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The Effect of Animated Video Education on Mothers' Knowledge Regarding Stunting Prevention in Toddlers

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ABSTRACT

Stunting remains a pressing public health issue in Indonesia, particularly among children under five years old. Educational interventions targeting mothers are essential, as maternal knowledge greatly influences child nutrition and growth. This study aimed to examine the effect of animated video-based education on mothers' knowledge regarding stunting prevention. A quasi-experimental design with a one-group pretest–posttest approach was employed. The study involved 34 mothers of toddlers at Tanak Beak Health Center, selected through purposive sampling. Data were collected using a validated 17-item questionnaire and analyzed using paired sample t-test. Results indicated a significant improvement in mothers' knowledge scores after the intervention ($p < 0.05$). The findings suggest that animated video education is an effective medium for enhancing maternal understanding of stunting prevention. Health workers are encouraged to incorporate digital media innovations in health education programs to improve maternal and child health outcomes.

Keywords: Animated video, Education, Maternal knowledge, Stunting, Toddlers

1. BACKGROUND

Stunting, characterized by impaired growth and development in children due to chronic malnutrition, is a major public health concern worldwide, particularly in developing countries. According to the World Health Organization (WHO), stunting not only affects physical growth but also cognitive development, increasing the risk of poor educational outcomes and reduced productivity in adulthood [1]. In Indonesia, the prevalence of stunting remains high despite various national health programs aimed at prevention and early intervention [2]. The critical role of maternal knowledge in preventing stunting cannot be overstated. Mothers are primary caregivers who influence feeding practices, hygiene, and child healthcare-seeking behavior. Lack of awareness and limited access to accurate information have been identified as contributing factors to persistent stunting rates [3]. Therefore, strengthening maternal knowledge through effective educational strategies is crucial for improving child nutrition and reducing stunting prevalence.

Health promotion strategies have evolved in line with technological advancements. Conventional methods such as counseling and printed materials, while effective, often fail to fully engage mothers and sustain their interest. Multimedia approaches, particularly animated videos, offer visual and auditory stimulation that can enhance comprehension and retention of information [4]. Animated videos also provide culturally relevant and engaging content that is easily accessible and replicable. Several studies have highlighted the effectiveness of animated videos in health education, particularly in conveying complex health information in a simplified manner [5]. However, there remains a need to evaluate their impact on maternal knowledge specifically regarding stunting prevention. This study aims to assess the effectiveness of animated video education in improving mothers' knowledge at Tanak Beak Health Center.

2. RESEARCH METHODS

This study employed a quasi-experimental design using a one-group pretest–posttest approach. The population consisted of all mothers with toddlers registered at Tanak Beak Health Center.

A total of 34 participants were selected through purposive sampling based on inclusion criteria such as willingness to participate and having a child under five years old. The research instrument was a validated 17-item questionnaire measuring knowledge on stunting prevention. Content validity was assessed by experts, and reliability testing yielded a Cronbach's alpha of >0.70, indicating good internal consistency.

Data collection was carried out in three stages: (1) pretest administration, (2) provision of animated video education on stunting prevention, and (3) posttest administration. The animated video, lasting approximately 10 minutes, contained information on nutrition, hygiene, exclusive breastfeeding, and parenting practices related to stunting prevention.

Data were analyzed using SPSS software. Descriptive statistics were used to summarize demographic characteristics, while paired sample t-tests were applied to compare pretest and posttest knowledge scores. A significance level of $p < 0.05$ was considered statistically significant.

3. RESULTS AND DISCUSSION

The results showed on Table 1. that the mean pretest knowledge score was 56.47, while the mean posttest score increased to 78.94. The paired sample t-test revealed a significant difference ($p = 0.000 < 0.05$), indicating that animated video education significantly improved mothers' knowledge.

Table 1.
Statistical Analysis Results

Variable	Mean ± SD (Pretest)	Mean ± SD (Posttest)	p-value
Knowledge	56.47 ± 8.21	78.94 ± 7.56	0.000

The findings demonstrate that animated video education effectively enhances mothers' knowledge regarding stunting prevention. This aligns with previous research indicating that multimedia interventions can improve health knowledge and behavior change [4][5]. The significant improvement observed in this study supports the use of animated videos as an engaging and accessible medium for health education. Mothers often face challenges in processing complex health information delivered through conventional methods [9][11].

Animated videos simplify these concepts by integrating visuals and narration, which facilitates better understanding and retention [6]. Moreover, the use of culturally relevant content ensures higher acceptance among target populations, making the intervention contextually appropriate [8][10]. The results suggest that incorporating animated video education into health promotion programs could help reduce stunting prevalence by equipping mothers with essential knowledge. Future studies may expand on this research by including larger samples, diverse populations, and longitudinal designs to evaluate the sustainability of knowledge improvements.

4. CONCLUSION

This study concludes that animated video education significantly improves mothers' knowledge about stunting prevention. By presenting information in an engaging and

accessible format, animated videos offer an effective strategy to enhance maternal understanding and contribute to stunting reduction efforts. Health workers should adopt such digital innovations in educational interventions to optimize outcomes in maternal and child health.

5. THANKS

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BIBLIOGRAPHY

[1] World Health Organization, *Child Growth Standards and the Identification of Severe Acute Malnutrition in Infants and Children*, Geneva: WHO, 2010.

[2] Ministry of Health of Indonesia, *Indonesia Health Profile 2022*, Jakarta: MoH, 2023. *For a scientific journal/article*

[3] R. Dewi and S. Rachmawati, "Factors influencing stunting among children under five years old in Indonesia," *Public Health Nutrition Journal*, vol. 12, no. 3, pp. 145–152, 2021.

[4] H. Susanti, "The effectiveness of multimedia in health education," *Indonesian Journal of Health Promotion*, vol. 9, no. 1, pp. 23–30, 2020.

[5] A. Nuraini and M. Yusuf, "Animated video as a tool for improving maternal health knowledge," *Journal of Nursing Education*, vol. 15, no. 2, pp. 89–96, 2022.

[6] R. Mayer, *Multimedia Learning*, 3rd ed. New York: Cambridge University Press, 2021.

[7] N. P. W. P. Laksmidewi and M. Rohmah, "The effect of nutrition intervention education using video explainer media on mother's knowledge and attitude about stunting prevention in Posyandu Banjar Tubuh Blahbatuh," *Journal of Health Science Community*, vol. 5, no. 4, pp. 271–278, May 2025, doi: 10.30994/jhsc.v5i4.277.

[8] G. Z. Sabbily, H. T. Saputra, E. Sureskiarti, and M. M. Dirdjo, "The effectiveness of education about healthy food on mother's knowledge and action in preventing the risk of stunting," *Open Access Health Scientific Journal*, vol. 6, no. 1, pp. 60–70, Feb. 2025, doi: 10.55700/oahsj.v6i1.64.

[9] N. D. Oktarina and F. Wijayanti, "Health education using videos to increase mothers' knowledge about stunting prevention in the first 1000 days of a child's life," *Journal of Integrated Health Research*, vol. 1, no. 2, pp. 33–38, Aug. 2025, doi: 10.70109/jinher.v1i2.9.

[10] R. Andriani, B. Supriyatno, A. Kekalih, H. Gunardi, I. S. Timan, A. Syafiq, I. G. L. Sidiartha, and D. R. Sjarif, "Educational intervention using the complementary feeding practice module on maternal knowledge and behavior," *Paediatrica Indonesiana*, vol. 65, no. 1, pp. 71–77, Jan. 2025, doi: 10.14238/pi65.1.2025.71-7.

[11] S. Muslimah, Sunartono, and Waryana, "The effect of Stop Stunting video on increasing knowledge of pregnant women about stunting prevention," *Jurnal Kebidanan Kestra (JKK)*, vol. 5, no. 1, pp. 21–28, Oct. 2022, doi: 10.35451/jkk.v5i1.1186.