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Enhancing maternal toddler parenting competence through nurturing care videos

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A B S T R A C T

Background: Despite increased global attention to early childhood development, children under 5 in low- and middle-income countries face heightened risks of poor developmental outcomes. In Indonesia, where innovative approaches to nurturing care are needed, video-based interventions show promise.

Purpose: This study aimed to elevate maternal competence in parenting and contribute to the holistic development of children aged 0-3 years through video-based nurturing care education.

Method: Non-equivalent quasi-experimental design with pre-post-test control groups was employed. This study used a consecutive sampling technique on 89 mothers with children 0-3 years old (intervention group = 40 and control group = 49). The intervention group was given health education using videos via a WhatsApp link, and the control group was given leaflets directly. Data was collected from May to August 2022, four weeks before the intervention (pre-test) and two weeks after the video and leaflets were given (post-test). The instrument was modified from the Knowledge, Attitude, and Practice (KAP) questionnaire developed by UNICEF. The effect of education was analyzed using Wilcoxon and independent t-test.

Results: The group that received the intervention showed a notable and positive influence on their knowledge, attitudes, and practices (KAP levels) in contrast to the control group. This suggests the video-based intervention effectively enhanced participants' understanding, attitudes, and caregiving practices.

Conclusion: The research emphasizes the positive outcomes of video-based nurturing care intervention for mothers with children aged 0-3 years. The intervention significantly improved maternal attitudes toward parenting, caregiving behaviors, and overall child development. These results emphasize the significance of employing video interventions to encourage effective nurturing care practices.

INTRODUCTION

Despite the increasing global attention towards early childhood development, there remains a significant concern as 249 million children under 5 in low- and middle-income countries face elevated risks of poor developmental outcomes.[1] According to a previous study, in Indonesia, around 37% of children under the age of 5 suffer from poor developmental outcomes, with approximately 18% severely stunted. Indonesia, in particular, ranked fifth among countries with the highest prevalence of stunted children.[2] Emerging evidence indicates that suboptimal childhood development can worsen inequity and poverty, as it leads

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to lower educational attainment and reduced adult productivity and earnings, perpetuating intergenerational poverty.[3,4] The developmental impact of the early childhood environment is of great importance. Evidence from various health and social science fields indicates that the foundations of adult health and well-being can be traced back to the processes that unfold during early childhood.[5–7] For children to achieve their full developmental and growth potential, it is essential to establish a comprehensive and multisectoral system of services and opportunities.[8]

Previous research has explained the significant impact of providing Care for Children Development (CCD) training on parental caregiving self-efficacy. In that study, maternal self-efficacy improved before and after the training. CCD training using lecture and video methods significantly influenced maternal self-efficacy and the quality of maternal interactions. The use of video has its advantages, as it provides audiovisual learning that enhances understanding and helps retain education for a more extended period. Based on the preliminary study conducted on nine mothers in Kapanewon Depok, it was found that 68% of mothers with diploma-level education and above still exhibited low self-efficacy and caregiving practices. This suggests that mothers may still lack understanding of age-appropriate Complementary Feeding for their children, struggle to recognize signs of illness in their children and how to address them at home, have difficulty utilizing healthcare services effectively, and may lack confidence in implementing caregiving practices.[9]

Interventions involving nurturing care, which integrate health, nutrition, and nurturing inputs for children alongside measures to empower, support, and enable caregivers in providing nurturing care, are widely acknowledged as crucial for promoting optimal child development and growth during early life.[10] The WHO member states adopted the nurturing care framework (NCF) in May 2018 as a blueprint for holistic child growth through inter-sectoral collaboration, focusing on the foundational period from pregnancy to age three.[11] This period is crucial for brain development, with approximately 80% of a baby's brain formation occurring during this time.[12] By incorporating five key components - good health, adequate nutrition, responsive caregiving, opportunities for early learning, and security and safety - within the nurturing care framework, this study aimed to elevate maternal competence in parenting and contribute to the holistic development of children aged 0-3 years through video-based nurturing care education.

METHOD

Study Design

The research employed a non-equivalent quasi-experimental design with pre-post-test control groups.

Settings and Respondent

Data collection was carried out in May-August 2022, in the Kapanewon area, Depok, Sleman Regency, Yogyakarta. This investigation focused on mothers with children aged 0-3 years. For the data analysis, 40 participants belonged to the intervention group, while 49 participants were part of the control group. The intervention group received video materials on Nurturing Care, whereas the control group received Nurturing Care leaflets. This research employed a consecutive sampling method.

Variables, Instruments, and Measurements

To assess the competencies of the mothers in parenting their children, the researchers utilized the Knowledge, Attitude, and Practices (KAP) questionnaire. The knowledge questionnaire was adapted from the KAP questionnaire developed by UNICEF,[11] covering various aspects of early childhood development, pregnancy, nutrition, immunization, child development, and more. The researchers modified two existing questionnaires, translated them into Indonesian, and consulted with experts to ensure accuracy and clarity. A trial of the knowledge questionnaire was conducted on 120 mothers of different educational backgrounds using Google Forms. The knowledge instrument included five components of Nurturing Care, comprising 20 closed questions graded on the Guttman scale (correct answers scoring 1 and wrong or unknown answers scoring 0). Higher scores indicated higher knowledge levels.

Additionally, the study used a questionnaire to measure mothers' attitudes about parenting with the Nurturing Care approach. This attitude instrument included 34 closed questions related to the five components of Nurturing Care. The Likert scale was used, with answers ranging from Strongly Agree (4 points) to Strongly Disagree (0 points). A higher total score indicated a more positive attitude towards Nurturing Care. Similarly, the attitude questionnaire was translated, validated, and trialed on 120 mothers with varying educational backgrounds through Google Forms. The practice questionnaire complemented the knowledge and attitude questionnaires, assessing mothers' caregiving practices towards their children (Covering nutrition, health, responsive parenting, early stimulation, and safety); the practice questionnaire initially had 40 questions. However, after undergoing validity testing, it was reduced to 28 items. The questionnaire incorporated questions related to monitoring child growth and development, feeding, caring for sick children, protecting children from illness, stimulation, affection, and protection.

Making the Nurturing Care Video

These videos were designed to cover six essential topics, each dedicated to promoting nurturing care in early childhood development. The topics included in the videos were: 1) introduction to nurturing care, 2) good health, 3) adequate nutrition, 4) responsive caregiving, 5) opportunities

for early learning, and 6) security and safety. To ensure the quality and effectiveness of the videos, the researcher collaborated with a multimedia expert. This partnership facilitated discussions on various aspects of video creation, including the artistic elements, ensuring the videos were visually appealing and engaging for the target audience. Additionally, they addressed the clearance aspect, ensuring that copyright or legal considerations were managed correctly to avoid infringement issues.

Furthermore, the collaboration explored the possibility of publishing the videos, possibly making them accessible to a broader audience beyond the scope of the research. This could extend the intervention's impact, reaching more mothers and caregivers who could benefit from the knowledge and insights provided in the nurturing care videos. Additionally, the researcher sought the invaluable input of experienced professionals in pediatrics, including pediatricians and pediatric nurses. The primary aim of this phase was to ensure the accuracy and credibility of the material presented in the video series. The experts were consulted to review and provide feedback on various aspects of the videos.

Firstly, the script used in the videos was meticulously examined by pediatric experts to verify the medical accuracy and appropriateness of the information conveyed. The researchers sought to ensure that the content aligns with the latest scientific knowledge and guidelines related to early childhood development and nurturing care. Secondly, the references used in the video material were scrutinized by pediatric experts. The goal was to validate that the sources cited are reputable and evidence-based, providing a solid foundation for the information presented in the videos. Additionally, the experts assessed the appropriateness of the content in terms of its suitability for the target audience, which consists of mothers and caregivers. They considered whether the language and visuals were clear and easily understandable, ensuring that the videos effectively communicated the essential concepts of nurturing care. Conciseness was another critical aspect examined during the expert validation phase. The researchers sought feedback from the pediatric experts to ensure the video content was succinct, avoiding unnecessary complexities and ensuring the core messages were delivered effectively.

Furthermore, the videos have been patented, indicating that the content is original and legally protected against unauthorized use or reproduction. Additionally, obtaining Intellectual Property Rights (IPR) from the Directorate General of Human Rights of Indonesia further solidifies the legitimacy and recognition of the educational materials. Overall, the availability of these videos in Bahasa Indonesia on a widely accessible platform like YouTube, coupled with their patenting and IPR recognition, signifies a concerted effort to promote nurturing care practices and early childhood development in Indonesia. These videos can reach a broad audience, including caregivers, parents, educators, and policymakers, contributing to the betterment of nurturing care practices in the country.

Experimental Procedure

The participants were separated into two distinct groups: the intervention group and the control group. In the intervention group, participants were provided with health education using video materials consisted a series of six videos, each lasting for approximately 5 to 7 minutes, which were delivered via a WhatsApp link. In contrast, the control group did not receive videos; instead, they were given printed leaflets containing information about nurturing care. Data collection occurred at two specific time points: firstly, the pre-test, where data was gathered from both the intervention and control groups four weeks before they received the video or leaflets; and secondly, the post-test, where data was collected from both groups two weeks after they had received the video and leaflets.

Data Analysis

Changes in knowledge and attitudes before and after the educational intervention were assessed using the Wilcoxon test.

Ethical Consideration

All adult participants and the parents or legal guardians provided written informed consent following ethical principles of self-determination, doing good, and avoiding harm. Participants received complete information about the study's goals, procedures, confidentiality measures, and their ability to withdraw from the study before data collection. This thorough approach aimed to reduce possible risks, prioritize the well-being of participants, and uphold their independence. Ethical approval was obtained from the Medical and Health Research Ethics Committee (MHREC) of the Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, with reference number KE/FK/0533/EC/2022.

RESULTS

Among the women in the intervention group and the control group, the majority (50%) fell into the age range of 25-29 years, and most of them had less than two children (intervention = 47.9% and control = 52.1%). Regarding educational background, a significant portion of both groups had completed high school (intervention = 43.8% and control = 56.3%). Additionally, approximately half of the women in the intervention group (48.5%) and the control group (51.5%) were unemployed and identified as housewives. Moreover, nearly half of the women in the intervention group (44.8%) and more than half in the control group (55.2%) had prior experience with parenting education (Table 1).

Table 2 showed that the mothers in the intervention group experienced a positive impact on their KAP levels compared to those in the control group. This suggests that the video-based intervention effectively enhanced their understanding, attitudes, and practices regarding childcare and nurturing care. The Wilcoxon test results indicated that the mean score of the intervention group increased significantly from the pre-test to the post-test ($p<0.05$).

Table 1. Characteristics of Respondent

Characteristics	Intervention Group (n=40)	Control Group (n=49)
Age, yr		
20-24	3 (42.9%)	4 (57.1%)
25-29	18 (50.0%)	18 (50.0%)
30-34	11 (47.8%)	12 (52.2%)
35-39	2 (15.4%)	11 (84.6%)
40-44	6 (60.0%)	4 (40.0%)
Number of children		
≤2	35 (47.9%)	38 (52.1%)
>2	5 (31.3%)	11 (68.8%)
Education		
Elementary	1 (50.0%)	1 (50.0%)
Junior	1 (16.7%)	5 (83.3%)
Senior	21 (43.8%)	27 (56.3%)
College	17 (51.5%)	16 (48.5%)
Occupation status		
Unemployed	32 (48.5%)	34 (51.5%)
Employed	8 (34.8%)	15 (65.2%)
Previous nurturing care education		
Ever	30 (44.8%)	37 (55.2%)
Never	10 (45.5%)	12 (54.5%)
Social interaction		
Good	40 (45.5%)	48 (54.5%)
Poor	0 (0%)	1 (10.0%)
Gender of child		
Male	23 (43.4%)	30 (56.6%)
Female	17 (47.2%)	19 (52.8%)

DISCUSSION

The findings showed a noteworthy increase in the average score of the intervention group from the initial assessment to the final assessment. This indicates that the video-based nurturing care program can effectively enhance mothers' knowledge, attitudes, and practices in parenting toddlers. The effectiveness of online video-based education has been extensively studied in recent decades. Typically, individuals tend to remember approximately 10-15% of content when read, 10-20% when heard, and 20-30% when seen. However, when audio and visual elements are combined in video-based teaching, retention rates notably improve, with around 40-50% of knowledge retained.[13] The utilization of video-based interventions offers a hopeful prospect. Integrating five essential elements: optimal health, sufficient nutrition, attentive caregiving, early learning opportunities, and a secure and safe environment into the nurturing care framework.[14,15]

Similar to earlier studies, it has been observed that individuals can retain approximately half of the information conveyed through audiovisual messages. Furthermore, employing videos as an educational tool has sustained enhancements in mothers' knowledge, confidence, and behaviors for up to six months following the educational program. The impact of video-based education is even more pronounced when the animations effectively capture the essence of the content. Consequently, providing educational resources to parents plays a crucial role in augmenting their parenting knowledge and skills.[16–19] The development of children greatly relies on various critical factors, including opportunities for stimulation, responsive parent-child interactions, child-directed and focused enrichment, early learning, and positive parenting. Parenting programs are interventions or services designed to enhance parenting interactions, behaviors, knowledge, beliefs, attitudes, and practices.[20–22]

In another previous study, a meta-analysis showed that multiple studies using video intervention were analyzed, involving over 1800 families. The findings from this analysis demonstrate statistically significant positive impacts of video feedback interventions on parents' attitudes towards parenting, their parenting behaviors, and the child's development.[23] Various program models, such as home visits and group sessions, were utilized. Combining group sessions and home visits resulted in better outcomes than using home visits alone. The most effective parenting programs employed multiple behavior-change techniques, including media like posters and cards illustrating enrichment practices, providing opportunities for parental practice of play and responsive communication with their child, offering guidance and support for changing practices and utilizing problem-solving strategies.[21,24–27]

One notable gap in published reviews is the role of fathers in promoting nurturing care and protection. Combining nutrition and stimulation in parenting programs has also proven effective in enhancing children's cognitive and language development outcomes. The results suggest that parenting support programs emphasizing nurturing care and protection can significantly enhance the positive effects of essential health, nutrition, education, and protection interventions on early child development outcomes.[28]

The findings of this study, however, contrast with previous on the effectiveness of video and print media for educational purposes in enhancing respondents' understanding. A previous study revealed that, in the long term, print media was more effective than video media. The advantage of print media was attributed to its portability, allowing respondents to take it home and review the content again. However, the present study acknowledges that different outcomes might arise if video media were made accessible for respondents to take home.[29]

Table 2. Differences in Improvement of Knowledge, Attitude, and Practices between Groups

Variable	Group	Pre		Post		p-value
		Median	Min-Max	Median	Min-Max	
Knowledge	Intervention	15.00	10-19	18.00	10-19	<0.001
	Control	16.00	10-18	18.00	10-18	<0.001
Attitude	Intervention	96.00	87-125	102.00	87-127	<0.001
	Control	103.00	64-127	108.00	64-127	0.010
Practices	Intervention	61.00	46-73	63.00	44-79	<0.001
	Control	64.00	37-76	64.00	38-76	0.148

The current study possesses several strengths. Firstly, in research design. Secondly, it focuses on mothers with children aged 0-3 years, which is crucial for child development. Additionally, the study's unique aspect lies in targeting the knowledge, attitude, and practices of the nurturing care framework among mothers in the Indonesian context, serving as a third strength. However, whether the study's target has influenced the participation rate remains uncertain.

Nonetheless, the study has certain limitations. The use of self-reported questionnaires may lead to overestimating parenting attitudes and related parental practices due to social desirability bias. Moreover, while the significant intervention effects were attributed to the integration of videos within the high-risk family component, it is challenging to exclude the potential influence of the community component on these variables. Nevertheless, the study mainly addressed the more complex parenting-related factors, indicating that the favorable intervention effects are more likely linked to the integration of videos rather than the broader intervention. Finally, the research specifically focused on the effects of the video-based nurturing care intervention on KAP, but further investigations are necessary to explore the broader effects of the intervention on other health-related factors.

CONCLUSIONS AND RECOMMENDATION

This study's findings show the beneficial effects of video-based nurturing care interventions on mothers with children aged 0-3 years. The intervention led to statistically significant improvements in maternal attitudes toward parenting and their parenting behaviors. This underscores the significance of video interventions in fostering positive parenting practices and enriching child development. As a result, it can be recommended as an educational resource for mothers with children in this age group.

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REFERENCES

1. Lu C, Black MM, Richter LM. Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level. Lancet Glob Health. 2016;4(12):e916-e922. doi:10.1016/S2214-109X(16)30
2. Satriawan E. Strategi nasional percepatan pencegahan stunting 2018-2024. *Jakata: Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K)*. Published online 2018.
3. Gertler P, Heckman J, Pinto R, et al. Labor market returns to an early childhood stimulation intervention in Jamaica. *Science (1979)*. 2014;344(6187):998-1001. doi:10.1126/science.1251178
4. Walker SP, Wachs TD, Grantham-McGregor S, et al. Inequality in early childhood: risk and protective factors for early child development. *The Lancet*. 2011;378(9799):1325-1338. doi:10.1016/S0140-6736(11)60555-2
5. Shonkoff JP, Garner AS, Siegel BS, et al. The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *Pediatrics*. 2012;129(1):e232-e246. doi:10.1542/peds.2011-2663
6. Richter LM, Daelmans B, Lombardi J, et al. Investing in the foundation of sustainable development: pathways to scale up for early childhood development. *The Lancet*. 2017;389(10064):103-118. doi:10.1016/S0140-6736(16)31698-1
7. Black MM, Walker SP, Fernald LCH, et al. Early childhood development coming of age: science through the life course. *The Lancet*. 2017;389(10064):77-90. doi:10.1016/S0140-6736(16)31389-7
8. Black MM, Lutter CK, Trude ACB. All children surviving and thriving: re-envisioning UNICEF's conceptual framework of malnutrition. *Lancet Glob Health*. 2020;8(6):e766-e767. doi:10.1016/S2214-109X(20)30122-4
9. Akhmadi, Sunartini, Haryanti F, Madyaningrum E, Sitaresmi MN. Effect of care for child development training on cadres' knowledge, attitude, and efficacy in Yogyakarta, Indonesia. *Belitung Nurs J*. 2021;7(18):311-319.

10. Britto PR, Lye SJ, Proulx K, et al. Nurturing care: promoting early childhood development. *The Lancet*. 2017;389(10064):91-102. doi:10.1016/S0140-6736(16)31390-3
11. World Health Organization. *Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential*. World Health Organization; 2018. https://apps.who.int/iris/handle/10665/272603
12. Cusick SE, Georgieff MK. The Role of Nutrition in Brain Development: The Golden Opportunity of the "First 1000 Days." *J Pediatr*. 2016;175:16-21. doi:10.1016/j.jpeds.2016.05.013
13. Prinz A. Advantage of three dimensional animated teaching over traditional surgical videos for teaching ophthalmic surgery: a randomised study. *British Journal of Ophthalmology*. 2005;89(11):1495-1499. doi:10.1136/bjo.2005.075077
14. Amiatun AN. *Pengaruh Pemberian Video Edukasi Nurturing Care Terhadap Efikasi Diri Dan Praktik Ibu Dalam Pengasuhan Anak Usia 0-3 Tahun Selama Pandemi Covid-19*. Thesis. Universitas Gadjah Mada; 2022. Accessed July 29, 2023. https://etd.repository.ugm.ac.id/penelitian/detail/218700
15. Hasanah NN. *Pengaruh Edukasi Video Nurturing Care Terhadap Pengetahuan Dan Sikap Ibu Pada Pengasuhan Anak Usia 0-3 Tahun Selama Masa Pandemi Covid-19*. Thesis. Universitas Gadjah Mada; 2022. Accessed July 29, 2023. https://etd.repository.ugm.ac.id/penelitian/detail/216458
16. Finders JK, Díaz G, Geldhof GJ, Sektnan M, Rennekamp D. The impact of parenting education on parent and child behaviors: Moderators by income and ethnicity. *Child Youth Serv Rev*. 2016;71:199-209. doi:10.1016/j.childyouth.2016.11.006
17. Scheinmann R, Chiasson MA, Hartel D, Rosenberg TJ. Evaluating a Bilingual Video to Improve Infant Feeding Knowledge and Behavior Among Immigrant Latina Mothers. *J Community Health*. 2010;35(5):464-470. doi:10.1007/s10900-009-9202-4
18. Wallace LM, Ma Y, Qiu LQ, Dunn OM. Educational videos for practitioners attending Baby Friendly Hospital Initiative workshops supporting breastfeeding positioning, attachment and hand expression skills: Effects on knowledge and confidence. *Nurse Educ Pract*. 2018;31:7-13. doi:10.1016/j.nepr.2018.04.005
19. Bieri FA, Gray DJ, Williams GM, et al. Health-Education Package to Prevent Worm Infections in Chinese Schoolchildren. *New England Journal of Medicine*. 2013;368(17):1603-1612. doi:10.1056/NEJMoa1204885
20. Rosales A, Sargsyan V, Abelyan K, et al. Behavior change communication model enhancing parental practices for improved early childhood growth and development outcomes in rural Armenia – A quasi-experimental study. *Prev Med Rep*. 2019;14:100820. doi:10.1016/j.pmedr.2019.100820
21. Aboud FE, Yousafzai AK. Global Health and Development in Early Childhood. *Annu Rev Psychol*. 2015;66(1):433-457. doi:10.1146/annurev-psych-010814-015128
22. Engle PL, Fernald LC, Alderman H, et al. Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *The Lancet*. 2011;378(9799):1339-1353. doi:10.1016/S0140-6736(11)60889-1
23. Juffer F, Bakermans-Kranenburg MJ, Van Ijzendoorn MH. *Promoting Positive Parenting: An Attachment-Based Intervention. Monographs in Parenting Series*. CRC Press; 2008.
24. Gertler P, Heckman J, Pinto R, et al. Labor market returns to an early childhood stimulation intervention in Jamaica. *Science (1979)*. 2014;344(6187):998-1001. doi:10.1126/science.1251178
25. Eickmann SH, Lima AC, Guerra MQ, et al. Improved cognitive and motor development in a community-based intervention of psychosocial stimulation in northeast Brazil. *Dev Med Child Neurol*. 2003;45(08). doi:10.1017/S0012162203000987
26. Hamadani JD, Huda SN, Khatun F, Grantham-McGregor SM. Psychosocial Stimulation Improves the Development of Undernourished Children in Rural Bangladesh. *J Nutr*. 2006;136(10):2645-2652. doi:10.1093/jn/136.10.2645
27. Peairson S, Austin AMB, de Aquino CN, de Burró EU. Cognitive Development and Home Environment of Rural Paraguayan Infants and Toddlers Participating in *Pastoral del Niño* , an Early Child Development Program. *Journal of Research in Childhood Education*. 2008;22(4):343-362. doi:10.1080/02568540809594632
28. Panter-Brick C, Burgess A, Eggerman M, McAllister F, Pruett K, Leckman JF. Practitioner Review: Engaging fathers – recommendations for a game change in parenting interventions based on a systematic review of the global evidence. *Journal of Child Psychology and Psychiatry*. 2014;55(11):1187-1212. doi:10.1111/jcpp.12280
29. Wilson EAH, Park DC, Curtis LM, et al. Media and memory: The efficacy of video and print materials for promoting patient education about asthma. *Patient Educ Couns*. 2010;80(3):393-398. doi:10.1016/j.pec.2010.07.011