

Received: 28 June 2026

Revised: 29 June 2026

Accepted: 30 June 2026

Published: 30 June 2026

Empowering Mothers Of Young Children Thru Self Care Acupressure To Increase Mothers' Knowledge In Managing Cough And Cold In Young Children

Engelina Choiru Fitroti^{1*}

STIKes Patria Husada Blitar

Author of correspondence: angelinachoirulfitroti@gmail.com

ABSTRACT

Background: Mothers' knowledge in caring for young children is influenced by information obtained through formal and non-formal education. Such information can provide immediate knowledge gains that contribute to behavioral change, including the use of complementary therapies such as acupressure. Mothers of young children at the Integrated Primary Service (ILP) in Bendogerit Village, Blitar City, represent a strategic group for empowerment, as they play a central role in daily child care. **Research Objectives:** This research aims to develop Edu Game Smart Move media as a means of healthy lifestyle education for children with obesity. **Research Method:** This study employed a pre-experimental one-group pretest–posttest design. The population consisted of 40 mothers of children under five registered at the ILP “Cut Mutia”, Bendogerit Village, with total sampling applied. Data were collected using a structured questionnaire measuring mothers' knowledge of acupressure for managing coughs and colds in toddlers. The intervention comprised health education through lectures and counseling supported by leaflet media, Given one by one, conducted in one 25-minute session. Data were analyzed using the Wilcoxon Signed-Rank Test. **Research Results:** . Statistical analysis showed a significant increase in mothers' knowledge after the intervention, with a p-value of 0.000 ($p < 0.05$). This finding indicates a meaningful difference in knowledge levels before and after health education on acupressure therapy. The program demonstrated successful outcomes through structured implementation and strong collaboration between the implementation team and community partners. **Conclusion:** Health education on acupressure effectively improved mothers' knowledge and is expected to support independent and correct home management of coughs and colds in toddlers.

Keywords: Cough and Cold, Community Empowerment, Acupressure Therapy

Background

Acute Respiratory Infection (ARI) is an acute infection involving the upper and lower respiratory tract organs that can cause a wide range of illnesses, from mild to severe. This disease can affect the respiratory tract from the nose to the alveoli. ISPA includes Air Bone Diseases, which are transmitted thru the air (1). ISPA is defined as an acute respiratory tract disease caused by infectious agents transmitted from human to human. Symptoms usually appear quickly, within a few hours to a few days. Symptoms include fever, cough, and often sore throat, coryza (runny nose), shortness of breath, wheezing, or difficulty breathing. Respiratory tract infections are a health problem that remains a global concern to this day. According to its official website, the WHO states that 5.3 million children under five years of age die, and 740,180 (14%) of these deaths are caused by pneumonia, which is one of the manifestations of ARI (2). Based on the 2023 Indonesian Health Survey, the prevalence of Acute Respiratory Infections (ARI) in East Java among children under five years old was found to be 37.5% (3). Colds and coughs are the most common upper respiratory tract infections affecting toddlers. Very young children are highly susceptible to colds and coughs, especially at the ILP “Cut Mutia” Bendogerit village, Blitar City. Based on interviews with the cadre leader, many young children experience colds and coughs, and most mothers of young children do not yet understand how to manage them. The limited knowledge and skills of mothers in dealing with cough and cold problems in toddlers can worsen the condition.

The problem found is the limited knowledge of mothers of young children regarding coughs and colds. When toddlers experience coughs and colds, most mothers consider it a common and natural problem for toddlers that will eventually resolve on its own without special treatment. In fact, cough symptoms can disrupt daily activities, reduce appetite, and ultimately interfere with the growth and development process. Thru this service activity, the implementing team will provide community-based nursing solutions and complementary therapies in the form of education and acupressure demonstrations for coughs and colds. The aspect of empowering mothers of young children is emphasized to improve partners' ability to handle coughs and colds in young children. This empowerment is expected to improve the quality of life of toddlers by increasing the knowledge and skills of toddler mothers regarding acupressure for coughs and colds.

The partners in this research activity are the group of mothers with young children from the ILP, as mothers

are the closest and most frequent figures interacting with children, making them strategically positioned as research partners in the context of self-care acupressure to treat coughs and colds in young children. This will enable mothers to perform simple therapeutic actions at home. This service will be carried out at the ILP “Cut Mutia” located in Bendogerit village, Blitar City. This location was chosen because, based on a study conducted with cadre mothers and mothers of young children, the majority of mothers of young children still lack knowledge about acupressure for coughs and colds in young children. ILP (Primary Service Integration) is a new transformation of the transformation of the form and mechanism of service, from age-specific primary health care to primary health care for all ages, which is now part of the community health service strengthening system at the village or sub-district level.

When toddlers start experiencing coughs and colds, mothers usually take initial steps like giving over-the-counter medication, inhaling steam, or giving a gentle massage. However, the mother's lack of knowledge about proper non-pharmacological techniques often makes home management less than optimal. Meanwhile, the use of certain medications in toddlers requires caution, so it cannot always be the primary option. Therefore, a mother's knowledge of performing massage to treat coughs and colds in toddlers, as a safe and health-principle-based self-care effort, is very important. One method that is becoming increasingly recognized and can be applied to support the reduction of cold and cough symptoms is acupressure. Acupressure can be performed gently by mothers at home, without special tools, and with minimal risk of side effects if done correctly. This method is considered suitable as a complementary approach in self-care (4). However, the application of acupressure is still rarely practiced by mothers of young children due to a lack of information, insufficient practical skills, and the absence of programs that systematically equip mothers with the correct techniques. A self-care acupressure program is needed to increase mothers' capacity to care for their toddlers, providing knowledge about acupressure points, duration, safe pressure, and the frequency of administering the treatment. Guidance thru educational activities and demonstrations allows mothers to be more confident in performing acupressure as part of their daily care (5).

Thru the self-care program of acupressure for mothers of toddlers, it is hoped that there will be an increase in mothers' knowledge and ability to independently and safely manage the symptoms of cough and cold in toddlers, and that they will be able to reduce their dependence on medication. Additionally, this program plays a role in strengthening the role of ILP as a means of community empowerment in complementary health. Here, nurses play a very important role in efforts to improve the health of toddlers thru complementary therapy approaches, one of which is acupressure for coughs and colds. In the ILP environment, nurses act as educators, providing accurate and easy-to-understand explanations about the causes of colds and flu, acupressure points that can be massaged, and the benefits of this therapy for toddlers (4). Nurses also ensure that every procedure taught is safe, meets standards, and can be performed independently by mothers of young children. The education provided covers massage techniques, duration, proper pressure, and warning signs to watch out for, ensuring no errors occur in practice. Beside being educators, nurses also serve as facilitators and companions for mothers of young children in regularly applying acupressure. Nurses conducted a live demonstration at the ILP, guiding mothers of young children until they were able to perform acupressure independently at home. Additionally, nurses monitor the toddler's symptom progression and evaluate whether the therapy helps alleviate the cold or cough or requires further referral to a healthcare facility. Thus, nurses also support the empowerment of mothers of young children so that they are more confident and able to perform safe, simple, and effective non-pharmacological care to reduce cough and cold complaints in young children.

Method

The design used in this study is a pre-experimental design (one-group pretest-posttest). The population in this activity consists of 40 mothers of young children registered at the ILP “Cut Mutia” in Bendogerit Village. The sampling technique used is total sampling, so the entire population is used as the sample. The instrument used was a questionnaire to measure the knowledge of mothers of young children about acupressure in managing coughs and colds, compiled based on material from (5), as well as an intervention instrument in the form of lectures and counselling using leaflets as health education about acupressure for coughs and colds Given one by one, conducted in one 25-minute session. Statistical analysis was performed using the Wilcoxon statistical test.

Results

The research activities carried out with the under-five mothers' group at the ILP “Cut Mutia” Bendogerit village in Blitar City have shown significant program achievements. This achievement is the result of the structured and collaborative program implementation between the implementing team and partners in the field. Well-established synergy supports the effective achievement of program goals. The results of this activity are presented in detail in the following section as an evaluation and reflection on the implementation of the program that has been carried out.

Table 1. Demographic Data of Mothers with Young Children at the ILP “Cut Mutia” Bendogerit Village

No.	Demographics	Category	Frequency	Percentage
1.	Age	Late Adolescence: 17-25 Years	4	10.0%
		Early Adulthood: 26-35 Years	22	55.0%
		Late Adulthood: 36-45 Years	13	32.5%
		Early Old Age: 46-55 Years	1	2.5%
		Total	40	100%
2.	Occupation	Teacher	3	7,5%
		Entrepreneur	11	27,5%
		ASN	6	15,0%
		Lecturer	2	5,0%
		Doctor	1	2,0%
		Housewife	17	42,5%
		Total	40	100%
3.	Education Level	Junior High School	4	10,0%
		Senior high school	16	40,0%
		Associate Degree	3	7,5%
		Bachelor	17	42,5%
		Total	40	100%

Based on Table 1, it can be seen that out of 40 mothers of young children at the ILP “Cut Mutia” Bendogerit village, 55.0% are young adults, 32.5% are older adults, 10.0% are late adolescents, and 2.5% are early elderly. Based on Table 1, it can be seen that the most common type of work among the 40 mothers of young children at the ILP “Cut Mutia” Bendogerit village is homemaker, accounting for 42.5%, followed by self-employed at 27.5%, civil servants at 15.0%, teachers at 7.5%, lecturers at 5.0%, and doctors at 2.0%. Based on Table 3, it can be seen that the highest level of education among the 40 mothers of young children at the ILP “Cut Mutia” Bendogerit” is Bachelor's degree at 42.5%, followed by High School at 40.0%, Junior High School at 10.0%, and Associate Degree at 7.5%.

Table 2. Results of the Wilcoxon Signed Rank Test

Knowledge level	Pretest		Posttest		Sstatistical Test
	Frekuensi	Presentase	Frekuensi	Presentase	
Baik	7	17.5%	32	80%	Wilcoxon Signed Rank Test : p=0,000 (p<0,005).
Cukup	18	45.0%	8	20%	
Kurang	15	37.5%	0	0%	
Total	40	100%	40	100%	

Based on the table 2 above, it shows that out of 40 respondents based on knowledge level characteristics, before health education was provided, 7 people had good knowledge, 18 people had sufficient knowledge, and 15 people had poor knowledge. After health education was provided, there was an increase, with 32 people having good knowledge and 8 people having sufficient knowledge. Based on the analysis results using the Wilcoxon Signed Rank Test, a significance value of $p=0.000$ ($p<0.005$) was obtained.

Discussion

Pretest and Posttest of Partner Knowledge Level

The table above shows that most respondents experienced an increase in scores from pretest to posttest, reflecting an improvement in knowledge after the intervention was implemented. Based on the analysis results using the Wilcoxon Signed Rank Test, a significance value of $p=0.000$ ($p<0.005$) was obtained. This indicates a statistically significant difference in the knowledge levels of mothers with young children at the ILP “Cut Mutia” Bendogerit village in Blitar City before and after receiving health education. Thus, it can be concluded that providing health education has a positive influence on increasing respondents' knowledge. This finding aligns with opinion that health education is a learning process aimed at improving the health knowledge, attitudes, and behaviors of individuals and groups. According to him, increased knowledge is an initial indicator of the success of a health education intervention,

as knowledge forms the basis for better health attitudes and behaviors (6).

Health education on acupressure as an effort to manage coughs and colds in toddlers, provided to mothers of toddlers at the ILP “Cut Mutia” in Bendogerit Village, was shown to have a significant impact on increasing knowledge about managing coughs and colds in toddlers. This proves that delivering information thru health education using leaflets is proven effective in increasing knowledge about acupressure for managing coughs and colds in toddlers (7). Partners in the self-care program for coughs and colds in toddlers showed a significant increase in knowledge after receiving interventions thru lecture methods with a counselling approach, information delivery using leaflets, and direct demonstration activities that practically supported understanding of the material (8). This approach is proven effective because it is supported by learning theory, which states that information delivery thru mass media such as leaflets is effective (9).

The partners in this activity showed great enthusiasm and a very positive response to the series of events. This is due to the interactive extension methods, where the material is not only presented theoretically but is also followed by an acupressure demonstration session (10). Thru live demonstrations, partners not only learn what acupressure is but are also able to practice it independently at home (11). Thus, this activity not only increases knowledge but also develops sustainable practical skills for partners in maintaining the health of their young children, particularly for coughs and colds in toddlers (7).

Results of the assessment activities with partners

Health education activities were conducted in 1 meeting. Health education was provided to 40 mother partners with young children, using lecture and counselling methods with leaflets. The topics covered were the causes of coughs and colds, risk factors if coughs and colds in young children are not properly managed, the definition of acupressure, the benefits of acupressure, and specific body points that can relieve coughs and colds in young children, all aimed at managing coughs and colds in young children.

The implementation stages of this activity are as follows: first, the preparation stage, which involves preparing pretest and posttest questionnaires, the educational materials to be used in this activity, and the tools for measuring the knowledge level of mothers of young children, namely questionnaires. The implementation stage involves educational activities using lecture and counselling methods. This activity aims to increase partners' knowledge by educating participants about acupressure therapy for coughs and colds in young children (12). Counselling sessions on acupressure therapy to overcome coughs and colds in young children are conducted to provide partners with understanding and skills in independently managing coughs and colds in young children at home (13). Thru this counselling, partners are expected to be able to independently perform acupressure therapy for coughs and colds in young children, so that it can be applied in daily life as a treatment for coughs and colds in young children (14). This research program activity concluded with the administration of a posttest to the partners using the same questionnaire containing the same questions as the pretest. The provision of counselling education for the management of colds and flu in toddlers is presented in the following image.



Figure 1 Provides Education on Acupressure for Coughs and Colds in Toddlers



Figure 2 Provides Counselling on Acupressure for Coughs and Colds in Toddlers

After the lecture and material presentation using leaflets, counselling was conducted on acupressure techniques

for coughs and colds in toddlers. This counselling includes explanations and practice of acupressure points, such as point locations, how to press, massage direction, and duration. Mothers of young children were given the opportunity to observe and practice acupressure techniques again with the guidance of a facilitator. Observation results show that mothers of young children are beginning to understand the steps for performing acupressure and demonstrated high enthusiasm during the demonstration session.

Suggestions

Based on the results of the activities carried out with the ILP “Cut Mutia” Bendogerit village group of mothers with young children, significant program achievements have been demonstrated. This achievement is the result of the structured and collaborative program implementation between the implementing team and partners in the field. The well-established synergy supports the effective achievement of program goals. It is hoped that the partners, the mothers of toddlers, can apply acupressure therapy to treat coughs and colds in toddlers at home independently and appropriately. For future community service researchers, it is recommended to develop drupa activities by expanding the scope of participants to optimize acupressure therapy in treating coughs and colds in toddlers. In addition, for relevant institutions, strengthening community-based programs is expected to continue supporting empowerment initiatives, particularly for mothers with young children, as a strategic effort to sustainably reduce the prevalence of coughs and colds in toddlers in Indonesia.

Acknowledgment

Thank you to the head of the ILP “Cut Mutia” cadre, from the Bendogerit village, Blitar City, for granting permission to conduct this research. I would also like to express my gratitude to my supervisors, for their guidance, insights, and expertise, which were very helpful in the progress of this research.

References

1. Librawati S, Lusiana A, Masini. Efektifitas Pijat Batuk Pilek Terhadap Lama Sembuh Batuk Pada Balita. 2025;16:70–7. <https://doi.org/10.48186/89acqf13>
2. 2020 W. WHO New Pneumonia KIT 2020 Information Note. 2020;(1):1–2. Available from: <https://nurseslabs.com/pneumonia-nursing-care-plans/>
3. Indonesia SK 2023. Dalam angka. 2023;
4. Pertiwi SI, Setiyani D, Christiani N, Setyowati H. Efektifitas Pijat Batuk Pilek pada Balita di Desa Morangan Kecamatan Suruh. 2024;3(1):614–21.
5. Oktavia A, Ayu D, Veftisia V. Akupresure Batuk Pilek pada Balita di Komplek Perumahan Bds 3 Balikpapan. 2023;2(2):1098–106. <https://callforpaper.unw.ac.id/index.php/semnasdancfpbidanunw/article/view/557>
6. Ulfa EA. Pendidikan Kesehatan Terhadap Tingkat Pengetahuan Ibu Dalam Upaya Pencegahan Stunting. 2022; Http://Repo.Uds.Ac.Id/Id/Eprint/351
7. Hamzah SR, Nurul S, Saleh H. Edukasi Pijat Batuk Pilek Pada Balita Terhadap Peningkatan Pengetahuan Ibu di Desa Ratatotok Tengah. 2023;3(2):2146–52. <http://ejournal.sisfokomtek.org/index.php/jpkm/article/view/766>
8. Sari, D. N., Tambunan, I., Santoso, R., Oktaviani, M., & Rahmadiana A. PENDEKAR: Peningkatan Derajat Kesehatan Anak Melalui Akupresur PENDEKAR: Enhancement Of Children’s Health Degree Through Acupressure. J Pengabdian Pada Masyarakat, 2023;8(2), 350-359.
9. Husna K. Pengaruh Konseling Terhadap Perilaku Ibu Dalam Pencegahan Dan Perawatan Balita Infeksi Saluran Pernafasan Akut Di Wilayah Kerja Puskesmas Bangkalan: Penelitian Quasy Eksperiment. (Doctoral Diss Univ AIRLANGGA). 2024; <http://repository.unair.ac.id/id/eprint/132011>
10. Herlina S, Qomariah S, Sartika W, S PW, Diansyah A, Studi P, et al. Pelatihan Akupresure Untuk Mengurangi Batuk Pilek Pada Anak Di Panti Asuhan Rahmat Nur Hidayah Pekanbaru. 2023;3(1):1–7. <https://doi.org/10.58794/jdt.v3i1.450>
11. Imawan, V. S., & Husain F. Persepsi Pasien terhadap Terapi Akupresur dalam Mengatasi Insomnia di Sebuah Klinik Kota Semarang. Etnorefika J Sos dan Budaya, 2024;13(3), 381-399. <https://doi.org/10.33772/etnorefika.v13i3.261>
12. Fairus M, Triwijayanti Y, Poltekkes M, Prodi T, Terapan S, Metro K, et al. Edukasi Teknik Akupresure Untuk Mengatasi Batuk Pilek Pada Balita Di Puskesmas Purwosari. 2021;928–32. <https://prosiding.rcipublisher.org/index.php/prosiding/article/view/246>
13. Ridwan, M., & Fibrila F. Pelatihan kombinasi akupresur dan pijat untuk mengatasi batuk pilek pada balita di posyandu kenanga Banjarrejo Batanghari Lampung Timur. Seandanan J Pengabdian Pada Masyarakat, 2022;2(1),

- 16-23. <https://doi.org/10.23960/seandanan.v2i1.31>
14. Hikmah I. Pengaruh Pijat Akupresur Terhadap Penurunan Frekuensi Batuk Pada Balita: Literature Review. 2024; <https://repositori.unimma.ac.id/id/eprint/4468>