

Review Article

Role of nursing care after retinoblastoma surgery in children: A narrative review

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Abstract

Retinoblastoma emerges as the predominant intraocular malignancy during childhood. Surgical interventions address specific clinical situations, balancing tumor regression and visual functionality. Also, nurses play a pivotal role in preoperative preparations, intraoperative support, and postoperative care, contributing to the child's physical and emotional well-being. The study aims to comprehensively review nursing care post-retinoblastoma surgery, providing an educational and research foundation in pediatric oncology. A literature review on nursing care after retinoblastoma surgery utilized diverse databases and keywords. Searches spanned Persian (Magiran and Scientific Information Database), international databases including PubMed and Google Scholar search engine, employing Boolean operators. Initially, 120 articles underwent screening, resulting in 9 meeting the criteria after eliminating duplicates. Nursing care following retinoblastoma surgery is a meticulous and multifaceted process aimed at ensuring the child's holistic well-being and triumphant recovery. The three key focus areas include surgical site care, pain management, and complication monitoring. Surgical site care involves vigilant oversight, prompt reporting of concerns, and meticulous attention to the healing process. Pain management strategies, tailored to the child's age, involve medication and non-pharmacological methods, enhancing overall well-being. Proactive monitoring for complications encompasses regular assessments of vital signs and visual changes, emphasizing effective communication within the healthcare team. The comprehensive follow-up care extends beyond immediate concerns, addressing medical evaluations, visual assessments, psychosocial support, educational guidance, and lifestyle considerations. This approach ensures a thorough and successful postoperative journey for the child. Nursing care after retinoblastoma surgery is vital for children's recovery. The holistic approach involves meticulous surgical site management, personalized pain relief, proactive complication monitoring, and comprehensive follow-up care. Effective communication and collaboration ensure tailored support for each child, emphasizing a patient-centric approach for a successful postoperative journey.

Keywords: Nursing, Nursing Care, Retinoblastoma, Child, Review.

1 | Introduction

Retinoblastoma emerges as the predominant intraocular malignancy during childhood [1]. Its inception is traced to a mutation in the RB1 gene, representing the pioneering identification of a tumor-suppressor gene. The constitutional loss of one allele of RB1 renders an individual susceptible to cancer, while the deprivation of the second allele in a developing retinal cell catalyzes the initiation of retinoblastoma tumors. This paradigmatic malignancy has exerted a profound impact on the paradigm of cancer. Additionally, the global frequency of retinoblastoma remains consistent at one instance per 15,000 to 20,000 live births,

amounting to roughly 9000 novel cases yearly [2]. In the absence of intervention, retinoblastoma typically progresses within 12 months, resulting in retinal detachment and necrosis of the optic orbit. While the tumor persists in its proliferation and penetration into the central nervous system through the optic nerve or indirectly via the choroid, the ailment can evolve into a life-threatening condition within a few years [3].

The management of retinoblastoma is intricate and individualized based on the patient's unique circumstances. Primary enucleation continues to be the preferred strategy for advanced unilateral cases. However, surgical intervention for conditions like

cataracts, rhegmatogenous retinal detachment, or vitreous hemorrhage may be deemed justifiable in specific extraordinary clinical situations. This is particularly applicable when the eye under consideration is the singular potentially functional eye, and the tumor is clinically determined to be stable and undergoing regression [4]. Also, surgical strategies typically involve either enucleation, the excision of the affected eye, or localized tumor resection to maintain the eye's functionality [5]. These procedures are carried out under general anesthesia, and meticulous postoperative care is vital for monitoring the healing process, addressing discomfort, and, if necessary, facilitating the placement of an ocular prosthesis for the child. Regular follow-up and psychosocial support represent crucial elements of the child's care, and collaborative efforts among healthcare professionals ensure a comprehensive and well-integrated treatment plan [5].

Meanwhile, nurses play an integral role across the entire spectrum of retinoblastoma surgery, spanning the preoperative phase to postoperative care [6]. Also, they actively contribute to preoperative preparations, extending empathetic support to the child and their family and ensuring a seamless induction of anesthesia. Nurses establish a sterile environment throughout the surgical procedure and provide indispensable assistance. In the postoperative phase, they meticulously monitor the child's vital signs, address pain management, and educate parents on the proper care of the surgical site. Additionally, nurses play a pivotal role in facilitating rehabilitation services and furnishing resources to aid families in adapting to changes in vision and appearance post-surgery. Through collaborative efforts with the broader healthcare team, nurses ensure a comprehensive care approach, coordinating follow-up appointments to monitor the child's progress. The compassionate care provided by nurses proves indispensable in addressing both the emotional and physical needs of children undergoing retinoblastoma surgery [7].

In the current study, the authors aim to review the role of nursing care after retinoblastoma surgery and provide an educational and research platform for retinoblastoma nursing care in children.

2 | Methods

The current literature review was conducted in 2023, focusing on factors contributing to nursing care after retinoblastoma surgery. To compile pertinent articles, searches were executed in Persian (Magiran and Scientific Information Database), international databases including PubMed and Google Scholar search engine, employing a combination of keywords, including "nursing care", "retinoblastoma", and "surgery", along with Boolean operators "OR" and "AND" in the title and abstract. Manual searches were

also conducted in related journals, and the reference lists of chosen papers were scrutinized for comprehensive coverage. The inclusion criteria encompassed studies published between January 2000 and February 2023, ensuring relevance to nurse care and availability in Persian or English with full-text access. Conversely, exclusion criteria involved conference presentations, educational articles, non-reputable journal publications, and letters to the editor. Initially, 120 articles underwent screening, resulting in 9 pieces meeting the eligibility criteria after eliminating duplicates and irrelevant studies. Data extraction involved a checklist encompassing the period, type, and results. Duplicate studies were expunged, and three seasoned researchers evaluated the articles for quality and biases. The organization and identification of duplicates were managed using the Endnote V.20 reference management software [8].

3 | Results

After retinoblastoma surgery, nursing care assumes a pivotal role in fostering the child's recuperation, diligently overseeing possible complications, and extending emotional and educational aid to both the child and their family [9]. Based on the findings, nursing care after retinoblastoma may involve in the following criteria:

3.1 | Surgical site care

The meticulous oversight of the surgical site after retinoblastoma surgery stands as a pivotal facet within the domain of nursing postoperative care. This care entails the conscientious and vigilant monitoring of where the tumor underwent extraction or treatment within the ocular region [10]. The primary aim is to ascertain the proper recuperation of the site, ensuring its immunity from infection or other complicating factors. Nurses are responsible for inspecting the surgical locale and examining for indicators of inflammation, infection, excessive hemorrhaging, or aberrations [11]. They also verify the cleanliness, dryness, and secure application of surgical dressings or wound coverings. Nurses expeditiously relay this information to the healthcare team when issues or concerns manifest, facilitating prompt and efficacious intervention. The productive administration of the surgical site assumes paramount significance in forestalling postoperative complications and securing the wholesome convalescence of the child [12]. It encompasses a scrupulous and methodical process, with a focal point on the overall well-being and comfort of the child post-retinoblastoma surgery, alongside the prosperous healing of the surgical area [13].

3.2 | Pain management

The management of pain in the context of retinoblastoma surgery constitutes an integral component of nursing care, designed to optimize the postoperative comfort and well-being of the child. After the surgical intervention, it is anticipated that the child may endure pain and discomfort, necessitating nurses to assess and effectively address these manifestations meticulously. Nurses initiate this process by evaluating the child's pain using apt pain assessment scales, considering their age and capacity to articulate their discomfort. This evaluation informs the tailored selection of pain management strategies. Frequently, medications are administered judiciously to alleviate pain, with careful consideration given to the child's age, weight, and the intensity of their pain. Nurses also deploy non-pharmacological modalities to manage pain, including the establishment of a comfortable positioning for the child, the application of relaxation techniques, and the utilization of distraction methods to mitigate anxiety and discomfort. Continual monitoring plays a pivotal role in pain management, with nurses consistently assessing pain levels and the efficacy of interventions, enabling adjustments to maintain the child's comfort. Effective pain management is instrumental in minimizing the child's experience of pain post-retinoblastoma surgery, enhancing their overall comfort and quality of life throughout the postoperative period. This scrupulous approach to pain management is a critical facet of nursing care, making a substantial contribution to the child's physical and emotional well-being as they navigate the recovery process from the surgical intervention [9].

3.3 | Monitoring for complications

Surveillance for complications post-retinoblastoma surgery emerges as an indispensable facet of nursing care, with a paramount objective of safeguarding the child's safety and well-being throughout the postoperative phase [6]. The primary emphasis is promptly identifying and addressing any potential issues or adverse events that may manifest as the child recovers from surgery. These complications encompass a spectrum of concerns, including infection, excessive bleeding, alterations in vision, or other adverse effects associated with the surgical procedure [14]. In this regard, A foundational element within the monitoring process involves the regular and systematic assessment of the child's overall condition [15]. This assessment entails vigilant monitoring of vital signs, such as temperature, blood pressure, heart rate, and respiratory rate [16]. These parameters furnish crucial insights into the child's physiological status, facilitating the early detection of any sign's indicative of systemic complications. Another pivotal aspect of monitoring for complications revolves around assessing changes in the child's vision [17]. Given the direct impact of

retinoblastoma surgery on vision, nurses pay special attention to the child's ocular health. Any reports of visual disturbances, alterations in sight, or changes in the appearance of the eye trigger prompt investigation and reporting to the healthcare team [18]. Early identification of visual changes facilitates timely interventions to address complications affecting the child's vision.

Effectual communication serves as the linchpin in monitoring for complications. Nurses collaborate closely with the entire healthcare team, comprising surgeons, ophthalmologists, anesthesiologists, and other specialists. This collaborative synergy ensures the seamless coordination of all childcare facets. Nurses promptly communicate concerns, findings, or alterations in the child's condition to the medical team. Timely communication is vital in empowering the healthcare team to make well-informed decisions and interventions promptly [19].

On the other hand, the proactive and vigilant nature inherent in monitoring for complications substantially contributes to the child's overall well-being during the postoperative recovery period [20]. Early identification and intervention forestall the escalation of complications, thereby supporting the child's smooth and successful recovery [21]. This underscores the significance of nursing care as a comprehensive and meticulous approach that prioritizes the child's safety and comfort in the aftermath of retinoblastoma surgery [22-24]. In total, nursing care post-retinoblastoma surgery unfolds as a multifaceted process, with monitoring for complications assuming a central and critical role. This encompasses the routine assessment of the child's condition, scrupulous examination of the surgical site, adept pain management, vigilant evaluation of visual changes, and effective communication with the healthcare team. The early detection of potential issues and the timely implementation of interventions contribute substantively to the child's safety, well-being, and triumphant recovery. Nursing care following retinoblastoma surgery epitomizes a holistic approach, underscoring the indispensability of comprehensive and vigilant care in supporting the child's postoperative journey.

3.4 | Follow-Up Care

The postoperative phase after retinoblastoma surgery extends into a crucial and exhaustive follow-up care stage [25]. This phase predominantly centers on monitoring the child's advancements, appraising the efficacy of the surgery, and ensuring their enduring ocular health and overall well-being. It encompasses many facets, including medical evaluations, visual assessments, imaging studies, psychosocial assistance, educational counsel, and considerations for lifestyle adjustments [26]. The significance of effective follow-up care cannot be overstated, as it is

pivotal in fostering the child's health and enhancing their quality of life in the years after retinoblastoma surgery [27]. Meanwhile, scheduled medical appointments with the healthcare team constitute a foundational component of follow-up care. These appointments involve consultations with the child's ophthalmologist, oncologist, and other specialists actively involved in the child's care [28]. The scheduling of these appointments adheres to a systematic and structured timeline, ensuring continuous, and vigilant monitoring of the child's ocular health [29]. Also, the ophthalmologist's regular ocular examinations are at the core of follow-up care. These examinations aim to appraise the surgical success and monitor the overall health of the remaining eye. The ophthalmologist meticulously scrutinizes the eye for any indications of tumor recurrence, alterations in vision, or other ocular issues. Early detection and intervention are paramount in preserving the child's imagination and overall ocular health [30, 31].

Additionally, imaging studies, such as ultrasound or magnetic resonance imaging scans, frequently form part of the follow-up care regimen. These studies furnish detailed images of the eye [32] and its adjacent structures, enabling the healthcare team to discern subtle changes that may elude detection through clinical examination alone [33]. Particularly in cases with a risk of recurrence or when the surgical procedure has impacted the eye's anatomy, these imaging studies prove invaluable. The child's and their family's emotional well-being remains a focal point during follow-up care [34]. Navigating the diagnosis of retinoblastoma, the rigors of surgery and treatment, and the ongoing journey can impose emotional demands [35, 36]. Consequently, follow-up care includes sustained psychosocial support to address the emotional aspects of the journey, encompassing counseling, resources, and guidance to assist the child and their family in coping with the emotional impact of retinoblastoma [37-39].

Educational support is also a considerable consideration in follow-up care. As the child progresses in growth and development, their educational needs may evolve. Follow-up care may involve guiding and addressing any special educational requirements related to changes in vision or ocular health [40]. This support ensures the child's continued academic and developmental flourishing. For children who have undergone enucleation, follow-up care may encompass guidance on the upkeep and maintenance of an ocular prosthesis (an artificial eye) [41]. Proper prosthesis care is indispensable for preserving the child's appearance and self-esteem [42]. Nurses and ophthalmologists often provide education and guidance on this facet of care.

Additionally, contingent on the child's specific needs and treatment history, follow-up care may extend to lifestyle and dietary counsel to bolster their overall health and well-being. This

guidance may include recommendations for physical activity, sun protection, and a balanced diet to promote the child's health and mitigate the risk of further health concerns [43].

Furthermore, effective communication and collaboration emerge as fundamental tenets in the success of follow-up care [44]. Parents play a pivotal role in ensuring the child's attendance at scheduled appointments, receiving requisite care, and adhering to recommended interventions or lifestyle changes. The healthcare team, comprising nurses, ophthalmologists, and oncologists, collaborates closely with the child and their family, ensuring that follow-up care is cohesive and caters to the child's needs [45-47].

In general, follow-up care post-retinoblastoma surgery unfolds as a comprehensive and continual process designed to scrutinize the child's ocular health, evaluate the success of the surgery, and discern any signs of tumor recurrence. It also addresses the child's developmental, educational, psychosocial, and lifestyle requisites. By offering continuous medical care, emotional support, and guidance, follow-up care is pivotal in advancing the long-term health and well-being of children who have undergone retinoblastoma surgery. It is a holistic approach that underscores the importance of comprehensive and vigilant care in supporting the child's postoperative journey.

4 | Limitations

This study constitutes a literature review examining past works focusing on nursing care in pediatric cancer surgeries, particularly retinoblastoma. Like any other research, it is not devoid of limitations. In this regard, the limitations of this study may include specific exclusions. Firstly, the study only investigates English and Persian sources between 2000 and 2023, potentially overlooking studies conducted at different times and in other languages. Additionally, in the present research, the bias of the results cannot be ruled out. Furthermore, in line with the inherent nature of literature review studies, the quality of the included studies has not been assessed.

5 | Implications for clinical nursing practice

The study's findings highlight nursing's crucial role in post-surgery care for retinoblastoma patients. The implications for nursing practice include prioritizing careful management of the surgical site, personalizing pain management strategies, and being vigilant for any complications. Effective communication and collaboration are also emphasized to ensure timely interventions and contribute significantly to the child's safety and successful recovery. Furthermore, the study suggests a holistic approach to

follow-up care, addressing medical, psychosocial, and educational aspects. Nurses play a central role in promoting the well-being of children, requiring ongoing education and training to maintain the highest standards of care in retinoblastoma surgery aftermath.

6 | Recommendations for future research

Several research avenues can be explored in this context based on the obtained results. First, investigating and comparing the efficacy of pharmacological and psychological pain management factors on improving post-retinoblastoma surgical pain. Second, examining moral distress among nurses, patients, and their families in pediatric departments. Third, exploring nursing-rehabilitation interventions to enhance the recovery of children after retinoblastoma surgery.

7 | Conclusions

In sum, following retinoblastoma surgery, nursing care is pivotal in ensuring children's comprehensive well-being and successful recovery. The multifaceted approach encompasses management of the surgical site, alleviation of pain, surveillance for complications, and thorough follow-up care. Rigorous oversight of the surgical site entails vigilant monitoring for indications of infection or inflammation, with nurses promptly conveying any concerns to facilitate timely intervention. Pain mitigation strategies, individualized to each child's age and condition, encompass both administration of medication and non-pharmacological methods, thereby diminishing discomfort and augmenting general well-being. Proactive monitoring for complications includes regular evaluations of vital signs and visual changes, coupled with efficient communication within the healthcare team to facilitate early identification and intervention. This comprehensive monitoring substantially contributes to the child's safety and successful recovery. Follow-up care surpasses immediate postoperative considerations, encompassing medical assessments, visual appraisals, psychosocial support, educational guidance, and lifestyle considerations. Effective communication and collaboration between healthcare professionals and parents are paramount for tailoring follow-up care to meet the distinctive needs of each child. Fundamentally, nursing care post-retinoblastoma surgery embodies a comprehensive and patient-centric approach, delivering continuous support and vigilant monitoring for a thorough and triumphant postoperative journey.

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Authors' contributions

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work: MT; Drafting the work or revising it critically for important intellectual content: MT; Final approval of the version to be published: MT; Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved: MT.

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Availability of data and materials

The datasets used during the current study are available from the corresponding author on request.

Using artificial intelligent chatbots

None.

References

- Ortiz MV, Dunkel IJ. Retinoblastoma. *J Child Neurol.* 2016;31(2):227-236.
- Dimaras H, Kimani K, Dimba EA, Gronsahl P, White A, Chan HS, et al. Retinoblastoma. *Lancet.* 2012;379(9824):1436-1446.
- Canty CA. Retinoblastoma: an overview for advanced practice nurses. *J Am Acad Nurse Pract.* 2009;21(3):149-155.
- Honavar SG, Shields CL, Shields JA, Demirci H, Naduvilath TJ. Intraocular surgery after treatment of retinoblastoma. *Arch Ophthalmol.* 2001;119(11):1613-1621.
- Damato BE. Local resection of uveal melanoma. *Dev Ophthalmol.* 2012;49:66-80.
- Sullivan M, Bouffet E, Rodriguez-Galindo C, Luna-Fineman S, Khan MS, Kearns P, et al. The COVID-19 pandemic: A rapid global response for children with cancer from SIOP, COG, SIOP-E, SIOP-PODC, IPSO, PROS, CCI, and St Jude Global. *Pediatr Blood Cancer.* 2020;67(7):e28409.
- Cline RJ, Harper FW, Penner LA, Peterson AM, Taub JW, Albrecht TL. Parent communication and child pain and distress during painful pediatric cancer treatments. *Soc Sci Med.* 2006;63(4):883-898.

8. Selçuk AA. A Guide for Systematic Reviews: PRISMA. *Turk Arch Otorhinolaryngol*. 2019;57(1):57-58.
9. Muralidhar N, Menon V. The eye of the beholder: Catching retinoblastoma early. *Indian J Health Wellbeing*. 2018;9(1):881-885.
10. Hoskin P, Makin W. The role of surgical and radiological intervention in palliation. In: *Oncology for Palliative Medicine*. Oxford, UK: Oxford University Press, 1998:229-234.
11. Timby BK, Smith NE. *Introductory Medical-Surgical Nursing*. 11th ed. Philadelphia: Wolters Kluwer Health Lippincott Williams & Wilkins, 2013:1064.
12. Kehlet H, Dahl JB. Anaesthesia, surgery, and challenges in postoperative recovery. *Lancet*. 2003;362(9399):1921-1928.
13. Moshfeghi DM, Moshfeghi AA, Finger PT. Enucleation. *Surv Ophthalmol*. 2000;44(4):277-301.
14. Mor IJ, Vogel JD, da Luz Moreira A, Shen B, Hammel J, Remzi FH. Infliximab in ulcerative colitis is associated with an increased risk of postoperative complications after restorative proctocolectomy. *Dis Colon Rectum*. 2008;51(8):1202-1207.
15. Rychik J, Atz AM, Celermajer DS, Deal BJ, Gatzoulis MA, Gewillig MH, et al. Evaluation and Management of the Child and Adult With Fontan Circulation: A Scientific Statement From the American Heart Association. *Circulation*. 2019;140(6):e234-e284.
16. Nicolò A, Massaroni C, Schena E, Sacchetti M. The Importance of Respiratory Rate Monitoring: From Healthcare to Sport and Exercise. *Sensors (Basel)*. 2020;20(21):6396.
17. Kerem E, Conway S, Elborn S, Heijerman H; Consensus Committee. Standards of care for patients with cystic fibrosis: a European consensus. *J Cyst Fibros*. 2005;4(1):7-26.
18. Rowe FJ. Stroke survivors' views and experiences on impact of visual impairment. *Brain Behav*. 2017;7(9):e00778.
19. Siddikov I, Khasanov D, Khujamatov H, Reypnazarov E. Communication Architecture of Solar Energy Monitoring Systems for Telecommunication Objects. 2021 International Conference on Information Science and Communications Technologies (ICISCT): IEEE; Tashkent, Uzbekistan; 2021. p. 1-5.
20. Lui GK, Saidi A, Bhatt AB, Burchill LJ, Deen JF, Earing MG, et al. Diagnosis and Management of Noncardiac Complications in Adults With Congenital Heart Disease: A Scientific Statement From the American Heart Association. *Circulation*. 2017;136(20):e348-e392.
21. Fishbein DH, Ridenour TA, Stahl M, Sussman S. The full translational spectrum of prevention science: facilitating the transfer of knowledge to practices and policies that prevent behavioral health problems. *Transl Behav Med*. 2016;6(1):5-16.
22. Wilson SF, Giddens JF. *Health assessment of nursing practice*. 7th ed. India: Elsevier Health Science, 2020.
23. Black CD, Black CM. *Working for a Healthier Tomorrow*. London: Cross-Government Health, Work and Well-being Programme, 2008.
24. Khanna NR, Rathod Y, Manjali J, Ramadwar M, Panjwani P, Qureshi S, et al. Outcomes of Children Diagnosed with Unilateral Retinoblastoma: Retrospective Audit. *Int J Radiat Oncol Biol Phys*. 2023;117(2):e522.
25. Munier FL, Beck-Popovic M, Chantada GL, Cobrinik D, Kivelä TT, Lohmann D, et al. Conservative management of retinoblastoma: Challenging orthodoxy without compromising the state of metastatic grace. "Alive, with good vision and no comorbidity". *Prog Retin Eye Res*. 2019;73:100764.
26. Jarvis C. *Physical examination & health assessment*. 7th edition. Elsevier; 2016.
27. Friedman DN, Chou JF, Francis JH, Sklar CA, Li Y, McCabe M, et al. Vision-Targeted Health-Related Quality of Life in Adult Survivors of Retinoblastoma. *JAMA Ophthalmol*. 2018;136(6):637-641.
28. Quaye AA, Coyne I, Söderbäck M, Hallström IK. Children's active participation in decision-making processes during hospitalisation: An observational study. *J Clin Nurs*. 2019;28(23-24):4525-4537.
29. Marino BS, Lipkin PH, Newburger JW, Peacock G, Gerdes M, Gaynor JW, et al. Neurodevelopmental outcomes in children with congenital heart disease: evaluation and management: a scientific statement from the American Heart Association. *Circulation*. 2012;126(9):1143-1172.
30. Wong TY, Sun J, Kawasaki R, Ruamviboonsuk P, Gupta N, Lingsingh VC, et al. Guidelines on Diabetic Eye Care: The International Council of Ophthalmology Recommendations for Screening, Follow-up, Referral, and Treatment Based on Resource Settings. *Ophthalmology*. 2018;125(10):1608-1622.
31. Sahli E, Bingol Kiziltunc P, Idil A. Visual habilitation in young children with visual impairment. *Child Care Health Dev*. 2022;48(3):378-386.
32. Mabotuwana T, Hombal V, Dalal S, Hall CS, Gunn M. Determining Adherence to Follow-up Imaging Recommendations. *J Am Coll Radiol*. 2018;15(3 Pt A):422-428.
33. Acharya RU, Yun WL, Ng EY, Yu W, Suri JS. Imaging systems of human eye: a review. *J Med Syst*. 2008;32(4):301-315.
34. Sacco RL, Kasner SE, Broderick JP, Caplan LR, Connors JJ, Culebras A, et al. An updated definition of stroke for the 21st century: a statement for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke*. 2013;44(7):2064-2089.
35. Sherief ST, Girma E, Wu F, O'Banion J, Wondimagegn D, Teshome T, et al. Caring for a child with retinoblastoma: Experience of Ethiopian parents. *Pediatr Blood Cancer*. 2023;70(3):e30163.
36. Salt A, Redshaw M. Neurodevelopmental follow-up after preterm birth: follow up after two years. *Early Hum Dev*. 2006;82(3):185-197.
37. Lee JY, Divaris K. Hidden consequences of dental trauma: the social and psychological effects. *Pediatr Dent*. 2009;31(2):96-101.
38. Scheiman M, Scheiman M, Whittaker S, Freeman PB, Sokol-McKay DA. *Low vision rehabilitation: a practical guide for occupational therapists*. Thorofare (NJ): Slack; 2007.

39. Gibbs D, Reynolds L, Shea Yates T. Understanding the Experiences of Living With an Artificial Eye in Children With Retinoblastoma-Perspectives of Children and Their Parents. *J Pediatr Hematol Oncol Nurs*. 2022;39(4):250-263.
40. Listernick R, Ferner RE, Liu GT, Gutmann DH. Optic pathway gliomas in neurofibromatosis-1: controversies and recommendations. *Ann Neurol*. 2007;61(3):189-198.
41. Tlale R-MD. The emotional experiences of patients following removal of the eye (enucleation or evisceration). Pretoria, Gauteng, South Africa; 2007.
42. Sykes LM, Doolabh R. Deciding on prosthodontic treatment in children with inherited dental abnormalities: should psychological or dental well-being take precedence? *S Afr Dent J*. 2018;73(8):532-535.
43. Sallis JF, Patrick K. Physical activity guidelines for adolescents: consensus statement. *Pediatr Exerc Sci*. 1994;6(4):302-314.
44. Mangold K, Denke NJ, Gorombe D, Ostroski TL, Root L. Principles of successful partnerships. *Nurs Adm Q*. 2014;38(4):340-347.
45. Hill JA, Kimani K, White A, Barasa F, Livingstone M, Gallie BL, et al. Achieving optimal cancer outcomes in East Africa through multidisciplinary partnership: a case study of the Kenyan National Retinoblastoma Strategy group. *Global Health*. 2016;12(1):23.
46. Landier W, Bhatia S. Cancer survivorship: a pediatric perspective. *Oncologist*. 2008;13(11):1181-1192.
47. AlAli A, Kletke S, Gallie B, Lam WC. Retinoblastoma for Pediatric Ophthalmologists. *Asia Pac J Ophthalmol (Phila)*. 2018;7(3):160-168.

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