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Shallot vs. *Dadap Serep* leaf compresses: Non-pharmacological approaches to fever management in toddlers with ARIs

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Abstract

Background: Fever is one of the most common symptoms of Acute Respiratory Infections (ARIs) in toddlers, and non-pharmacological interventions such as traditional compresses are widely used in community settings. Shallot (*Allium cepa* L) compresses and *dadap serep* (*Erythrina subumbrans*) leaf compresses are two conventional methods believed to have antipyretic effects, yet direct comparative evidence remains limited.

Purpose: To compare the effectiveness of shallot compresses and *dadap serep* leaf compresses in reducing fever among toddlers diagnosed with ARIs.

Method: A quasi-experimental design with a pre-test and post-test control group was employed. A total of 34 toddlers aged 12–59 months were selected using purposive sampling and evenly divided into two groups: shallot compress (n = 17) and *dadap serep* compress (n = 17). Body temperature was measured before and 15 minutes after the intervention. Data were analyzed using paired t-tests, independent t-tests, and N-Gain scores.

Results: Both interventions significantly reduced body temperature ($p < 0.001$). The *dadap serep* group showed a slightly higher absolute temperature reduction (0.60°C) compared to the shallot group (0.50°C). However, the shallot compress demonstrated a higher N-Gain score, indicating greater proportional effectiveness.

Conclusion: Shallot and *dadap serep* leaf compresses are both effective, low-cost, and accessible non-pharmacological interventions for reducing fever in toddlers with ARIs. Shallot compresses provide more stable proportional effectiveness, while *dadap serep* compresses offer a slightly greater immediate reduction. Both methods hold value for home-based fever management and primary healthcare settings.

Keywords: Acute Respiratory Infection; Antipyretic; *Dadap serep*; Shallots; Traditional Compress Methods.

INTRODUCTION

Acute Respiratory Infections (ARIs) remain one of the leading causes of morbidity and mortality among children under five in developing countries, including Indonesia (Liu, Qin, Du, Wang, Yan, Liu, & Liu, 2022; Sirota, Doxey, Dominguez, Bender, Vongpradith, Albertson, & Ed-Dra, 2025; Windi, Efendi, Qona'ah, Adnani, Ramadhan, & Almutairi, 2021). ARIs affect both the upper and lower respiratory tracts and are triggered by more than 300 pathogenic microorganisms, predominantly viruses and bacteria (Widhidewi, Wiyatno, Dewantari, Paramasatiari, Aryastuti, Artika, & Safari, 2020). According to the World Health Organization (WHO), ARIs contribute to millions of cases annually and represent one of the major causes of death in children under five worldwide (Gill, Kaziev, Mtaweh, Kant, Seaton, Farrar, & Khosa, 2025). A similar pattern is observed in Indonesia, where ARIs consistently rank among the top three most frequently reported diseases in healthcare facilities. In Bengkulu Province, ARI cases were the third highest in 2023 (Health Office of Bengkulu Province, 2024).

Fever is documented as a co-occurring symptom in 55–82% of ARI cases among children under five (Desouza, Patil, Thomas, & Desouza, 2024; Kwiyoleda, Groendahl, Okamo, Kayange, Manyama, Kidenya, & Mirambo, 2020). Although fever is a physiological response to infection, inadequate management may lead to serious complications such as dehydration, neurological impairment, and febrile seizures in toddlers (Al Arifi & Alwhaibi, 2021; Lé, Kané, Dembé, Maiga, Kountao, Traoré, & Dicko, 2025; Rafferty, Burrows, Joseph, Leveille, Nihtianova, & Amirian, 2021).

Pharmacological treatment using antipyretics is generally the first-line management (Alqudah, Stubbs, Al-Masaeed, & Fernandez, 2025; Sakr, Toufailli, Akiki, Akel, Malaeb, Dabbous, & Salameh, 2022). However, non-pharmacological approaches remain widely practiced—particularly in rural communities—due to their accessibility, affordability, and long-standing cultural use (Kerdar, Himbert, Martin, & Jenetzky, 2021; Ng, Li, Jin, & Wong, 2023). Among these methods, compress therapy is one of the most commonly applied non-pharmacological

interventions for reducing fever in young children (Menekşe, Tiryaki, & Çınar, 2025; Ng et al., 2023). Two traditional compress techniques frequently used in Indonesian households are the shallot (*Allium cepa* L) compress and the *dadap serep* (*Erythrina subumbrans*) leaf compress. The shallot compress is believed to accelerate fever reduction through active compounds such as *allylcysteine sulfoxide* and *flavonoids*, which stimulate peripheral vasodilation (Kailasari, Cahyaningrum, & Suryani, 2023; Pebriani, Handayani, & Kusvitasari, 2023; Putri & Wulan, 2022). Meanwhile, *dadap serep* leaves are used as a natural cooling agent due to their surface properties, which effectively absorb body heat (Awatiszahro, Nirwana, Rofiah, Sefika, & Ulum, 2023; Novitasari, Kurniawati, & Septiana, 2023). As a traditional medicinal plant, *dadap serep* contains antipyretic compounds that function primarily through conduction-based heat transfer (Susilawati, Levita, Susilawati, & Sumiwi, 2023).

Despite the widespread use of these two traditional compress methods and their documented benefits in several clinical contexts, no studies to date have directly compared the effectiveness of shallot compresses and *dadap serep* leaf compresses in reducing fever among toddlers with ARI. This gap is significant, particularly in regions such as Bengkulu, where traditional remedies remain commonly used and where selecting the most effective non-pharmacological intervention may improve early fever management at home and in primary healthcare facilities. Therefore, the present study aims to provide empirical evidence comparing the effectiveness of these two traditional compress techniques in reducing fever among toddlers with ARI. By directly comparing two widely used community-based interventions through an experimental approach, this study enables a more objective and measurable evaluation of their effectiveness. The findings are expected to strengthen evidence-based practices in pediatric nursing and offer practical recommendations tailored to local contexts, especially in areas with limited access to pharmacological treatments.

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RESEARCH METHOD

A quasi-experimental design with a pre-test and post-test approach involving a control group was applied. This design made it possible to observe changes in body temperature among toddlers before and after the intervention while comparing the effectiveness of two traditional compress techniques, shallot compress and *dadap serep* leaf compress. The research was conducted in the working area of the Rimbo Pengadang Public Health Center, Lebong Regency, from August to September 2024, a period marked by rising ARI cases among toddlers.

The study population consisted of toddlers aged 12–59 months who experienced ARI accompanied by fever, with a total recorded population of 257 children. From this population, a sample was selected using purposive sampling based on specific inclusion criteria: toddlers aged 12–59 months, clinically diagnosed with ARI, having a body temperature of at least 37.8°C during the pre-test, having not received antipyretic medication within the last 6 hours, and whose parents or guardians had provided informed consent. Exclusion criteria were a history of febrile seizures, allergies or skin irritation to onions or specific plants, and comorbid conditions that might influence body temperature. A total of 34 toddlers met these criteria and were divided equally into two groups of 17 toddlers each, with the intervention group receiving the shallot compress and the control group receiving the *dadap serep* leaf compress.

Several instruments were used in this study, including an observation sheet to document demographic information and temperature readings, a calibrated digital axillary thermometer to measure body temperature, and a stopwatch to ensure that the duration of each intervention was consistent. The shallot compress was prepared from two cloves of fresh shallots weighing approximately ten grams, crushed to release their natural extract, and mixed with five drops of eucalyptus oil. This mixture was applied to the toddler's chest, back, and the soles of the feet and left in place for fifteen minutes.

Meanwhile, the *dadap serep* leaf compress used three to four fresh leaves that were washed and briefly soaked in warm water for mild sterilization before being placed on the toddler's forehead, chest, and abdomen for the same fifteen-minute duration.

Body temperature was measured twice before the intervention and again fifteen minutes afterward using the digital axillary thermometer, with the mean of each pair of readings recorded to minimize measurement error. Throughout the intervention, several external variables were controlled to maintain internal validity. The room temperature was maintained between 26°C and 28°C, and no fan or air conditioning was used during the procedure. All toddlers wore lightweight standardized clothing, and interventions were performed between 09:00 and 11:00 to minimize circadian variations in body temperature. Food and fluid intake were paused for at least fifteen minutes before and during the intervention to prevent thermal changes related to digestion or activity.

Data analysis began with univariate analysis to describe respondent characteristics. The Shapiro–Wilk test was used to assess data normality. A paired t-test analyzed differences in body temperature before and after the intervention within each group, while an independent t-test compared the degree of temperature reduction between the two groups. The N-Gain Score was also calculated to evaluate the relative effectiveness of each intervention method.

This research has received ethical approval from the Ethics Committee of Bengkulu Health Polytechnic, Ministry of Health. Parents or guardians were fully informed of the study procedures and provided written consent. The researcher ensured participant safety throughout the study, immediately discontinued the intervention if any irritation occurred, and referred toddlers to medical personnel if their body temperature failed to improve after the procedure. This research obtained ethical approval with No KEPK.BKL/662/12/2024.

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RESEARCH RESULTS

Table 1. Characteristics of the Participants (N=34)

Variable	Group	
	Intervention (n=17)	Control (n=17)
Age (n/%) (Mean±SD)(Range)(years)		
1-3	(3.23±1.25)(1-5) 7/41.2	(3.18±1.19)(1-5) 4/23.5
3-5	10/58.8	13/76.5
Gender (n/%)		
Male	7/41.2	7/41.2
Female	10/58.8	10/58.8
Nutritional status (n/%)		
Underweight (<7 kg)	0/0.0	0/0.0
Normal (7.7 kg – 17 kg)	12/70.6	9/52.9
Overweight (>17 kg)	5/29.4	8/47.1
Height for age (n/%)		
Short (<75 cm)	0/0.0	0/0.0
Normal (75 cm – 115 cm)	17/100	17/100
Height (>115 cm)	0/0.0	0/0.0
Body Temperature (°C) (Mean±SD/range)		
Pre-test	37.88±0.11/37.8-38.0	37.90 ±0.11/37.8-38.1
Post-test	37.38±0.18/37.1-37.6	37.30 ±0.17/37.1-37.7

Table 1 indicates that the majority of toddlers in both groups were aged between 3 and 5 years. The sex distribution was balanced, with boys and girls represented equally in the intervention and control groups. Most participants also demonstrated normal nutritional status and height, suggesting comparable baseline characteristics across groups. At the pre-test stage, all toddlers presented with fever, defined as body temperatures $\geq 37.8^{\circ}\text{C}$. The mean initial temperature in the intervention group was 37.88°C (range: $37.8\text{--}38.0^{\circ}\text{C}$), while the control group showed a slightly higher mean of 37.90°C (range: $37.8\text{--}38.1^{\circ}\text{C}$). Following the intervention, the average post-test temperature decreased to 37.38°C (range: $37.10\text{--}37.60^{\circ}\text{C}$) in the intervention group and 37.30°C (range: $37.10\text{--}37.70^{\circ}\text{C}$) in the control group.

Table 2. Pre-Post Temperature Changes Analysis

Group	Pre-test (Mean ± SD)	Post-test (Mean ± SD)	Δ Change	p-value
Intervention (Shallot)	37.88±0.11/ 37.8-38.0	37.38±0.18/ 37.1-37.6	0.50	< 0.001*
Control (<i>Dadap serep</i>)	37.90 ±0.11/ 37.8-38.1	37.30 ±0.17/ 37.1-37.7	0.60	< 0.001*

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Table 2 illustrates that in the intervention group, the mean body temperature declined from 37.88°C to 37.38°C, reflecting a reduction of 0.50°C. Statistical analysis using a paired t-test confirmed this change with a p-value of <0.001. Similarly, in the control group, the average temperature decreased from 37.90°C to 37.30°C, corresponding to a reduction of 0.60°C. This difference was also statistically significant, with a p-value of 0.001.

Table 3. N-Gain Score

Group	X_{Max}	X_{Min}	Measures of Central Tendency		Group Variance Measure	
			X_{Mean}	X_{Median}	Range	STD
Intervention (Shallot)	0.80	0.13	0.37	0.30	0.67	0.07
Control (<i>Dadap serep</i>)	0.90	0.00	0.22	0.27	0.45	0.04

Table 3 indicates that the shallot compress achieved an average N-Gain Score of 0.37, which falls within the category of moderate effectiveness. The *dadap serep* leaf compress produced a lower average N-Gain Score of 0.22, also classified as moderate, though notably less effective compared to the shallot compress.

DISCUSSION

The findings of this study demonstrate that both shallot and *dadap serep* leaf compresses are effective in reducing fever among toddlers with Acute Respiratory Infections (ARIs). These results align with previous studies reporting the effectiveness of shallot and *dadap serep* compresses in lowering body temperature in febrile children (Awatiszahro et al., 2023; Kailasari et al., 2023; Novitasari et al., 2023; Pebriani et al., 2023; Putri & Wulan, 2022). However, the relative effectiveness of each intervention exhibits important differences that warrant deeper discussion.

The decrease in temperature in both groups indicates that these non-pharmacological interventions operate through distinct mechanisms of heat reduction. In the shallot compress group, the average temperature reduction of 0.50°C is consistent with previous findings reporting reductions of 0.50–0.73°C within 15–30 minutes (Rahmawati, Isnaini, Lathifah, & Yuantina, 2024). The primary mechanism involves peripheral vasodilation and stimulation of heat release through sweating. This vasodilation increases blood flow to the skin's

surface, allowing body heat to dissipate more effectively (Kailasari et al., 2023). Volatile compounds such as *propyl disulfide* and essential oils contained in shallots accelerate evaporation, facilitating rapid heat loss through sweating (Shahrajabian, Wenli, & Cheng, 2020). Flavonoids (*quercetin*, *kaempferol*) and sulfur compounds also exert anti-inflammatory and antipyretic effects by inhibiting prostaglandin synthesis in the hypothalamus, thereby lowering the body's thermal set point (Marefati, Ghorani, Shakeri, Boskabady, Kianian, Rezaee, & Boskabady, 2021).

In contrast, the *dadap serep* leaf compress produced a slightly greater absolute temperature reduction of 0.60°C, similar to previous studies reporting decreases of up to 0.80°C (Awatiszahro et al., 2023). Its primary mechanism is believed to derive from conductive heat transfer, in which the cool surface of the leaf absorbs heat directly from the skin. When applied, the cold contact stimulates heat conduction from the skin to the leaf, triggering a cooling signal to the hypothalamus via the spinal cord, prompting the body to adjust its temperature toward normal (Susilawati et al., 2023). *Dadap serep* leaves contain alkaloids, flavonoids, saponins, polyphenols, and tannins (Fahmy, Al-Sayed, El-Shazly, & Nasser Singab, 2020). Among these compounds, alkaloids function as natural antipyretics that help lower body temperature by providing a cooling effect on the skin (Novitasari et al., 2023; Susilawati et al., 2023). Meanwhile, flavonoids and polyphenols exert anti-inflammatory effects by

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inhibiting prostaglandin production, a key mediator of fever and inflammation (Jiménez-Cabrera, Bautista, Velázquez-González, Jaramillo-Morales, Guerrero-Solano, Urrutia-Hernández, & De la O-Arciniega, 2020).

Despite the greater absolute reduction in temperature produced by *dadap serep*, the N-Gain analysis shows that shallot compresses are more consistent in proportionally reducing fever relative to the child's initial temperature. This indicates that the shallot compress demonstrates more stable effectiveness across varying degrees of fever. This consistency may be influenced by the more uniform penetration of active compounds across the applied body areas and their higher volatility, which promotes rapid vasodilation (Marefati et al., 2021; Teshika, Zakariyyah, Zaynab, Zengin, Rengasamy, Pandian, & Fawzi, 2019; Setiawan, Putri, Indayani, Widiastih, Anastasia, Setyaningsih, & Riswanto, 2021). In contrast, while *dadap serep* leaf compresses can reduce temperature rapidly, their effects appear more variable among children (Awatiszahro et al., 2023; Jiménez-Cabrera et al., 2020). Such variation may be associated with differences in leaf thickness, skin characteristics, and hydration levels that influence heat conduction (Fahmy et al., 2020).

Clinically, these findings have important implications for primary healthcare and home-based fever management. Both compression methods may serve as effective alternatives before administering antipyretics, particularly in settings with limited access to medications. These results also reinforce the importance of educating parents on the safe and appropriate use of traditional compress techniques. Given its more consistent relative effectiveness, the shallot compress may be recommended as the primary option, while *dadap serep* leaf compresses may remain a practical alternative in urgent situations or when other materials are unavailable. This study provides strong empirical evidence comparing two traditional interventions widely used in Indonesian communities, thus strengthening the scientific basis for evidence-based traditional health practices. Furthermore, the findings offer relevant insights for nurses, midwives, and other health professionals in selecting suitable non-

pharmacological interventions for mild to moderate fever.

Nevertheless, this study has several limitations. The sample size was relatively small, limiting the generalizability of the findings. The 15-minute post-intervention measurement period also does not capture the longer-term effects of the compress methods on temperature stabilization. Additionally, ARI types were not categorized by etiology (viral or bacterial), which could influence inflammatory response variations among participants. The use of an axillary thermometer, known to produce slightly lower readings compared to core body temperature, may have affected the precision of measurements. Future studies should consider longer observation periods, such as 30–60 minutes after intervention, to better assess sustained temperature changes. Research combining traditional compresses with pharmacological therapy may also help determine whether synergistic effects exist. Furthermore, using more accurate temperature measurement tools, such as tympanic or infrared thermometers, could improve data reliability. Phytochemical studies investigating the active compounds in shallot and *dadap serep* leaves are also warranted to strengthen the scientific understanding of these traditional interventions.

CONCLUSION

Both shallot and *dadap serep* leaf compresses effectively reduced fever in toddlers with ARIs. The *dadap serep* compress produced a slightly greater immediate temperature drop, while the shallot compress showed more consistent proportional effectiveness, likely due to its stable active compound action. These findings support both methods as safe, low-cost options for community fever management, with shallot compresses recommended for sustained effectiveness and *dadap serep* compresses as a practical alternative for rapid cooling.

REFERENCES

- Al Arifi, M. N., & Alwhaibi, A. (2021). Assessment of Saudi parents' beliefs and behaviors towards management of child fever in Saudi Arabia—a cross-sectional study. *International journal of*

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- environmental research and public health*, 18(10), 5217.
- Alqudah, M., Stubbs, M. A., Al-Masaeed, M., & Fernandez, R. (2025). An evaluation of parents' and caregivers' preferences managing fever in children based on experiences in using ibuprofen and paracetamol: A systematic review. *Journal of Pediatric Nursing*.
- Awatiszahro, A., Nirwana, B. S., Rofiah, K., Sefika, P. R., & Ulum, H. (2023). Erythrina Subumbrans Compress To Reduce Fever Of Children With Hyperthermia. *Journal of Global Research in Public Health*, 8(2), 170-172.
- Desouza, J., Patil, M., Thomas, I., & Desouza, J. (2024). Current clinical profiles of acute respiratory tract infections in children between 2 months to 5 years. *Int J Contemp Pediatr*, 11, 152-6.
- Fahmy, N. M., Al-Sayed, E., El-Shazly, M., & Nasser Singab, A. (2020). Alkaloids of genus Erythrina: An updated review. *Natural Product Research*, 34(13), 1891-1912.
- Health Office of Bengkulu Province. (2024). *Profil Kesehatan Provinsi Bengkulu Tahun 2023*. Sub. Bagian Perencanaan, Evaluasi dan Pelaporan Dinas Kesehatan Provinsi Bengkulu. Retrieved from: <https://dinkes.bengkuluprov.go.id/buku/>
- Gill, P. J., Kaziev, C. L., Mtaweh, H., Kant, T., Seaton, C., Farrar, D. S., & Khosa, B. (2025). Performance of the World Health Organization (WHO) severe acute respiratory infection (SARI) case definitions in hospitalized children and youth: cross-sectional study. *The Lancet Regional Health–Americas*, 44.
- Jiménez-Cabrera, T., Bautista, M., Velázquez-González, C., Jaramillo-Morales, O. A., Guerrero-Solano, J. A., Urrutia-Hernández, T. A., & De la O-Arciniega, M. (2020). Promising antioxidant activity of Erythrina genus: an alternative treatment for inflammatory pain?. *International Journal of Molecular Sciences*, 22(1), 248.
- Kailasari, R., Cahyaningrum, E. D., & Suryani, R. L. (2023). Pengaruh Pemberian Kompres Bawang Merah Terhadap Penurunan Suhu Tubuh Pada
- Balita Demam Di Puskesmas Kembaran 1. *Jurnal Cakrawala Ilmiah*, 2(12), 4477-4484.
- Kerdar, S. H., Himbert, C., Martin, D. D., & Jenetzky, E. (2021). Cross-sectional study of parental knowledge, behaviour and anxiety in management of paediatric fever among German parents. *BMJ open*, 11(10), e054742.
- Kwiyolecha, E., Groendahl, B., Okamo, B., Kayange, N., Manyama, F., Kidenya, B. R., & Mirambo, M. M. (2020). Patterns of viral pathogens causing upper respiratory tract infections among symptomatic children in Mwanza, Tanzania. *Scientific reports*, 10(1), 18490.
- Lé, F., Kané, M., Dembé, G., Maiga, L. B., Kountao, N., Traoré, N. L., & Dicko, F. (2025). Causes and Prognoses of Acute Fever in Children Aged 0-15 Who Are Hospitalized in the Department of Pediatrics at the University Hospital (UH) Gabriel Touré, Bamako-Mali. *Open Journal of Pediatrics*, 15(1), 10-20.
- Liu, Q., Qin, C., Du, M., Wang, Y., Yan, W., Liu, M., & Liu, J. (2022). Incidence and mortality trends of upper respiratory infections in China and other Asian countries from 1990 to 2019. *Viruses*, 14(11), 2550.
- Marefati, N., Ghorani, V., Shakeri, F., Boskabady, M., Kianian, F., Rezaee, R., & Boskabady, M. H. (2021). A review of anti-inflammatory, antioxidant, and immunomodulatory effects of Allium cepa and its main constituents. *Pharmaceutical biology*, 59(1), 285-300.
- Menekşe, D., Tiryaki, Ö., & Çınar, N. (2025). Determination of the relationship between parents' health literacy and fever management of their children: A cross-sectional study. *Journal of Advanced Nursing*, 81(2), 867-877.
- Ng, H. L., Li, H., Jin, X., & Wong, C. L. (2023). Parental knowledge, attitudes, and practices towards childhood fever among South-East and East Asian parents: A literature review. *Plos one*, 18(9), e0290172.

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- Novitasari, A., Kurniawati, A., & Septiana, M. (2023). Plesdasep Innovation: Fever-Reducing Plaster Using the Leaves of Dadap Serep (*Erythrina subumbrans*) as a First Aid Medium for Fever. *Jurnal Inovasi Daerah*, 2(2), 204-210.
- Pebriani, R., Handayani, L., & Kusvitasari, H. (2023). Pengaruh Kompres Bawang Merah Terhadap Penurunan Suhu Tubuh Pada Kejadian Ikutan Paska Imunisasi (KIPI) Pentabio. *Jurnal Rumpun Ilmu Kesehatan*, 3(3), 37-52.
- Putri, F., & Wulan, R. (2022). Hubungan Kompres Bawang Merah (Allin Esensial Oil) Dengan Penurunan Demam Pada Balita Di Kampung Hasik Jaya Sorong Selatan. *Coping: Community Of Publishing In Nursing*, 10(3), 299.
- Rafferty, M. S., Burrows, H., Joseph, J. P., Leveille, J., Nihtianova, S., & Amirian, E. S. (2021). Multisystem inflammatory syndrome in children (MIS-C) and the coronavirus pandemic: Current knowledge and implications for public health. *Journal of infection and public health*, 14(4), 484-494.
- Rahmawati, E. D., Isnaini, N., Lathifah, N. S., & Yuantina, Y. (2024). Efektivitas Bawang Merah Terhadap Penurunan Suhu Tubuh Anak dengan Demam Pasca Imunisasi DPT di Desa Sukanegara. *Malahayati Nursing Journal*, 6(1), 214-221.
- Sakr, F., Toufaily, Z., Akiki, Z., Akel, M., Malaeb, D., Dabbous, M., & Salameh, P. (2022). Fever among preschool-aged children: a cross-sectional study assessing Lebanese parents' knowledge, attitudes and practices regarding paediatric fever assessment and management. *BMJ open*, 12(10), e063013.
- Setiawan, A. Y. D., Putri, R. I., Indayani, F. D., Widiasih, N. M. S., Anastasia, N., Setyaningsih, D., & Riswanto, F. D. O. (2021). Kandungan kimia dan potensi bawang merah (*Allium cepa* L.) sebagai inhibitor SARS-CoV-2. *Indonesian Journal of Chemometrics and Pharmaceutical Analysis*, 143-155.
- Shahrajabian, M. H., Wenli, S. U. N., & Cheng, Q. (2020). Chinese onion, and shallot, originated in Asia, medicinal plants for healthy daily recipes. *Notulae Scientia Biologicae*, 12(2), 197-207.
- Sirota, S. B., Doxey, M. C., Dominguez, R. M. V., Bender, R. G., Vongpradith, A., Albertson, S. B., & Ed-Dra, A. (2025). Global, regional, and national burden of upper respiratory infections and otitis media, 1990–2021: a systematic analysis from the Global Burden of Disease Study 2021. *The Lancet Infectious Diseases*, 25(1), 36-51.
- Susilawati, E., Levita, J., Susilawati, Y., & Sumiwi, S. A. (2023). Pharmacology activity, toxicity, and clinical trials of *Erythrina* genus plants (Fabaceae): an evidence-based review. *Frontiers in Pharmacology*, 14, 1281150.
- Teshika, J. D., Zakariyyah, A. M., Zaynab, T., Zengin, G., Rengasamy, K. R., Pandian, S. K., & Fawzi, M. M. (2019). Traditional and modern uses of onion bulb (*Allium cepa* L.): a systematic review. *Critical reviews in food science and nutrition*, 59(sup1), S39-S70.
- Widhidewi, N. W., Wiyatno, A., Dewantari, A. K., Paramasatiari, L., Aryastuti, S. A., Artika, I. N., & Safari, D. (2020). Identification of viral etiology of acute respiratory tract infections in children and adults in Tabanan, Bali, Indonesia. *Access Microbiology*, 2(6), e000120.
- Windi, R., Efendi, F., Qona'ah, A., Adnani, Q. E. S., Ramadhan, K., & Almutairi, W. M. (2021). Determinants of acute respiratory infection among children under-five years in Indonesia. *Journal of Pediatric Nursing*, 60, e54-e59.

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