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BIBLIOTHERAPY OUTCOMES IN PRESCHOOLERS WITH INFECTIOUS DISEASES


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<p>ARTICLE INFORMATION</p>	<p>A B S T R A C T</p>
<p>*Corresponding Author Nova Ari Pangesti E-mail: nopheexcellent@gmail.com</p>	<p><i>Background: Hospitalization in preschool children, especially due to infectious diseases such as Dengue Haemorrhagic Fever (DHF) and Acute Respiratory Tract Infection (ARI), frequently triggers anxiety that affects psychological well-being and the recovery process. Bibliotherapy, a non-pharmacological intervention using age-appropriate picture storybooks, has been applied to reduce anxiety. However, its effectiveness may differ depending on the illness and individual response. Research Objective: To compare the effectiveness of bibliotherapy in reducing anxiety levels among hospitalized preschool children with DHF and ARI. Methods: This comparative case study with a qualitative approach involved four children aged 4–7 years: two diagnosed with DHF at Dr. Soedirman General Hospital, Kebumen, and two diagnosed with ARI at Majenang General Hospital. Bibliotherapy sessions were conducted for three consecutive days, one 20-minute session per day, using picture storybooks. Anxiety levels were assessed through behavioral observation and the Spence Children’s Anxiety Scale (SCAS) Parent Report. Results: The findings showed differences between the two groups. Children with DHF demonstrated a more significant reduction in anxiety within the first two days, whereas children with ARI showed a slower decrease, with improvements observed on days two and three. Moreover, children with DHF exhibited positive emotional expressions earlier than those with ARI. Conclusion: Bibliotherapy appears to be more effective in reducing anxiety levels more rapidly in preschool children hospitalized with DHF compared to those with ARI.</i></p>
<p><i>Keywords:</i> Bibliotherapy_1 Anxiety_2 Dengue Hemorrhagic Fever (DHF)_3 Acute Respiratory Tract Infection (ARI)_4 Preschool Children_5</p>	<p>A B S T R A K</p> <p>Latar Belakang: Hospitalisasi pada anak prasekolah, khususnya akibat penyakit infeksi seperti <i>Dengue Hemorrhagic Fever</i> (DHF) dan Infeksi Saluran Pernapasan Akut (ISPA), sering menimbulkan ansietas yang berdampak pada kondisi psikologis dan proses penyembuhan anak. Biblioterapi salah satu intervensi non-farmakologis yang digunakan untuk mengurangi ansietas melalui media buku cerita bergambar yang sesuai dengan usia. Namun, efektivitas intervensi ini dapat bervariasi tergantung pada kondisi penyakit dan respon individu. Tujuan Penelitian: membandingkan efektivitas biblioterapi dalam menurunkan tingkat ansietas pada anak prasekolah yang menjalani hospitalisasi akibat DHF dan ISPA di dua rumah sakit berbeda. Metode: Penelitian ini menggunakan desain studi kasus komparatif dengan pendekatan kualitatif. Empat anak usia 4–7 tahun yang menjalani perawatan inap menjadi partisipan: dua anak dengan DHF di RSUD Dr. Soedirman Kebumen, dan dua anak dengan ISPA di</p>
<p>Kata Kunci: Biblioterapi_1 Ansietas_2 DHF_3 ISPA_4 Anak Prasekolah_5</p>	

	<p>RSUD Majenang. Intervensi biblioterapi diberikan selama 3 hari berturut-turut, satu sesi per hari selama 20 menit dengan membacakan buku cerita bergambar. Tingkat ansietas diukur melalui observasi perilaku dan kuesioner <i>Spence Children's Anxiety Scale (SCAS) Parent Report</i>. Hasil: terdapat perbedaan respons antara dua kelompok anak dengan DHF menunjukkan penurunan skor ansietas yang lebih signifikan dalam dua hari pertama, sedangkan pada anak dengan ISPA, perubahan ansietas terjadi lebih lambat, yakni pada hari ke-2 dan ke-3. Selain itu, anak dengan DHF tampak menunjukkan ekspresi emosional positif lebih cepat dibandingkan anak dengan ISPA. Kesimpulan: Biblioterapi memiliki efektivitas cenderung lebih cepat menurunkan Tingkat ansietas pada anak dengan DHF dibandingkan anak yang mengalami ISPA.</p>
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INTRODUCTION

Preschool age is a developmental stage in children that is particularly vulnerable to various illnesses, especially infections such as Dengue Hemorrhagic Fever (DHF) and Acute Respiratory Infections (ARI). Both diseases remain major public health problems in Indonesia, with a relatively high incidence rate each year. According to the World Health Organization (WHO), cases of Dengue Hemorrhagic Fever (DHF) in 2023 increased tenfold worldwide, rising from 500,000 to 5.2 million reported cases (WHO, 2024a). In Central Java, data from 2020 show that preschool-aged children (4–6 years old) required an average of six days of hospital care. Within that year, a total of 1,500 children in this age group were recorded as undergoing hospitalization (Dinas Kesehatan Provinsi Jawa Tengah, 2020).

The World Health Organization (WHO) states that Acute Respiratory Infections (ARI) account for nearly 20% of deaths among children under the age of five worldwide. ARI has become both an epidemic and a pandemic disease (WHO, 2024). In 2023, the Indonesian Ministry of Health recorded a total of 1,515,070 cases of Acute Respiratory Infections (ARI) in May, which declined to 1,305,185 cases in June and further to 1,290,171 cases in July. However, the number of cases increased again to 1,387,650 in August (Kemenkes RI, 2023). In 2024, the prevalence of Acute Respiratory Infections (ARI) among children under five in Central Java was recorded at 39.8%, making it one of the provinces with a significant incidence of ARI in Indonesia.

Central Java ranked fifth in ARI cases among the 34 provinces, with Jakarta, Banten, and several other provinces reporting higher prevalence rates (Kemenkes RI, 2023).

The total number of DHF (Dengue Fever) cases in Kebumen Regency in 2024 was 278 cases, with 1 death. Meanwhile, at the beginning of 2025, 14 DHF cases were recorded in the Kebumen area until early January 2025 (Kebumen Regency Health Office, 2025). Meanwhile, in Majenang, the number of ARI cases in Cilacap Regency in 2025 is estimated to be around 7,268 cases (Cilacap Regency Health Office, 2025).

Illnesses experienced by preschool-aged children, such as Dengue Hemorrhagic Fever (DHF) and Acute Respiratory Infections (ARI) accompanied by high fever, can lead to a weakened immune system, often requiring hospitalization. In the United States, it is estimated that more than five million children are hospitalized each year, with over 50% of them experiencing anxiety and stress. Furthermore, it is reported that more than 1.6 million children aged 2–6 years are hospitalized due to injuries and various other causes (National Hospital Discharge Survey, 2022). Hospitalization is a process that children must undergo due to emergency conditions or health problems that require them to stay in the hospital

for treatment, which often leads to psychological changes in the child (Faidah & Marchelina, 2022).

During the hospitalization process, children are exposed to various stressors that cause them to feel fear. This fear often leads to aggressive reactions, as children may perceive hospitalization as a form of punishment. Consequently, they experience a loss of control over their emotions, making it difficult for them to cooperate during medical procedures. Such aggressive reactions are primarily triggered by excessive anxiety (Vianti, 2020). The level of anxiety among children undergoing hospitalization in the United States is reported to be 17%, or approximately 6.4 million hospitalized children. Hospitalization often causes feelings of worry due to unfamiliar experiences, new environments, and situations that children must face during their stay in the hospital.

Anxiety in preschool-aged children during hospitalization can be influenced by several factors, including interactions with healthcare providers, the unfamiliar or new environment, loss of freedom and independence, as well as separation from significant caregivers. These factors may contribute to short-term impacts on the child's anxiety during treatment, such as difficulties in cooperating with healthcare personnel, which in turn can prolong the

healing process and potentially result in long-term trauma. If left unaddressed, anxiety may become a more serious problem that interferes with the child's growth and development, while also delaying recovery (Yulianto *et al.*, 2021). Children's anxiety can be alleviated through play activities as a non-pharmacological approach to reducing the negative impact of hospitalization. Play therapy is essential for children as it helps foster creativity, imagination, emotions, willpower, and motivation in an atmosphere of joy. Techniques commonly used to reduce anxiety include listening to music and storytelling with pictures, also known as bibliotherapy. Storytelling with pictures is delivered in a way that prevents children from becoming bored and can be enriched with humor and entertainment within the story (Shechtman, 2009).

Bibliotherapy can be defined as the use of books to help address problems. Through books, children are able to connect their personal experiences with the stories presented, which can then serve as a basis for discussion. Bibliotherapy functions as a therapeutic tool to facilitate emotional growth and healing, with stories providing opportunities for change by offering children alternative perspectives on thoughts, feelings, and behaviors. When delivered appropriately, stories

give children the chance to gain insights and learn healthier ways of coping with difficulties (Tielsch Goddard, 2016).

A study conducted by (Wu, Tsai-Jung, et al, 2025) This provides preliminary evidence that interactive bibliotherapy is more effective than reading-only bibliotherapy in reducing emotional distress. Picture books can serve as a promising psychological intervention for adolescents undergoing cancer treatment. Another study (Naina & Pooja, 2023) The results showed a decrease in anxiety with a mean difference of 30.50 ± 8.31 , and a calculated t value of 8.91, which was greater than the tabulated value of 2.009, indicating significance at $p < 0.001$. The study concluded that bibliotherapy is an effective method for reducing anxiety levels in hospitalized children. This method is cost-effective, can be implemented at any time, and was reported to provide comfort for children during hospitalization.

Various studies have shown that bibliotherapy is effective in enhancing adaptive coping, reducing anxiety, and accelerating children's adaptation to illness. However, the effectiveness of bibliotherapy in preschool-aged children with different infectious diseases, such as Dengue Hemorrhagic Fever (DHF) and Acute Respiratory Infections (ARI), has rarely been examined. Therefore, this

study was conducted to compare the effectiveness of bibliotherapy in preschool children with DHF and ARI, with the aim of providing a scientific basis for the development of psychosocial interventions in pediatric healthcare services.

RESEARCH METHODOLOGY

Study Design

This study employed a comparative case study design with a qualitative approach. The purpose was to explore and compare the effectiveness of bibliotherapy in preschool-aged children diagnosed with Dengue Hemorrhagic Fever (DHF) and Acute Respiratory Infections (ARI).

Participants

The participants consisted of four children aged 4–7 years who were undergoing hospitalization. Two children diagnosed with DHF were recruited from Dr. Soedirman Regional Hospital, Kebumen, and two children diagnosed with ARI were recruited from Majenang Regional Hospital. Participants were selected purposively based on their relevance to the research objectives.

Intervention

Bibliotherapy was delivered through reading illustrated storybooks tailored to the children's age and cognitive

development. The intervention was carried out over three consecutive days, with one session per day lasting approximately 20 minutes. The stories selected contained educational and supportive themes designed to help children understand their emotions, manage anxiety, and promote positive coping mechanisms during hospitalization.

Data Collection

Data were obtained using three methods:

1. Behavioral Observation – Participant observation was conducted during the bibliotherapy sessions to record emotional expressions, interactions, and signs of anxiety displayed by the children.
2. Semi-Structured Interviews – Conducted with parents to explore their experiences regarding changes in their children's behavior after the intervention, as well as with healthcare providers to obtain additional perspectives.
3. Questionnaires – Children's anxiety levels were measured using the Spence Children's Anxiety Scale (SCAS) Parent Report, completed by parents both before and after the intervention.

Data Analysis

Data were analyzed using thematic analysis as described by Braun and Clarke

(2006). This process involved familiarization with the data, generating initial codes, identifying themes, reviewing and refining themes, and producing the final analysis to capture key patterns related to children’s anxiety responses and coping mechanisms.

RESULT

Characteristics of Participants

The research data were obtained through interviews conducted with four

Tabel 1. Characteristics of Participants

Partisipan Code	Age	Gender	Diagnosa Medis
An. D	5 years 1 month	Female	DHF
An. I	5 year 6 month	Male	DHF
An. C	5 year	Female	ISPA
An. D	7 year	Male	ISPA

The themes that emerged from this study included: (1) gradual reduction of anxiety, (2) improvement in emotional expression and behavior, (3) stabilization of physiological responses, and (4) parental support as a facilitator of therapeutic success.

1. Gradual Reduction of Anxiety

The findings revealed a clear pattern of gradual reduction in anxiety among preschool children undergoing bibliotherapy. For children diagnosed with DHF, the intervention led to a noticeable improvement in emotional stability and overall comfort during

participants who were considered relevant to the research objectives. Two children diagnosed with Acute Respiratory Infections (ARI) were Child C, a 5-year-old female, and Child D, a 7-year-old male. Meanwhile, two other children diagnosed with Dengue Hemorrhagic Fever (DHF) were Child D, a 5-year-1-month-old female, and Child I, a 5-year-6-month-old male, as presented in Table 1.

hospitalization. Initially, both participants were categorized as experiencing moderate anxiety (SCAS scores of 41 and 40). They displayed common symptoms such as fear, confusion, restlessness, and sleep disturbance, particularly when

approached by healthcare staff. However, after three consecutive sessions of storytelling therapy, these symptoms gradually diminished, and both children showed a shift into the mild anxiety category.

Mothers consistently reported positive behavioral changes, highlighting improvements in sleep,

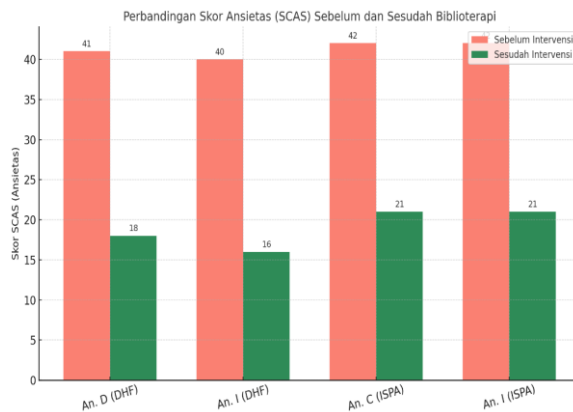
calmness, and emotional responses. One mother described, *“During the illness, my child was often scared, confused, and had trouble sleeping. Every time the nurse came, she immediately became restless. But after three storytelling therapy sessions, she is now calmer and even able to sleep well”* (P1, December 23, 2024). Another added, *“At first, my child was very anxious, always fussy, and could not sleep soundly. After listening to the story *The Mouse Deer Stealing Cucumbers* for several days, he seemed more relaxed, less tense, and slept better”* (P2, December 28, 2024). Quantitative measurements supported these observations. Client 1 demonstrated a reduction in SCAS scores from 21 (mild anxiety, pre-intervention) to 18 (mild anxiety, post-intervention), while Client 2 showed a decrease from 20 to 16 within the same category. These improvements were reflected in observable behaviors such as calmer responses during medical procedures, increased relaxation, and improved sleep quality.

A similar trajectory was seen among children with ISPA. On the first day, both participants presented with moderate anxiety (SCAS scores

of 42 and 42). By the second session, their scores had declined into the mild anxiety range (30–34), and after the third session, further improvement was recorded with scores reaching 21. Parents echoed these findings in their narratives. As one mother explained, *“On the first day, my child often cried, had trouble sleeping, and was very afraid whenever the nurse came. After two storytelling sessions, he began to be braver and could sleep more calmly. By the third day, he was completely different—no longer afraid, able to respond to the nurse’s questions, and looked comfortable”* (P3, January 21, 2025). Another reflected, *“At first, my child was shy and anxious, waking up at night due to restlessness. After being read stories for several days, she became calmer, no longer cried when the nurse came, and her sleep improved”* (P4, January 26, 2025).

Overall, both qualitative narratives and quantitative data demonstrated that bibliotherapy contributed to a progressive reduction in anxiety for children with DHF and ISPA. The consistent trend across both groups moving from moderate to mild anxiety by the third day of intervention underscores

bibliotherapy's potential as an effective non-pharmacological strategy to ease hospitalization-related distress (see Diagram 1).



2. Improvement of Emotional Expression and Behavior

In An. D and An. I, prior to the intervention, the children displayed emotional expressions such as fear, confusion, shyness, and irritable behavior. After undergoing bibliotherapy, the children began to show positive expressions, including smiling more easily, being brave enough to answer questions, and no longer crying when approached by nurses. In An. C, a significant change was observed, from frequently calling for her mother to becoming calmer after the third day. An. I, who initially appeared shy and reluctant to interact, eventually became more cooperative and demonstrated comfort during treatment.

3. Stabilization of Physiological Responses

Bibliotherapy not only impacted emotional and behavioral aspects but was also correlated with improvements in vital signs. In the case of DHF, although the main focus was on reducing anxiety, physiological symptoms such as difficulty sleeping and restlessness were alleviated. In children with ISPA, evaluations showed a gradual decrease in body temperature from 38.4°C to 36.5°C, along with improvements in respiratory rate and heart rate. These findings indicate that the reduction in anxiety also contributed to supporting the children's physical recovery.

4. Parental Support as a Facilitator

Parental presence emerged as a critical factor in alleviating children's anxiety during hospitalization. Throughout the bibliotherapy sessions, maternal support consistently provided a sense of security for the children. Several parents described how their children calmed immediately when the mother was physically present, indicating that proximity played a significant role in reducing distress. One mother explained, *"As soon as I sat next to her, she immediately stopped crying. So she really needs me close"* (P2, December 28, 2024). Similarly,

another noted, *“When I am beside him, my child becomes calmer. At first, he refused to be left alone and always held my hand”* (P3, January 21, 2025).

Interestingly, as bibliotherapy progressed, parents also observed gradual changes in their children’s dependency patterns. Children who initially relied heavily on their mothers became more independent and demonstrated greater emotional resilience. One parent reflected, *“She used to call for me constantly, but after being read stories several times, she has become braver. When the nurse comes, she no longer cries even if I am not always by her side”* (P1, December 23, 2024). Another echoed this shift: *“Usually, whenever there was a procedure, he would immediately look for me. But now he can stay calm even if I don’t hold his hand all the time”* (P4, January 26, 2025).

This reduction in dependency was accompanied by the emergence of relative independence in responding to medical staff. Children began to interact more directly with nurses, demonstrating improved confidence and self-assurance. For example, one mother stated, *“Now she can answer the nurse’s questions*

herself. I don’t always have to accompany her. She looks more confident” (P1, December 23, 2024). Another observed a similar transformation: *“My child has become braver and can say ‘yes’ or ‘no’ to the nurse without always looking at me first”* (P4, January 26, 2025). Overall, these accounts highlight the pivotal role of parental support not only in creating a sense of security but also in fostering children’s gradual independence during hospitalization with the aid of bibliotherapy.

5. Parents’ and Healthcare Providers’ Perspectives on the Effectiveness of Bibliotherapy

Parents perceived bibliotherapy as a simple yet effective intervention to reduce children’s anxiety during hospitalization. Storytelling not only served as a distraction but also provided comfort and reassurance. They observed tangible changes in their children’s behavior—from being fussy, fearful, and confused, to becoming calmer and braver in facing medical procedures. One mother described, *“Before the storytelling, my child always cried when the nurse came. After listening to the mouse deer story, now she can smile and is no longer afraid”* (P2, December 28,

2024). Another noted the effect on sleep patterns: *“The stories made him more relaxed. Usually, he did not want to sleep at night, but after the storytelling sessions, he was able to fall asleep more quickly”* (P3, January 21, 2025). Parents also emphasized growing independence in their children, as expressed by one participant: *“My child became braver to talk with the nurse. Instead of always looking at me first, he can now answer on his own. That is a big change”* (P2, December 28, 2024).

Healthcare providers, particularly nurses, also viewed bibliotherapy positively, recognizing its contribution as a non-pharmacological strategy that eased children’s anxiety and facilitated smoother care delivery. They highlighted that bibliotherapy did not replace the parents’ role but complemented it by strengthening children’s emotional resilience and fostering independence. As one nurse explained, *“I observed that children became calmer after being read stories. During medical procedures, they were not as fussy as before”* (Ward Nurse, December 28, 2024). Another nurse emphasized its impact on cooperation: *“Bibliotherapy helps children stay focused. At first, they*

were always afraid when they saw medical instruments, but now they are easier to work with” (Accompanying Nurse, January 26, 2025). Similarly, a senior nurse reflected on its practicality, stating, *“This intervention is simple but the effect is clear. It makes children less dependent on their parents, which also helps us perform examinations more easily”* (Senior Nurse, January 21, 2025). Overall, both parents and healthcare providers agreed that bibliotherapy played a significant role in reducing anxiety, promoting emotional comfort, and supporting cooperation during hospitalization. Its simplicity, accessibility, and effectiveness made it a valuable psychosocial intervention in pediatric care.

DISCUSSION

Differences in the Effectiveness of Bibliotherapy among Children with DHF and ISPA

The effectiveness of bibliotherapy varied between children diagnosed with dengue hemorrhagic fever (DHF) and those with acute respiratory infection (ISPA). In children with DHF, bibliotherapy demonstrated a faster and more immediate impact on reducing anxiety. Observable improvements were

noted as early as the first session, with children displaying more positive emotional expressions such as smiling, appearing relaxed, and refraining from crying during interactions with healthcare providers. Parents also reported improvements in sleep quality, suggesting that bibliotherapy provided a calming effect that allowed children to rest more comfortably.

Furthermore, greater independence was observed, as children began to confidently respond to nurses' questions without consistently relying on their parents. These findings indicate that bibliotherapy in children with DHF was able to produce rapid improvements, both emotionally and behaviorally. In contrast, children with ISPA exhibited a more gradual response to bibliotherapy. The reduction in anxiety was not immediately evident during the first session but became noticeable after the second and third sessions.

Emotional responses also emerged more slowly; initially, children remained fussy and restless but gradually became calmer after repeated interventions. Parental dependence decreased progressively, with children shifting from constantly seeking their mother's presence to becoming more independent by the final sessions. Similarly, cooperative behavior with nurses only

became clearly visible after multiple storytelling sessions. Thus, while bibliotherapy was effective for children with ISPA, it required more time to achieve optimal outcomes compared to children with DHF.

The findings of this study, conducted over a three-day intervention period, demonstrated that bibliotherapy was effective in reducing anxiety among children diagnosed with DHF. After three sessions, anxiety levels decreased from the moderate to the mild category. The children exhibited positive changes, such as remaining calmer during medical procedures, showing happier expressions, and experiencing improved sleep patterns. SCAS measurements also indicated a consistent reduction in anxiety scores for both participants, decreasing. In contrast, for children with ISPA, the reduction in anxiety was more gradual. On the first day, both participants still showed moderate anxiety with SCAS scores of 42.

According preliminary study by Dwiyanti *et al.*, (2023) bibliotherapy is a creative communication technique with children that uses illustrated storybooks in therapeutic and supportive processes. Several research findings have demonstrated that bibliotherapy can effectively reduce anxiety in hospitalized children. After the intervention, 72% of

children exhibited mild anxiety, 28% showed moderate anxiety, and none experienced severe anxiety. Overall, anxiety scores decreased by 27%. A significant association was found between the reduction in anxiety and variables such as age, educational status, and family type. (Edwin Jose Lawrence, 2024).

Herdman *et al.*, (2021) **Anxiety** is a feeling of fear and discomfort often accompanied by physiological reactions such as increased heart rate and respiration. Nursing interventions that involve therapeutic communication, family support, and distraction therapies such as bibliotherapy can help reduce anxiety levels by shifting the child's focus away from fear and worry. The consistent decrease in SCAS scores demonstrates the effectiveness of bibliotherapy. The results of the bibliotherapy intervention showed positive emotional and behavioral changes in children. Positive expressions that began to emerge such as smiling, engaging in communication, and demonstrating cooperative attitudes indicated a shift from a state of distress toward acceptance of the treatment situation and reduced shyness.

Research findings (Kaymaz, 2024) also highlight the development of bibliotherapy books specifically designed for very shy children. Extreme shyness during childhood can be a risk factor for

mental health disorders in adulthood. Therefore, the development of bibliotherapy books is highly important as an early intervention to help shy children learn to express themselves, interact, and build healthy social skills.

Furthermore, the reduction of excessive dependency on parents and the increased sense of comfort when interacting with healthcare providers indicate that bibliotherapy can strengthen children's adaptive abilities. This aligns with the concept that stories serve not only as entertainment but also as a medium of self-reflection, helping children to understand their experiences in a simpler and more meaningful way. Thus, bibliotherapy can be regarded as an effective supportive method to reduce anxiety, build self-confidence, and enhance independence during hospitalization.

A recent systematic review and meta-analysis reported that storytelling is effective in reducing anxiety and fear among hospitalized children compared to standard care. Importantly, these reductions were not merely temporary; children also became more capable of expressing their emotions and felt more comfortable communicating after the storytelling intervention (Ku *et al.*, 2025).

The theory of bibliotherapy suggests that reading or listening to

stories can serve as a therapeutic approach to help individuals understand and manage their emotions Setiani & Widiastuti, (2023) It is stated that bibliotherapy is effective for children because stories can facilitate self-understanding, reduce stress, and strengthen positive coping. The findings of this study are consistent with those of Setiani & Widiastuti (2023), who conducted research on children with Dengue Hemorrhagic Fever (DHF). Their study demonstrated that bibliotherapy, delivered through the story "*The Mouse Deer Stealing Cucumbers*" for a duration of 20 minutes, was effective in reducing anxiety problems among preschool-aged children undergoing hospitalization.

Both parents and healthcare providers agreed that bibliotherapy is effective in reducing anxiety among preschool children with DHF and ARI. Parents emphasized its impact on behavioral changes during hospitalization, such as increased calmness, courage, and improved sleep quality. Meanwhile, healthcare providers highlighted the ease of medical interactions, as children became more cooperative. Thus, bibliotherapy is considered not only beneficial for children but also supportive of collaboration between parents and healthcare providers throughout the care

process. According to a study conducted by (Sabeti et al., 2021)

In this case study, bibliotherapy demonstrated a comparatively faster and more significant effect on children with Dengue Hemorrhagic Fever (DHF) than on those with Acute Respiratory Infections (ARI). In DHF cases, anxiety reduction was evident from the very first session, accompanied by positive emotional changes, improved sleep quality, and increased independence, all of which occurred relatively quickly. In contrast, among children with ARI, the intervention effects appeared more gradually; anxiety reduction progressed step by step, emotional responses stabilized only after the second session, and independence as well as cooperative behavior became more apparent after the third session. This suggests that while bibliotherapy is effective for both groups, children with DHF respond more rapidly to the intervention, whereas ARI cases require more time to achieve optimal outcomes.

Bibliotherapy proved to reduce anxiety more quickly in children with DHF than in those with ARI. In DHF cases, the high anxiety caused by the perceived threat of the illness made children more responsive to the intervention, leading to observable emotional and behavioral improvements

from the initial session. In contrast, children with ARI experienced a more gradual decline in anxiety, with optimal results only emerging after several sessions. This finding is consistent with Lazarus and Folkman's stress and coping theory, which posits that the level of perceived threat influences the speed of adaptation the greater the stressor, the stronger the effect of an appropriate coping intervention. These results align with recent studies indicating that bibliotherapy effectively reduces children's anxiety during hospitalization by enhancing understanding, promoting a sense of security, and fostering independence (Abdi et al., 2025).

Conclusion

The study found differences in bibliotherapy effectiveness between preschool children with DHF and ARI. In children with DHF, anxiety decreased more quickly, with improvements visible from the first session, including reduced fear, better sleep, greater independence, and less reliance on parents. In contrast, children with ARI also benefited from bibliotherapy, but improvements appeared more gradually, becoming significant after the second or third session. Overall, bibliotherapy was effective in both groups, but it produced faster and more pronounced results in children with DHF compared to those with ARI.

REFERENCES

- Abdi, F., Karamoozian, A., Lotfilou, M., Gholami, F., Shaterian, N., Niasar, A. A., Aghapour, E., & Jandaghian-Bidgoli, M. (2025). Effect of play therapy and storytelling on the anxiety level of hospitalized children: a randomized controlled trial. *BMC Complementary Medicine and Therapies*, 25(1). <https://doi.org/10.1186/s12906-025-04767-4>
- Dinas Kesehatan Provinsi Jawa Tengah. (2020). *Buku Saku Kinerja SPM Bidang Kesehatan* (Vol. 3517463, Issue 24).
- Dwiyanti, D. A., Pohan, V. Y., & Alfiyanti, D. (2023). Penerapan Bibliotherapy Anak Usia Pra Sekolah Dengan Kecemasan Akibat Hospitalisasi Hospitalization. *Prosiding Seminar Nasional UNIMUS*, 6, 456–465.
- Edwin Jose Lawrence, J. L. (2024). Effective reduction of anxiety in hospitalised children through bibliotherapy. *Acta Paediatrica*, 6(113). <https://pubmed.ncbi.nlm.nih.gov/38381456/>
- Faidah, N., & Marchelina, T. (2022). Tingkat Kecemasan Anak Usia Prasekolah Yang Dirawat Di Rumah Sakit Mardi Rahayu Kudus. *Jurnal Keperawatan Dan Kesehatan Masyarakat Cendekia Utama*, 11(3), 218. <https://doi.org/10.31596/jcu.v11i3.1207>
- Herdman, Thomas, Kamitsuru, & Shigemi. (2021). *International Nursing Diagnoses: Definitions & Classification 2021–2023* (12 th). Thieme Medical Publishers.

- KAYMAZ, Ç. (2024). Developmental Bibliotherapy with Extremely Shy Children. *Psikiyatride Güncel Yaklaşımlar*, 16(3), 410–424. <https://doi.org/10.18863/pgy.1199297>
- Kemenkes RI, K. R. (2023). Dalam Angka Dalam Angka. *Kota Kediri Dalam Angka*, 1–68.
- Ku, S. H., Chua, J. S., & Shorey, S. (2025). Effect of storytelling on anxiety and fear in children during hospitalization: A systematic review and meta-analysis. *Journal of Pediatric Nursing*, 80, 41–48. <https://doi.org/10.1016/j.pedn.2024.11.006>
- Naina, M., & Pooja, G. (2023). Effectiveness of Bibliotherapy in Reducing the Level of Anxiety among Hospitalised Children. *International Journal of Science and Research (IJSR)*, 12(3), 145–148. <https://doi.org/10.21275/sr23303103505>
- Sabeti, F., Mohammadpour, M., Pouraboli, B., Tahmasebi, M., & Hasanpour, M. (2021). Health Care Providers' Experiences of the Non-Pharmacological Pain and Anxiety Management and Its Barriers in the Pediatric Intensive Care Units. *Journal of Pediatric Nursing*, 60, e110–e116. <https://doi.org/10.1016/j.pedn.2021.07.026>
- Setiani, S., & Widiastuti, S. (2023). Analisa Asuhan Keperawatan Melalui Intervensi Biblioterapy Pada Anak Usia Prasekolah Dengan Diagnosa Medis Dengue Hemorrhagic Fever Dirumah Sakit Anak Dan Bunda Harapan Kita. *Kreativitas Pengabdian Kepada Masyarakat*, 6(April), 1581–1592.
- Shechtman, Z. (2009). *Treating Child and Adolescent Aggression Through Bibliotherapy*. The Springer Series on Human Exceptionality.
- Tielsch Goddard, A. (2016). Children's Books for Use in Bibliotherapy. *Journal of Pediatric Health Care*, 25(1), 57–61. <https://doi.org/10.1016/j.pedhc.2010.08.006>
- Vianti, R. A. (2020). Nurses' Experiences in Addressing the Impact of Hospitalization on Children. *Jurnal Pena*, 34(2), 1–23.
- WHO. (2024a). *Dengue - Global situation*. Disease Outbreak News.
- WHO, W. (2024b). *Angka Kematian Anak ISPA di Dnia*.
- Wu, Tsai-Jung, Chen Su-may Sheih, Shiann-Tarng Jou, Chih-Ying Lee d, Ting-Yen Yu, Chieh-Yu Liu g, C.-W. C. (2025). Effects of bibliotherapy on emotional distress, coping strategies, and resilience in adolescents with cancer: A pilot randomized controlled trial. *European Journal of Oncology Nursing*, 76. <https://www.sciencedirect.com/science/article/abs/pii/S1462388925001243>
- Yulianto, A., Idayati, I., & Sari, S. A. (2021). Bermain (Puzzle) Terhadap Kecemasan Anak Usia Prasekolah Yang Mengalami Hospitalisasi. *Jurnal Wacana Kesehatan*, 6(1), 39. <https://doi.org/10.52822/jwk.v6i1.172>