foods, maternal height, number of families, economic status, educational level and parental occupation, and parenting (S. Nurkomala, 2017). Supported by Agritubella and Delvira (2020), they also said that the causes of stunting include Chronic Energy Deficiency (CED) in pregnant women which was 17.3% in 2018 and related to anemia, as well as LBW (Low Birth Weight Babies) reaching 10.2% in 2015, social inequality, exclusive breastfeeding, parents' income and education, and maternal factors and parenting styles.

The prevalence of *stunting* is closely related to birth weight and breastfeeding (Fitri, 2018). Breast milk increases the baby's immunity and lowers the risk of infection. The infants who are not properly breastfed are at risk of suffering from various infections due to insufficient and unhygienic diets. The provision of infant and child food greatly determines children's growth (Khoeroh & Indriyanti, 2017). One of the triggers for stunting in children under five is the low level of exclusive breastfeeding that arises from the past and has an impact on the child's future. Conversely, when breast milk is given properly by the mother, it helps maintain the balance of child's nutrition so that normal growth can be achieved. Babies really need breast milk in the growing stages for their nutritional needs to be fulfilled. Therefore, exclusive breastfeeding is mandatory until the age of 6 months which is then continued until the baby is 2 years old (Al Rahmad et al., 2013).

At the development stage, a family education model was produced in Brebes District. The model used must be declared valid by the expert. Validity according to Nieven in Rochmad (2012) can be seen from the products produced (family education model product) and related products consistently between one another (*material*). Based on the validation value of the expert team, the developed device was declared very valid by the expert or in other words it could be used with a few revisions. Thus, the model could be used for field testing and could then be further refined based on suggestions and input from all components.

The product of the family education model produced in this study needs to be known for its practicality. Practicality is the conveniences that exist in a product both in preparing, using, interpreting and storing (Arikunto, 2010). Products are said to be practical, which can be seen from the indicators of implementation (Nieveen in Subekti, 2012; Ervina et al., 2019; Rumaolat et al., 2019)). From the results of the practicality questionnaire filled in by the users in the extensive trial, it was stated that the criteria were very practical. This can be an indicator that the family education model is very practical to use. Besides, it is necessary to measure the level of effectiveness to be valid and practical learning device products. Effectiveness according to Akker in Rizka (2014) refers to the level that experience and intervention results are consistent with the objectives to be achieved. The indicators of effectiveness can be seen from learning outcomes, responses and motivation to participate in learning.

First, the effectiveness was seen from the level of implementation in broad trials. The results of the broad trial analysis of the practicality level show a score of 82.31%. It means that the product is very practical to use. Second, the effectiveness was seen from the user's response. In this study, the product of the family education model received a very good response from the users with a score of 89.70%.

5. Conclusion

Based on the research results of and discussion, it can be concluded that the school to become parents: a family education development model in 1000 HPK, was carried out through the following steps: defining, designing, developing and disseminating. The results of the expert and practitioner validator assessment show that the developed model is declared very valid with a score of 90.96% so that it can be used in the field. Then, the limited trial results show that the model is declared very practical by obtaining a score of 85.33% and gets a very good response with a score of 85.11%. The effectiveness test states that the practicality level of the model obtains a score of 88.32% in the very practical category and gets a good response with a score of 89.70%. The benefits of this research for the community is they can increase the motivation to synergize to reduce the incidence of stunting. Besides, for the Brebes Regency government can be used as a consideration in formulating stunting reduction policies that are in accordance with the needs and problems of each village.

References

- A., R., B., & A., S. (2013). Hubungan antara Karakteristik Ibu, Peran Petugas Kesehatan dan Dukungan Keluarga dengan Pemberian Asi Eksklusif di Wilayah Kerja Puskesmas Bonto Cani Kabupaten Bone. Universitas Hasanuddin.
- Agritubella, S. M., & Delvira, W. (2020). Efektifitas Poster Pola Diit 1000 Hari Pertama Kehidupan (HPK) terhadap Pengetahuan Ibu Hamil tentang Nutrisi dalam Pencegahan Stunting di Puskesmas Rambah Kabupaten Rokan Hulu. *Jurnal Endurance*, 5(1), 168–179.
- AL Rahmad, A. H., Miko, A., & Hadi, A. (2013). Kajian Stunting Pada Anak Balita Ditinjau Dari Pemberian ASI Eksklusif, MP-ASI, Status Imunisasi Dan Karakteristik Keluarga Di Kota Banda Aceh. *Jurnal Kesehatan Ilmiah Nasuwakes Poltekkes Aceh*, 6(2), 169–184.
- Ali, Z., Mahama, S., Abdul-Ganiyu, A., & Kamwininaang Stephen K Abizari Abdul-Razak. (2017). The effect of maternal and child factors on stunting, wasting and underweight among preschool children in Northern Ghana. BMC Nutition.
- Ana Samiatul Milah, Dini Nurbaeti Zen, & Nina Rosdiana. (2019). Penanggulangan Stunting Dan Pemberian Asupan Nutrisi Dengan Kejadian Status Gizi Pada Anak Usia 0-5 Tahun. *Bina Generasi : Jurnal Kesehatan*, 11(1), 63–73. https://doi.org/10.35907/jksbg.v11i1.136
- Antari, I. B. (2020). Hubungan Pola Asuh Orang Tua dengan Kejadian Stunting pada Balita Usia 24-59 Bulan. Poltekkes Denpasar.
- Arikunto, S. (2010). Prosedur Penelitian Suatu Pendekatan Praktik. Rineka Cipta.
- BKKBN. (2020). 1000 Hari PertamaKehidupan: Pondasi Utama Kehidupan Manusia di Masa Depan.
- Borg, W. R., & Gall, M. D. (1983). Education Research An Introduction. Longman.
- D., H. (2015). Pengasuhan Teori, Prinsip dan Aplikasinya di Indonesia. IPB Press.
- Djauhari, T. (2017). Gizi dan 1000 HPK. Saintika Medika: Jurnal Ilmu Kesehatan Dan Kedokteran Keluarga, 13(2), 125–133.
- Ervina, A., Zulmi, D., Ariesta, R., Aridawarni, Y., Aminah, A., & Umanailo, M. C. B. (2019). The Relationship of Patterns Use of Time and Income Family with Juvenile Delinquency in Junior High School Students at Lebak Distric. *INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH VOLUME*, 8(10). http://www.ijstr.org/research-paper-publishing.php?month=oct2019
- Fitri, L. (2018). Hubungan Bblr Dan Asi Ekslusif Dengan Kejadian Stunting Di Puskesmas Lima Puluh Pekanbaru. Jurnal Endurance, 3(1), 131.
- Goergieff, M. K., Ramel, S. E., & Cusick, S. E. (2018). Nutritional Influences on Brain Development. *Acta Paediatric*, 1(8).
- Indonesia, K. S. R. (2015). 1000 Hari Pertama KehidupanPenentu Ribuan Hari Berikutnya. Wahana Visi Indonesia. Kemenkes, K. K. (2012). Kurikulum dan modul Pelatihan fasilitator Pemberdayaan kader Posyandu. Kementerian Kesehatan RI.
- Peraturan Menteri Kesehatan Republik Indonesia No.65 Tahun 2013 Tentang Pedoman Pelaksanaan dan Pembinaan Pemberdayaan Masyarakat Bidang Kesehatan, (2013).
- Khoeroh, H., & Indriyanti, D. R. (2017). Evaluasi Penatalaksanaan Gizi Balita Stunting Di Wilayah Kerja Puskesmas Sirampog. *Unnes Journal of Public Health*, *6*(3), 189–197.
- Kosasih, I. (2020). Pemaknaan Kader Bina Keluarga Balita Terhadap Program Penanganan Children Stunting. *Tesis*, 33–34.
- Marchianti, A. C. N., Sakinah, E. N., & Diniyah, N. (2017). Efektifitas penyuluhan gizi pada kelompok 1000 HPK dalam meningkatkan pengetahuan dan sikap kesadaran gizi. *Journal of Agromedicine and Medical Sciences*, 3.
- Megawati, G., & Wiramihardja, S. (2019). Peningkatan Kapasitas Kader Posyandu dalam Mendeteksi dan Mencegah Stunting di Desa Cipacing Jatinangor. *Jurnal Aplikasi Ipteks Untuk Masyarakat*, 8(3), 154–159.
- Nurkomala, S. (2017). Praktik Pemberian Mpasi (Makanan Pendamping Air Susu Ibu) Pada Anak Stunting Dan Tidak Stunting Usia 6-24 Bulan. Universitas Diponegoro.
- Nurkomala, S., Nuryanto, N., & Panunggal, B. (2018). Praktik Pemberian Mpasi (Makanan Pendamping Air Susu Ibu) Pada Anak Stunting Dan Tidak Stunting Usia 6-24 Bulan. *Journal of Nutrition College*, 7(2), 45. https://doi.org/10.14710/jnc.v7i2.20822
- Onis, M. D., & Branca, F. (2016). Childhood Stunting: a global perspective. In Maternal and Child Nutrition
- Putri, D. K., Herawati, T., Alfiasari, A., Riany, Y. E., & ... (2020). Edukasi Keluarga Pengasuhan 1000 HPK untuk Pencengahan Stunting di Desa Cibatok 2. *Jurnal Pusat Inovasi* ..., 2(1), 18–27.
- Rumaolat, W., Dusra, E., Tunny, I. S., Malisngorar, M. S. J., Cahyawati, S., & Umanailo, M. C. B. (2019). Relationship Diet and Regulate Blood Sugar in the Elderly with DM Type Ii in Waimital Village, Kairatu District, West Seram Regency. *International Journal of Scientific & Technology Research*, 8(10)

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