EFFECTIVENESS OF HEALTH EDUCATION PROVISION BASED ON SELF CARE THEORY TO THE GROWTH OF TODDLERS

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ABSTRACT

Growth and development is an ongoing process ranging from conception to maturity. One of the important efforts in increasing growth is the delivery method of health education by using the Self Care approach to the growing of toddlers with the right health education media. The purpose of this research is to analyze the influence of nutritional counseling according to Self Care theory of toddler growth. The method of this research is pre-experimental research with pretest-posttest design. Samples are 18 infant respondents. Test normality using Kolmogorov-Smirnov. Hypotheses test the difference of pretest-Postest infant growth (weight loss, height, head circumference) with Wilcoxon. Differences pretest-posttest toddler growth (weight loss, height, head circumference) with Paired Samples T-Test. The result is based on collected data from 18 subjects, results of pretest-posttest toddler growth in Wilcoxon test there is a significant difference that is (P = 0.001). Results pretest-posttest weight loss Test Wilcoxon obtained significant differences (P = 0,002). The results of the pretest-posttest height of the body in the test Paired Sample T-Test There is a significant difference (P = 0.001). Results of pretest-posttest head circumference in test Paired Sample T-Test There is a significant difference (P = 0.001). In conclusion, there is a proven influence of nutrition counseling to grow toddlers according to self-care theory with media leaflets.

Keywords: health education, self-care theory, toddler growth.

Introduction

Growing flowers are a continuous process ranging from conception to maturity. The important period in growing flowers is under the age of five (toddlers). According to Minick (1991), Soetjiningsih (1995) and Depkes (2007), childhood is a critical period of growing flowers, because it is a fundamental thing that will influence and determine the growth of the next flower. Therefore, growing flowers in childhood must be optimal. Growing flowers include two different events, but they are interconnected and difficult to separate from each other.

Child growth relates to the problem of change in large, number, size or dimension of cell level, organ as well as the individual. Growth also concerns the process of differentiation from the cells of the body, body tissues, organs, and organ systems that develop in such a way that each can fulfill its function, including the development of emotions, intellectuals, and behaviors as the result of child interaction with the environment.

The quality of growth and development of children is influenced by genetic factors which are the fundamental potential and environmental factors it receives. This environmental factor that determines whether the existing potential in the child will evolve optimally. Environmental factors can begin since the child is still in the womb, at the time of

childbirth and after the child is born. Parents have a strategic role in educating and assisting children's growth and development. High knowledge can provide optimal stimulation of child growth compared to lack of knowledge on stimulation of growing flowers will have an impact on attitudes that do not support the stimulation of children because knowledge is a very important role in the formation of a person. The higher the knowledge you have the more positive a person's attitude towards a particular object.

Growth is the basis for assessing the nutritional adequacy of toddlers. The growth parameters used by the Depkes RI (2007) for toddlers aged 0-6 years are a comparison of body weight to height (BB/TB), weight per age (BB/U), body length per age (PB/U) and head circumference (LK). Measuring body weight on height can depict the condition of a child's nutrition at present (Supariasa, 2002; Sekartini, 2006). Other parameters that can be used in measuring the nutritional status of infants are laboratory tests including hemoglobin (Hb), ferritin (Fe3 +), and Growth hormone (GH). Measurement of serum ferritin levels is done to determine the iron supply which is the best indicator of knowing the iron level in the body because it is known that anemia is the result of a further deficiency (Soetjiningsih, 1995; Almatsier, 2003; Nathan et al., 2003; Warrow, 2005).

Based on the Self Care Deficit theory expressed by Dorothea Orem, humans can take care of themselves. Orem's concept is differentiated into three main theories: self-care, self-care deficit, and nursing system. Self-care deficit arises when the self-care agency that is not adequate in meeting the needs of self-care. Individual limitations can be caused by pain, accident, or the effects of treatment/treatment actions.

As previously described, parents, especially mothers, are the first and foremost environment for a child. The role of a mother is very important, especially as a health agent for children and families to fulfill the needs of children, foster care, and child. Therefore, every mother with a child needs the right knowledge, attitude, and skills and has high confidence to fulfill the needs of the children. Nurses as one of the health professions have the responsibility to promote family and child health, provide services on clients that include support, health education, and nursing services that can contribute to improving the knowledge, attitudes, and skills of mothers in caring for children (Mercer, 2006).

Mercer (2006) also suggests that nursing is a dynamic profession with three main focuses of health promotion, preventing pain and providing nursing services for those who need to gain optimal health and conduct research to enrich the basic knowledge for nursing services. Besides, nursing is also a health profession that engages strongly and supports mothers in achieving the role of a health agent for children and their families. One of the very important factors in improving knowledge is the method of delivering information tailored to the needs of the target by using appropriate health education media. Where the knowledge of mothers in this state is not adequate in meeting the needs of self-care.

When a self-care agency in a mother who has a toddler is not resolved, it will have an impact on toddler growth. Because when the mother has been able to do the self-care agency means it is also able to provide nutrition and vice versa. In the case of a mother's knowledge deficit, the role of nurses as a Nursing Agency helps to maximize the knowledge of mothers through the actions of nursing self-help nurses in the form of support if-Educative System by providing health education through the media of health education that is printed media (leaflets) to increase knowledge and change the behavior of mothers *(Self-care agency)* to toddler growth.

This study proved that the introduction of counseling affects the increase of knowledge and attitudes of mothers in the provision of a balanced nutrition menu. Counseling is a process of changing knowledge and attitude that

demands adequate preparation and knowledge for the extension and the target. The counseling method can also be used on targets with both low and high education, and the time of extension is conducted the target can participate actively and provide feedback on the extension material provided. Leaflets are chosen as a medium because they are easily stored, economical, and can serve as a reminder to the target. Therefore, one of the efforts to improve knowledge is to provide counseling with leaflets. The purpose of this research is to analyze the influence of health education in the Theory of self-care in the growth of toddlers in RW 2 Bangsal Kediri.

Research Methods

This study used pre-experimental research types with pretest-posttest design. The scope of this research includes the field of nursing and nursing Sciences. This research was conducted in Posyandu toddler RW 02 Village Wards, in the work area Puskesmas Pesantren 1 Kota Kediri. Samples of this research are toddlers in Posyandu toddler RW RW 02 Kelurahan Bangsal, in the working area of the Puskesmas Pesantren 1 Kota Kediri with the criteria of inclusion of mother aged 25-40 years, mother who has the last education level of SMP-SMA, Ibu can communicate verbally, mothers who are willing to participate with informed consent. Subject retrieval is a consecutive sampling. The free variables in this research are counseling, media leaflet. The variables tied to this research are growth (weight, height, and head circumference).

Table 1 Identification of toddler growth (weight loss, height, head circumference) in Posyandu toddler RW 02 Bangsal Kediri (n = 18)

Indicator	Pre	Post	Alteration	Information
Mean Weight	10,53	11,27	0,74	ascends
Mean Height	81,27	85,25	4,02	ascends
Mean Head circumference	44,87	46.73	1,86	ascends

Based on table 1 it can be known that after the administration of health education in one month all toddlers experienced growth with all indicators of growth is increasing (Beart body, height and head circumference).

Table 2 Growth Analysis Toddler (weight loss, height, head circumference) in Posyandu toddler RW 02 Bangsal Kediri (n = 18)

Indicator	Hasil Uji Wilcoxcon	Ascends	Fixed	Descended	Information
BB	P=0,002	14	2	2	Significant difference
TB	P=0,001	17	0	1	Significant difference
Lila	P=0,001	13	4	1	Significant difference

Based on table 2 shows health education delivery is effective to increase the weight of the toddler with a toddler who rose weight there are 14 children, 2 children remain, and 2 children down. The provision of health education is effective in increasing the height of the toddler with the height of infants up to 17 children and down 1 child. The provision of health education is effective in improving the head circumference of the child with a toddler who rises in circumference 13 children, remained 4 children, and dropped 1 child.

Discussion

Identifying toddler growth (weight, height, and head circumference) toddlers in Posyandu toddlers in RW 2 Bangsal Kediri.

Based on the results of the study obtained a large majority of 14 respondents (77.8%) experiencing increased weight loss.

The growing process is an ongoing process ranging from conception to maturity that is influenced by environmental factors and built-in factors. Toddler growth will be optimal if the environment provides positive support or vice versa. In the process of child growth, there are critical times, in which time it is necessary stimulation to increase growth. Growth delays are a serious problem for both developed and developing countries in the world. Less nutritional Status will inhibit the pace of development that is experienced by individuals, due to the proportion of the body structure is not appropriate to the age that will ultimately implicate growth.

Weight loss (BB) is the simplest growth parameter, easily measured and repeated. Weight loss is the most important measure used in each child's physical growth assessment examination in all age groups because weight is the right indicator to know the condition of nutrition and child growth during examination (acute). The reason is weight loss is very sensitive to slight changes just like pain and diet. In addition to the implementation side, objective measurement and can be repeated with any scale, relatively inexpensive and easy, and does not take a long time. However, weight measurement is not sensitive to body proportions e.g. short, obese, or tall thin. In addition, some disease conditions can affect the measurement of body weight such as swelling (modem), enlargement of organs (organomegaly), hydrocephalus, and so on. In such circumstances, the size of body weight cannot be used to assess the nutritional status.

The results of the study received a majority of 17 respondents (94.4%) Increased body height. The child's physical growth is generally assessed using an anthropic measure. The results of the anthropic measurement compared to a certain standard e.g. NCHS from Harvard or the National Standards (Indonesia) as recorded on the card to Healthy (KMS). By looking at the comparison of assessment results with standard standards, it can be known as child nutrition status. This comparative value can be used to assess the child's physical growth as it shows the child's position at the percentile (%) How much to an anthropic measure of growth so that it can be deduced whether the child is located on a normal variation, less or more. Besides, it can also be observed trend (shifting) growth of children over time. Height (TB) is the second most important anthropometric measure. TB measurements are simple and easy to do. Apalabila attributed to the results of the BB measurements will provide important information about the status of nutrition and the child's physical growth. As with the BB, TB measurements also require information such as the exact age, gender, and default standards referenced.

Measurement of height in the period of growth can continue to increase until the maximum height is achieved. The height of the body is an indicator describing the growth process that lasts in the period of relatively long (chronic) and is useful to detect the disruption of physical growth in the past. The height in infants in toddler Posyandu RW 02 Bangsal Kediri increased in 17 respondents, indicating an increase in infant growth.

The results of the study were obtained by most 13 respondents (72.2%) Increased head circumference. The head circumference (LK) depicts the brain growth of the volume estimation in the head. The head circumference is influenced by the child's nutritional status for up to 36 months. Routine measurements are done to capture the possibility of other causes that can affect the growth of the brain even though regular head circumference measurements

are needed at any time. When brain growth has been detected by a small head circumference (called Microcephalali), it can lead the child to a mental retardation disorder. Preferably if there is a disorder in the blood fluid circulation (cerebrospinal liquor) then the volume of the head will enlarge (Makrosefali), this disorder is known as hydrocephalus.

Toddlers in toddler Posyandu RW 02 Bangsal Kediri experienced an increase in the size of the head circumference, which indicates the presence of growth in infants. Measurement of the head circumference needs to be done routinely until the children 3 years old to know the growth of the brain takes place rapidly.

Analyzing the effect of providing health education to infant growth (weight, height, head circumference) toddlers in Posyandu toddlers in RW 2 Bangsal Kediri.

Based on the research before and after given the health education can be noted that with the comparison of body weight test using Wilcoxon Signed Rank Test obtained p-value 0.002 < 0.05 Then there is a significant difference where weight loss is 2 respondents, weight gain there are 14 respondents, and weight that remains 2 respondents.

One of the very important factors in improving knowledge is the method of delivering information tailored to the needs of the target by using appropriate health education media. Media health education is all means or attempts to display the message or information that would be conveyed by the communicator, in this case, is the print media (leaflet) to increase the knowledge and change the behavior of mothers to health (Fatmawati, 2014)

This research is a research intervention. The intervention conducted on the treatment group is with health education. The goal of health education is to change the behavior of mothers in a positive direction that is implemented in a planned manner through the learning process. Behavioral changes include three areas of behavior, i.e. knowledge, attitudes, and applying ability. Providing counseling to mothers affects the knowledge and attitudes of mothers in the provision of a balanced nutrition menu so that toddler growth increases, in this case, is increased weight of toddlers.

Based on the results of the prior and after studies given by health education can be noted that with a comparative test of height using Wilcoxon Signed Rank Test obtained p-value 0.001 < 0.05 Then there is a significant difference where the height of the body is down there is 1 respondent, the height of the body rises there are 17 respondents, and the height remains no.

Orem identifies ten basic factors affecting the self-care agency i.e. age, gender, stage of growth, level of health, lifestyle, health care system, family system factors, sociocultural factors, resource availability, and external environmental factor (Alligood, 2010). An imbalance between self-care and therapeutic demand with a self-care agency affects self-care deficit in an individual. Interactions between nurses and clients can occur if the client experiences a self-care deficit, where it appears as a nursing agency (DeLaune & Lander, 2002 in Nursalam, 2013). Orem is concerned that one should be able to be responsible for self-care implementation for himself and engage in decision-making in his actions (Alligod & Tomey, 2006 in Nursalam, 2013). A person's need to engage in the treatment in him getting treatment is referred to as therapeutic self-care demand (DeLaune & Ladner, 202 in Nursalam, 2013).

Orem identifies ten basic factors affecting the self-care agency i.e. age, gender, stage of growth, level of health, lifestyle, health care system, family system factors, sociocultural factors, resource availability, and external environmental factor (Alligood, 2010). An imbalance between self-care and therapeutic demand with a self-care agency affects self-care deficit in an individual. Awareness of the need to gain knowledge will influence actions taken by individuals (Taylor & Renpenning, 2011 in Nursalam, 2013). According to Friedman (1998) in Muhith

& Siyoto (2016) The family also serves as a support system for its members and the family members see that the supportive person, always ready to provide help and assistance if needed in this case is the mother. Family support is a process of relationship between the family and the social environment that makes the family capable of functioning with a variety of intellect and sense so that it will improve their health and adaptation in Life (Friedmen, 1998:174 in Harnilawati's book, 2013).

Family support is an important element in helping individuals in problem-solving. The support of the family will increase the confidence of individuals to interact with others and motivate themselves in establishing a positive relationship (Noorkasiani & Tamher, 2009).

When the Self-care agency in the mother, in this case, is the knowledge of mothers about the nutritional needs of toddlers is not resolved, it will impact on the growth of toddlers. Because when the mother has been able to do self-care agency means it is also able to provide nutrition and monitor toddler growth and vice versa. When the knowledge deficit occurs, the role of nurses as a Nursing Agency helps to maximize the ability to implement nutrition in infants who have an impact on growing toddler growth, in this case, is a toddler height. Based on the research before and after given the health education can be noted that with a comparative test head circumference using Wilcoxon Signed Rank Test obtained p-value 0.001 < 0.05 Then there is a significant difference where the head circumference down there is 1 respondent, circumference head up there are 13 respondents, and the circumference of the head that remains 4 respondents.

The learning process used in health education in this research is based on the theory of social learning by Bandura with its core concept is health education, which emphasizes the implementation of practice on the implementation of health education. The change in the conduct of the health education process is a change in the Self-care Agency and the change of competency (ability) of mothers that can be described through behavioral changes in mothers.

Based on the Self Care Deficit theory expressed by Dorothea Orem, humans can take care of themselves. Orem's concept is differentiated into three main theories: self-care, self-care deficit, and nursing system. Self-care deficit arises when the self-care agency that is not adequate in meeting the needs of self-care. Individual limitations may result from pain, accident, or the effects of treatment/treatment actions. Health education in this study was conducted 2 times, namely health education by using leaflets on toddler growth and preventing stunting given to mothers. Health education II by evaluating the material provided in the first week.

The process of learning through the provision of health education has 4 phases of attention, retention, reproduction, and motivation, most of these phases are the internal process of the subject of learning in social learning (Hall & Lindzey, 1993; Bandura, 1977 in Bastabel, 2002).

According to the researchers, in the event of self-care deficit requires nursing care that is the provision of health education in the mother to support the Self-care Agency. After the mother gets a health education, the mother applies the nutritional fulfillment to the toddler, with this makes the mother able to do the care on the toddler independently (self-care deficit) so that the balance of self-care agency with demand is increasing the growth of toddlers (weight, height, head circumference when. And because of the knowledge of mothers who applied well in toddlers, then the mother unconsciously increase the ability in its independence to do treatment in the news so that the self-care deficit can be solved.

Conclusion

Health education based on Self Care theory affects the growth of toddlers in children's Posyandu RW 2 Bangsal

Kediri both in the form of weight, height, and head circumference, which indicates a significant increase in the growth of toddlers including weight loss, height and head circumference in infants.

Advice

The provision of health education for mothers with toddlers needs to be maintained by collaborating with Posyandu cadres of toddlers at RW 2, Kediri and health care officers so as to support growth in infants.

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