

Behavior and Health Promotion in an Effort to Reduce Morbidity and Mortality Among Children Under Five

Perilaku dan Promosi Kesehatan dalam Upaya Menurunkan Angka Kesakitan dan Kematian Anak Balita

Joaquim Pinto¹, Joaquim Gregorio de Carvalho², Ermelinda da Costa Monteiro³, Carlos Boavida Tilman⁴

Universidade Nacional Timor Loro Sa'e^{1,2,3,4}

*pintotio123@gmail.com

**Corresponding Author*

ABSTRACT

Health behavior and promotion are key factors in reducing morbidity and mortality in children under five years of age, which remains a significant challenge worldwide. Factors such as stunting, malnutrition, acute respiratory infections (ARI), diarrhea, and pneumonia contribute to this problem. This study aims to explore the role of parental involvement in community-based health promotion programs in reducing morbidity and mortality in children under five years. The method used is a systematic literature review with the PRISMA approach, identifying and analyzing articles from reputable international databases. Findings show that parental involvement can significantly increase the effectiveness of health programs, with a positive impact on reducing child morbidity and mortality rates. The implications of this research emphasize the need for policies that support community-based prevention programs, integration of health strategies with parental involvement, and increased awareness of the role of parents in children's health.

Keywords: parental involvement, community-based health promotion, child morbidity, child mortality

ABSTRAK

Perilaku dan promosi kesehatan merupakan faktor kunci dalam mengurangi morbiditas dan mortalitas pada anak di bawah lima tahun, yang masih menjadi tantangan signifikan di seluruh dunia. Faktor-faktor seperti stunting, malnutrisi, infeksi saluran pernapasan akut (ISPA), diare, dan pneumonia berkontribusi pada masalah ini. Penelitian ini bertujuan untuk mengeksplorasi peran keterlibatan orang tua dalam program promosi kesehatan berbasis komunitas dalam mengurangi morbiditas dan mortalitas anak di bawah lima tahun. Metode yang digunakan adalah systematic literature review dengan pendekatan PRISMA, mengidentifikasi dan menganalisis artikel dari database internasional bereputasi. Temuan menunjukkan bahwa keterlibatan orang tua secara signifikan dapat meningkatkan efektivitas program kesehatan, dengan dampak positif pada penurunan angka morbiditas dan mortalitas anak. Implikasi dari penelitian ini menekankan perlunya kebijakan yang mendukung program pencegahan berbasis komunitas, integrasi strategi kesehatan dengan keterlibatan orang tua, serta peningkatan kesadaran tentang peran orang tua dalam kesehatan anak.

Kata Kunci: keterlibatan orang tua, promosi kesehatan berbasis komunitas, morbiditas anak, mortalitas anak

1. Introduction

Health behavior and promotion play an important role in reducing morbidity and mortality in children under five years. Various factors contribute to the high morbidity and mortality rates in this age group, including acute respiratory infections (ARI), diarrhea, malnutrition, and other preventable diseases (Sultana et al., 2019; Sarfo et al., 2023; Murarkar et al. al., 2021; Bando, 2024; Rehan et al., 2023; Integrated Management of Childhood Illness (IMCI) strategies have been identified as a key approach to address these challenges and

improve child health outcomes (Tshivhase et al., 2020; Sierra & Cañas, 2019). IMCI focuses on rapid treatment of diseases such as ARI and diarrhea through appropriate health care seeking behavior (Aragaw, 2024). Additionally, breastfeeding and complementary feeding practices have been highlighted as important factors in reducing mortality in infants and children under five years (Venugopal et al., 2019).

Increasing access to health services, strengthening preventive measures, and addressing socio-economic factors are crucial in reducing morbidity and mortality in children under five years (Costa, 2023; Teferi et al., 2022; Deshpande, 2024). Research shows that appropriate management of illnesses such as pneumonia is critical to preventing severe outcomes and reducing hospitalization rates in this vulnerable population (Dinka, 2024). Additionally, interventions such as the introduction of vaccines, such as the rotavirus vaccine, have shown significant reductions in diarrheal disease in children under five years (Owusu-Sarpong, 2022; Habib et al., 2021).

Understanding the determinants of childhood illness, promoting appropriate health behaviors among caregivers, and addressing environmental factors are essential components of effective health promotion strategies to reduce morbidity and mortality in children under five years of age. By implementing evidence-based interventions, improving health care-seeking behavior, and focusing on preventive measures, significant progress can be achieved in efforts to reduce mortality and morbidity rates in children under five years old (Paul & Mondal, 2020; Aheto, 2019; Kulkarni et al., 2021; Siddiqi & Mueyed, 2021).

The health of children under five years is a crucial aspect in efforts to develop public health, especially in developing countries where morbidity and mortality rates in this age group are still very high. This condition requires special attention because children in this age range have a high vulnerability to various infectious diseases and malnutrition, which often leads to death if not treated properly. Therefore, efforts to improve the health of children under five years old are very important in reducing the overall health burden on society.

One phenomenon that remains a challenge is the lack of research that specifically explores the role of parental involvement in community-based health promotion programs. Even though many health promotion programs have been implemented, there is still a gap between the implementation of these programs and the expected health outcomes. Parental involvement in these programs is believed to have great potential to increase the effectiveness of health interventions, but empirical evidence to support this is still limited.

In this context, the research question asked is: "To what extent can parental involvement in community-based health promotion programs reduce morbidity and mortality rates in children under five years old?" This question is important to answer because a deeper understanding of the role of parents can help in designing more effective and targeted interventions. By knowing the real impact of parental involvement, health programs can be better focused and optimized to achieve better results.

The urgency of this research lies in the need for a better understanding of how parental involvement can improve the effectiveness of health programs. In the context of high morbidity and mortality rates in children under five years of age, any efforts that can improve health outcomes are valuable. This research has the potential to have a significant impact in efforts to reduce morbidity and mortality through an approach that actively involves parents in child health programs.

The uniqueness (novelty) of this research lies in its new approach in evaluating parental involvement in the context of community-based health promotion. The focus of this research is not only on the health intervention itself, but also on the specific impact of parental involvement on the morbidity and mortality of children under five years old. This approach has not been widely explored in previous research, so it is hoped that it can provide a significant new contribution to the child health literature.

The expected contribution of this research is to provide new insight into the factors that influence the success of health promotion programs involving parents. The findings from this research can be used to formulate practical recommendations that can be implemented in child health programs in various communities. Thus, this research not only contributes to the development of science, but also provides real practical benefits in efforts to improve the health of children under five years. With this focused structure and narrative, it is hoped that the literature review prepared can provide a comprehensive and in-depth picture of the topic under study, as well as make a meaningful contribution to the field of children's health.

2. Methods

2.1. Collecting articles from reputable international databases using the PRISMA method

This research uses the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method as a guide for collecting and selecting articles from various reputable international databases. PRISMA is a method that is widely used in systematic literature reviews to ensure transparency and reproducibility in the process of searching and selecting articles. The steps in this process include identification of potential articles, screening of articles based on inclusion and exclusion criteria, final selection of relevant articles, and systematic reporting of search results.

2.2. Keywords Used to Search for Articles

Keywords used in searching articles include terms that are relevant to the research topic, including: "parental involvement," "community health promotion," "under-five morbidity," "under-five mortality," "child health," and "systematic reviews." These keywords were chosen to ensure broad coverage in finding articles relating to the role of parental involvement in community-based health promotion and its impact on the morbidity and mortality of children under five years old.

2.3. Number of Articles Obtained

In the initial stages of the search, a large number of articles were identified through various databases such as PubMed, Scopus, and Web of Science. After the initial identification stage, the articles were screened based on the title and abstract to determine relevance to the research topic. This process produces a number of articles which are then examined further to ensure compliance with the predetermined inclusion and exclusion criteria.

2.4. Article Inclusion and Exclusion Techniques

Inclusion and exclusion criteria were used to ensure that only relevant and high-quality articles were included in the review. Inclusion criteria include:

1. Articles published in the last 5 years, to ensure that the data obtained is still relevant and up-to-date.
2. The article focuses on children under five years, because the target population for this study is children in that age group.
3. Articles that discuss parental involvement in community-based health promotion, as this research topic explores the specific role of parental involvement.
4. Articles are available in English or Indonesian, to ensure accessibility and good understanding of the article content.

Exclusion criteria include:

1. Articles that do not have full access, because this research requires complete information from each included study.

2. Articles that are not relevant to the research topic, such as those that do not focus on parental involvement or are not related to community-based health promotion.
3. Individual case studies without comprehensive analysis, as this research focuses on generalizing findings from broader studies.
4. Articles that do not meet established methodological standards, such as studies with weak research designs or insufficient data for analysis.

With this procedure, this study aims to present a comprehensive and high-quality review of the role of parental involvement in community-based health promotion and its impact on the morbidity and mortality of children under five years.

3. Results and Discussions

3.1. Definition of Morbidity and Mortality in Children Under Five Years

Morbidity and mortality in children under five years of age is a globally significant public health problem. Various factors contribute to morbidity and mortality rates in this vulnerable population. Stunting, malnutrition, acute respiratory infections (ARI), diarrhea and pneumonia are the main causes of morbidity and mortality in children under five years (Kairiza et al., 2020; Akintunde et al., 2021; Sari et al., 2020; Keskin et al., 2019; Iparraguirre-Villanueva et al., 2022). Stunting is associated with an increased risk of morbidity, mortality, and impaired cognitive and psychomotor development (Dicko-Traoré et al., 2019). Malnutrition, especially that caused by nutritional imbalances resulting in underweight, stunting and wasting, is a significant risk factor for morbidity in children under five years (Venugopal et al., 2019). Diarrhea and malnutrition are major contributors to morbidity and mortality in areas with limited access to clean water and sanitation, and low socioeconomic status (Owusu-Sarpong, 2022). In addition, acute respiratory infections, including pneumonia, are a major cause of morbidity and mortality in children under five years (Iparraguirre-Villanueva et al., 2022).

Preventive measures such as breastfeeding have been shown to significantly reduce morbidity and mortality in children under one year old and children under five years old. Exclusive breastfeeding for the first six months, followed by breastfeeding for up to two years or more, as well as timely introduction of complementary foods play an important role in reducing acute and long-term morbid conditions in children. In addition, various studies emphasize the importance of interventions such as the rotavirus vaccine in reducing diarrheal disease in children under five years old.

In conclusion, addressing the multiple factors that contribute to morbidity and mortality in children under five, including malnutrition, infectious diseases, and inadequate access to clean water and sanitation, is critical to improving child health outcomes globally. Integrated efforts that include nutritional interventions, immunizations, and improving environmental conditions will contribute significantly to reducing morbidity and mortality rates in this age group.

3.2. Community Based Health Promotion

Community-based health promotion programs are very important in meeting community health needs through participatory and community-based approaches (Leroux, 2023). These programs have demonstrated effectiveness in promoting healthy behavior, especially in reducing the risk of chronic diseases (Abashidze-Gabaidze, 2023). Providing timely and accurate health information is essential for public health promotion, especially during difficult times such as a global pandemic (Kreps, 2022). Strategies such as participatory action research, community interventions for physical activity and nutrition, and health education play an important role in community-based health promotion (Monsalves-Álvarez, 2024).

Tailoring health promotion strategies to the unique characteristics and strengths of specific communities, such as collectivist communities, is critical to intervention success (Lanham et al., 2021). Involving communities through a participatory approach empowers them to increase healthy behavior, especially in addressing problems such as childhood obesity (Hardt et al., 2020). Additionally, understanding the motives that drive non-health organizations to engage in health promotion activities is key to sustaining partnerships and improving community health (Woodard et al., 2022).

Nurses play an important role in implementing non-communicable disease prevention and health promotion strategies, including health education, community partnerships, coordination, community engagement, and behavioral monitoring (Istifada et al., 2021). Implementing an integrated model for community health and safety can increase the effectiveness of interventions and prioritize prevention efforts (Tabrizi et al., 2020). Additionally, promoting policy, system, and environmental changes in rural communities can have a significant impact on public health outcomes (Gabbert et al., 2023).

In conclusion, community-based health promotion programs are essential to address public health challenges. By engaging communities, adapting interventions, and implementing effective strategies, it is possible to promote healthy behavior, prevent disease, and improve overall community health outcomes.

3.3. Role and Involvement of Parents

Parental involvement in children's health is a crucial factor that greatly influences various aspects of children's well-being. Research shows that parents play a significant role in shaping children's health, especially in stressful environments (Wiggins, 2023). Factors such as parents' daily involvement, communication, and decision making in health care are critical for children's development and mental health (Liu & Zhang, 2023; Aarthun et al., 2019). Additionally, parental behavior, including diet, dental hygiene practices, and health care visits, is critical in maintaining a child's overall health, especially in conditions such as type 1 diabetes mellitus (Halizah, 2024; Alamoudi, 2023).

Parents' perceptions and definitions of health conditions such as overweight and obesity influence their health behaviors, such as nutrition and physical activity, which in turn have an impact on children's well-being (JOHN, 2023). Nurses and health professionals also have a responsibility to involve parents in the decision-making process regarding their child's health care, empowering parents to make the right choices for their child's treatment (Rasmita, 2023; Putri & Rong, 2021). In addition, parents' awareness of their children's health status and their efforts to be good parents are important aspects that influence their involvement in supporting children's health (Weaver et al., 2020; Gahlon, 2024).

Parenting patterns, including nutrition, vaccination, breastfeeding, access to health, and environmental factors, are closely related to children's growth and development (Machmud, 2023). In the context of children with special needs, parental involvement in supporting their education and well-being is essential for their overall development (Jigyel et al., 2019). Additionally, parental involvement in mental health care, dental health awareness, and adherence to health care programs have a significant impact on child health outcomes (Chan, 2023; Hamasha et al., 2019; Lillo-Navarro et al., 2019). Overall, parental involvement plays an important role in promoting children's health and well-being across multiple domains, including physical, mental, and dental health. Understanding the factors that influence parental involvement and empowering parents to make informed decisions regarding their child's health are critical aspects of promoting positive health outcomes in children.

3.4. The Effect of Parental Involvement in Health Promotion

3.4.1. Related Studies

Parental involvement in health promotion has been widely studied, showing a significant impact on children's health behaviors and health outcomes. Park & Cho (2022) found that in families with a strong sense of community and support, parents tend to be more interested in their children's health, leading to positive health-promoting behaviors. Similarly, Hahnrahts et al. (2021) emphasize the importance of intergenerational learning from child to adult and parent-initiated changes in transferring health behaviors from school to home, thereby increasing the effectiveness of school-based health promotion interventions.

Furthermore, Csima (2024) and Donnelly et al. (2019) show the positive effect of increasing parental health literacy and parental involvement in school-based health activities on improving children's health status and well-being. Additionally, Luecking et al. (2020) highlight the important role of organizational context, stakeholder input, and capacity-building interventions in building positive relationships that support parent engagement in health promotion programs. Liu et al. (2021) also emphasizes the important role of parental involvement in improving children's physical health and mental development. Gahlon (2024) and Tørslev et al. (2021) further support the importance of ongoing parental involvement and involving parents in programs to promote children's mental health and healthy lifestyles through activities such as family cooking classes. In conclusion, this synthesis of studies confirms the crucial role of parental involvement in health promotion, showing that this involvement not only positively influences children's health behavior, but also contributes to improving children's overall health outcomes and well-being.

3.4.2. Mechanisms of Parental Involvement

Parental involvement is a crucial factor in health promotion programs, influencing children's health directly and indirectly. Naing et al. (2022) emphasize the importance of increasing collaboration between parents and teachers as well as community partnerships to increase the effectiveness of health promotion programs in schools. Similar research by Nugroho (2024) shows how maternal behavior, such as maintaining children's oral hygiene, significantly influences children's health outcomes, especially in the case of children with type 1 diabetes mellitus.

Russo et al. (2021) highlighted that the duration of the intervention had a positive effect on participant compliance, which is a critical factor in parent training programs focused on health promotion. Tørslev et al. (2021) emphasize the importance of conducting health promotion activities in environments where individuals interact regularly, highlighting the integration of such activities into people's daily lives. Liu et al. (2021) emphasizes the important role of parental involvement as the main strategy in improving children's physical health, behavior and mental development.

Furthermore, Gahlon (2024) showed that sustained parental involvement was positively correlated with program compliance and effectiveness, emphasizing the importance of parent coordination with educators for the promotion of children's mental health. Alamoudi (2023) highlights the important impact of parental oral health behavior on children's oral health outcomes, emphasizing the need for parental involvement in dental health promotion programs. Overall, these studies collectively emphasize the multiple ways parental involvement influences child health outcomes and the importance of integrating parents in health promotion initiatives.

3.5. Analysis of Findings

3.5.1. Relationship between parental involvement and reduced morbidity

Parental involvement has been widely researched in a variety of contexts, including its impact on reducing morbidity and promoting positive outcomes for adolescents. Research

shows that parental involvement plays a crucial role in youth academic achievement and engagement, which in turn leads to positive outcomes (Xiong et al., 2021). Additionally, parental involvement is also associated with reduced levels of morbidity-mortality markers such as war, famine, and pathogen burden, highlighting its potential in reducing morbidity (Szepsenwol et al., 2020).

Studies emphasize the importance of parental participation in care, respectful partnerships, and information sharing as attributes of family-centered care, which can contribute to reduced morbidity and improved health outcomes (O'Connor et al., 2019). Furthermore, interventions targeting parental emotion regulation are critical for promoting children's emotional socialization and treating emotional and behavioral disorders, underscoring the importance of parental involvement in interventions aimed at improving children's well-being (Hajal & Paley, 2020).

Parental involvement is also recognized as a potential strategy to overcome child bias and improve outcomes. Effective parenting interventions, based on social learning and cognitive behavioral theories, show promise in reducing children's mental health problems, including behavioral problems (Scott et al., 2020; Piotrowska et al., 2019). Additionally, parental monitoring of adolescents has been identified as a protective factor in interventions aimed at reducing problem behavior among adolescents (Pelham, 2023).

In the context of reducing pediatric morbidity and improving outcomes, family psychological support and holistic rehabilitation are critical for children experiencing postoperative morbidity after cardiac surgery (Wray et al., 2021). Additionally, redefining parental involvement as parental efficacy and integrating the school context may increase the effectiveness of interventions aimed at promoting positive outcomes for children (Gibbs et al., 2021).

Overall, empirical evidence suggests that parental involvement plays a significant role in reducing morbidity, promoting positive outcomes for children and adolescents, and improving overall family well-being. By fostering respectful partnerships, providing psychological support, and being actively involved in their children's care and education, parents can make a significant contribution to improving their children's health and well-being.

3.5.2. Relationship between parental involvement and reduced mortality

Parental involvement in health care has been extensively researched, particularly in pediatric and chronic disease care. Research consistently shows the positive impact of parental involvement on health care outcomes. For example, parental involvement is associated with increased clinic attendance for children with chronic illnesses (Badour, 2023). In neonatal intensive care, parental involvement has been shown to reduce stress, promote parent-child bonding, aid the transition to home, and support future development (Ferreira et al., 2021). Additionally, parental support increases self-efficacy and skills among young adults in effectively managing their health conditions (Pritlove et al., 2020).

Health professionals play an important role in facilitating parental involvement in the decision-making process. Research shows that involving parents in decisions about children's health care leads to better outcomes and increased confidence in self-management among young patients (Aarthun et al., 2019). However, health professionals may face challenges in fully engaging parents due to various barriers that impact their ability to cope with the situation (Chan & Shorey, 2021).

Furthermore, the importance of parental involvement in end-of-life care decisions for children with life-limiting conditions has been explored. Trusted relationships with health professionals are critical in supporting parents during this difficult decision-making process (Mitchell et al., 2019). Although involving parents in quality improvement initiatives in healthcare settings is recommended, bereaved parents are sometimes excluded due to perceived risks (Bourque et al., 2020).

Overall, the literature emphasizes the importance of parental involvement in health care across a variety of medical conditions and care settings. Although parental involvement produces positive outcomes for children and young adults, there are challenges in fully integrating parents into the decision-making process. Future research should focus on addressing barriers to parental involvement and developing strategies to increase collaboration between health professionals and parents to achieve better health care outcomes.

3.5.3. Supporting and Inhibiting Factors

The factors that influence parental involvement in children's education are very diverse and can be influenced by cultural, socio-economic and educational aspects. Cultural and socioeconomic factors have been identified as significant influences on parental involvement (Akpuokwe, 2024). In addition, parental self-efficacy and school support play a crucial role in increasing parental involvement (Al-Abdullatif & Aladsani, 2022). Good managerial performance, involvement of school families, and support from the community and government are also recognized as supporting factors (Rahayuningsih et al., 2023). When parental involvement is realized as family support that involves both parents in the child's learning process, this strengthens the parent-child relationship (Dombinskaya, 2023).

In contrast, challenges and barriers to parental involvement include limited language skills, competing basic needs, lack of understanding of homework, limited cross-cultural and interfaith understanding of teachers, and contentious shared spaces such as sexual health education (Cranston et al., 2021). Communication and language were identified as barriers to parental involvement (Badrasawi et al., 2020). In addition, barriers such as lack of sense of ownership of facilities and infrastructure, parents' understanding of regulations, and external influences have been identified as inhibiting factors (Rahayuningsih et al., 2023). Challenges such as emotional stress and lack of organizational strategies can also hinder parental involvement in child diabetes management (Butler et al., 2020). In conclusion, parental involvement in children's education is influenced by a complex interaction of various factors that can facilitate or hinder such involvement. Understanding and addressing these factors is critical to promoting effective parental participation in their children's educational journeys.

4. Conclusion

Morbidity and mortality in children under five years old remains a significant public health challenge worldwide, with factors such as stunting, malnutrition, acute respiratory infections (ARI), diarrhea, and pneumonia contributing to the problem. Interventions such as breastfeeding, vaccination, and improving sanitation conditions have been shown to be effective in reducing morbidity and mortality in children. Community-based health promotion programs and parental involvement in health care also play an important role in improving children's health and well-being. Overall efforts should focus on an integrated approach that includes nutritional interventions, immunizations, environmental improvements, and parental involvement to achieve better health outcomes.

4.1. Implications

1. **Health Policy:** Policymakers must strengthen health prevention and promotion programs by emphasizing the importance of breastfeeding, immunization, and access to good sanitation. Community-based programs involving community participation should be encouraged to increase the effectiveness of health interventions.
2. **Public Health Practice:** Health professionals need to integrate community-based approaches and parental involvement in health promotion strategies. Health education programs must be tailored to the specific characteristics and needs of the community.

3. Parental Involvement: Increasing parents' awareness of their role in children's health, including nutrition, vaccinations, and mental health care, should be a primary focus in child health strategies.

4.2. Limitations

1. Context Variability: Existing research is often conducted in different geographic or cultural contexts, so findings may not always be universally applicable. This may limit the generalizability of the results to other populations.
2. Data Limitations: Some studies may have limitations in methodology or sample size, which may affect the validity and reliability of the results.
3. Implementation Barriers: Although community-based and parent-involved interventions show promising results, practical challenges in implementation, such as lack of resources or institutional support, may hinder their effectiveness.

4.3. Future Research

1. Longitudinal Research: Long-term studies are needed to understand the lasting impact of health interventions and parental involvement on child morbidity and mortality. This research must also consider cultural and social factors that may influence the results.
2. Evaluation of Program Effectiveness: Further research is needed to evaluate the effectiveness of community-based health promotion programs and interventions involving parents. This research should cover a variety of settings to ensure broadly applicable results.
3. Multi-Sector Approach: Studies that explore how integration between the health, education and community sectors can improve child health outcomes would be valuable. This includes research on integrated intervention models that combine aspects of nutrition, sanitation, and parental involvement.
4. Development of Strategies to Overcome Obstacles: Research that focuses on identifying and addressing barriers to parental involvement and implementation of health interventions will help design more effective and practical strategies.

5. References

- Aarthun, A., Øymar, K., & Akerjordet, K. (2019). Health professionals' involvement of parents in decision-making in interprofessional practice at the hospital. *Journal of Interprofessional Care*, 34(3), 297-306. <https://doi.org/10.1080/13561820.2019.1632816>
- Abashidze-Gabaidze, G. (2023). A critical review of preventive medicine strategies and their effectiveness: a global perspective. *International Journal of Medical Science and Health Research*, 07(02), 10-19. <https://doi.org/10.51505/ijmshr.2023.7202>
- Aheto, J. (2019). Predictive model and determinants of under-five child mortality: evidence from the 2014 Ghana demographic and health survey. *BMC Public Health*, 19(1). <https://doi.org/10.1186/s12889-019-6390-4>
- Akintunde, T., Chen, S., Ibrahim, E., & Tassang, A. (2021). Maternal self-rated capability status and its association with under-five children morbidity. *Journal of Primary Care & Community Health*, 12, 215013272110021. <https://doi.org/10.1177/21501327211002102>
- Akpuokwe, C. (2024). Parental involvement laws in child education: a USA and African review. *International Journal of Applied Research in Social Sciences*, 6(3), 185-197. <https://doi.org/10.51594/ijarss.v6i3.849>

- Al-Abdullatif, A. and Aladsani, H. (2022). Parental involvement in distance k-12 learning and the effect of technostress: sustaining post-pandemic distance education in saudi arabia. *Sustainability*, 14(18), 11305. <https://doi.org/10.3390/su141811305>
- Alamoudi, R. (2023). The impact of parental oral health behaviors on the oral health of children. *International Journal of Community Medicine and Public Health*, 10(11), 4451-4456. <https://doi.org/10.18203/2394-6040.ijcmph20233149>
- Aragaw, F. (2024). Magnitude and determinant of healthcare-seeking behavior for childhood acute respiratory tract infections in ethiopia: a cross-sectional study. *BMC Pediatrics*, 24(1). <https://doi.org/10.1186/s12887-023-04463-7>
- Badour, B. (2023). Parental involvement in the transition from paediatric to adult care for youth with chronic illness: a scoping review of the north american literature. *International Journal of Pediatrics*, 2023, 1-10. <https://doi.org/10.1155/2023/9392040>
- Badrasawi, K., Yahefu, H., & Khalid, M. (2020). Challenges to parental involvement in children's education at a primary school: a rasch analysis. *Iium Journal of Educational Studies*, 7(1), 47-57. <https://doi.org/10.31436/ijes.v7i1.243>
- Bandoh, D. (2024). A study to evaluate wash interventions and risk factors of diarrhoea among children under five years, anloga district, ghana: a research protocol. *Plos One*, 19(5), e0302754. <https://doi.org/10.1371/journal.pone.0302754>
- Bourque, C., Dahan, S., Mantha, G., Reichherzer, M., & Janvier, A. (2020). My child's legacy: a mixed methods study of bereaved parents and providers' opinions about collaboration with nicu teams in quality improvement initiatives. *BMJ Open*, 10(9), e034817. <https://doi.org/10.1136/bmjopen-2019-034817>
- Butler, A., Hilliard, M., Titus, C., Rodriguez, E., Al-Gadi, I., Cole-Lewis, Y., ... & Thompson, D. (2020). Barriers and facilitators to involvement in children's diabetes management among minority parents. *Journal of Pediatric Psychology*, 45(8), 946-956. <https://doi.org/10.1093/jpepsy/jsz103>
- Chan, S. and Shorey, S. (2021). Healthcare professionals' sense of coherence of parental involvement in neonatal intensive care units: a framework synthesis. *Research in Nursing & Health*, 44(6), 875-890. <https://doi.org/10.1002/nur.22178>
- Chan, V. (2023). Parent involvement in mental health treatment for autistic children: a grounded theory-informed qualitative analysis. *Child Psychiatry & Human Development*. <https://doi.org/10.1007/s10578-023-01621-x>
- Costa, R. (2023). Trend of morbidity and mortality indicators due to acute diarrheal disease in children under five years old in the state of piau  (2000–2019). *Revista Brasileira De Sa de Materno Infantil*, 23. <https://doi.org/10.1590/1806-9304202300000120-en>
- Cranston, J., Labman, S., & Crook, S. (2021). Reframing parental involvement as social engagement: a study of recently arrived arabic-speaking refugee parents' understandings of involvement in their children's education. *Canadian Journal of Education / Revue Canadienne De L  ducation*, 44(2), 371-404. <https://doi.org/10.53967/cje-rce.v44i2.4439>
- Csima, M. (2024). The role of parental health literacy in establishing health-promoting habits in early childhood. *Children*, 11(5), 576. <https://doi.org/10.3390/children11050576>
- Deshpande, A. (2024). Are households with under-five children in nigeria socioeconomically disadvantaged?. *Plos Global Public Health*, 4(1), e0002616. <https://doi.org/10.1371/journal.pgph.0002616>
- Dicko-Traor , F., Doumbia, A., Sylla, M., Traor , M., Konat , D., Diakit , F., ... & Toloba, Y. (2019). Acute pneumonia characteristics in children under five years of age in bamako, mali. *Open Journal of Pediatrics*, 09(01), 7-18. <https://doi.org/10.4236/ojped.2019.91002>
- Dinka, I. (2024). Time to recovery and its predictors among under-five children admitted with severe pneumonia in east wallaga zone public hospitals, western ethiopia, 2023; a retrospective cohort study. *BMC Pediatrics*, 24(1). <https://doi.org/10.1186/s12887-024-04937-2>

- Dombinskaya, N. (2023). Ukrainian parents' engagement with czech public schools: challenges and roles for parents. *Studia Paedagogica*, 28(2), 97-118. <https://doi.org/10.5817/sp2023-2-5>
- Donnelly, S., Buchan, D., Gibson, A., McLellan, G., & Arthur, R. (2019). An insight into the involvement of mothers of low socioeconomic status in scottish primary school health education activities. *Health Education & Behavior*, 47(1), 111-122. <https://doi.org/10.1177/1090198119871329>
- Ferreira, A., Ferretti, E., Curtis, K., Joly, C., Sivanthan, M., Major, N., ... & Daboval, T. (2021). Parents' views to strengthen partnerships in newborn intensive care. *Frontiers in Pediatrics*, 9. <https://doi.org/10.3389/fped.2021.721835>
- Gabbert, K., Tompkins, N., & Murphy, E. (2023). Addressing the gap between academic research and grassroots public health practice: supporting policy, systems, and environmental changes in rural communities. *Health Promotion Practice*, 24(1_suppl), 161S-169S. <https://doi.org/10.1177/15248399221115452>
- Gahlon, A. (2024). Competency-based program for delivering child mental health training. *JIH*, 3(2), 214-218. <https://doi.org/10.51219/jih/shivam-dubey/37>
- Gibbs, B., Marsala, M., Gibby, A., Clark, M., Alder, C., Hurst, B., ... & Hutchison, B. (2021). "involved is an interesting word": an empirical case for redefining school-based parental involvement as parental efficacy. *Social Sciences*, 10(5), 156. <https://doi.org/10.3390/socsci10050156>
- Habib, F., Rahman, M., Choudhury, R., Paul, T., & Haque, M. (2021). Prevalence of rotavirus infection and its association with socio-demographic characteristics among under-five children admitted with acute diarrhoea in a tertiary care hospital of bangladesh. *Birdem Medical Journal*, 11(3), 186-190. <https://doi.org/10.3329/birdem.v11i3.55217>
- Hahnaths, M., Willeboordse, M., Jungbauer, A., Gier, C., Schouten, C., & Schayck, C. (2021). "mummy, can i join a sports club?" a qualitative study on the impact of health-promoting schools on health behaviours in the home setting. *International Journal of Environmental Research and Public Health*, 18(22), 12219. <https://doi.org/10.3390/ijerph182212219>
- Hajal, N. and Paley, B. (2020). Parental emotion and emotion regulation: a critical target of study for research and intervention to promote child emotion socialization.. *Developmental Psychology*, 56(3), 403-417. <https://doi.org/10.1037/dev0000864>
- Halizah, S. (2024). The influence of parents' behavior of children with type-1 diabetes mellitus in maintaining children's periodontal health based on the theory of planned behavior. *World Journal of Advanced Research and Reviews*, 21(1), 2787-2794. <https://doi.org/10.30574/wjarr.2024.21.1.0351>
- Hamasha, A., Rasheed, S., Aldosari, M., & Rajion, Z. (2019). Parents knowledge and awareness of their children's oral health in riyadh, saudi arabia. *The Open Dentistry Journal*, 13(1), 236-241. <https://doi.org/10.2174/1874210601913010236>
- Hardt, J., Walker, J., Webb, K., Brignano, S., Peu, T., Santos, D., ... & Littlewood, R. (2020). Healthier together: co-design of a culturally tailored childhood obesity community prevention program for māori & pacific islander children and families. *Health Promotion Journal of Australia*, 32(S1), 143-154. <https://doi.org/10.1002/hpja.438>
- Iparraguirre-Villanueva, O., Guevara-Ponce, V., Paredes, O., Sierra-Liñan, F., Zapata-Paulini, J., & Cabanillas-Carbonell, M. (2022). Convolutional neural networks with transfer learning for pneumonia detection. *International Journal of Advanced Computer Science and Applications*, 13(9). <https://doi.org/10.14569/ijacsa.2022.0130963>
- Istifada, R., Rekawati, E., & Wiarsih, W. (2021). How do the community health nurses' experience in the strategies of non-communicable disease (ncd) promotion and prevention?. *Jurnal Ilmu Dan Teknologi Kesehatan*, 9(1), 13-32. <https://doi.org/10.32668/jitek.v9i1.555>
- Jigyel, K., Miller, J., Mavropoulou, S., & Berman, J. (2019). Parental involvement in supporting their children with special educational needs at school and home in bhutan. *Australasian*

- Journal of Special and Inclusive Education, 43(01), 54-68. <https://doi.org/10.1017/jsi.2019.3>
- JOHN, D. (2023). Meanings of health and disease and their implication on health behaviours among preadolescents and guardians in nairobi city county, kenya. *strategicjournals.com*, 10(1). <https://doi.org/10.61426/sjbcm.v10i1.2530>
- Kairiza, T., Kembo, G., Pallegedara, A., & Macheka, L. (2020). The impact of food fortification on stunting in zimbabwe: does gender of the household head matter?.. <https://doi.org/10.21203/rs.2.21387/v2>
- Keskin, N., Sürmen, A., Save, D., Hıdıroğlu, S., & Karavuş, M. (2019). The knowledge and attitude about diarrhea of mothers of students attending an elementary school in a suburban area in istanbul. *Clinical and Experimental Health Sciences*, 9(3), 232-235. <https://doi.org/10.33808/clinexphealthsci.599992>
- Kreps, G. (2022). Addressing challenges to effectively disseminate relevant health information. *World Medical & Health Policy*, 14(2), 220-224. <https://doi.org/10.1002/wmh3.528>
- Kulkarni, M., Nayse, V., & Nayse, J. (2021). Knowledge and practices of mothers of under-five children regarding zinc supplementation in childhood diarrhea. *Panacea Journal of Medical Sciences*, 11(2), 301-304. <https://doi.org/10.18231/j.pjms.2021.061>
- Lanham, A., Lubari, E., Gallegos, D., & Radcliffe, B. (2021). Health promotion in emerging collectivist communities: a study of dietary acculturation in the south sudanese community in logan city, australia. *Health Promotion Journal of Australia*, 33(1), 224-231. <https://doi.org/10.1002/hpja.491>
- Leroux, J. (2023). Disorientation in community service-learning: a phenomenological inquiry. *Pedagogy in Health Promotion*, 10(1), 16-24. <https://doi.org/10.1177/23733799231204023>
- Lillo-Navarro, C., Montilla-Herrador, J., Escolar-Reina, P., Oliveira-Sousa, S., García-Vidal, J., & Medina-Mirapeix, F. (2019). Factors associated with parents' adherence to different types of exercises in home programs for children with disabilities. *Journal of Clinical Medicine*, 8(4), 456. <https://doi.org/10.3390/jcm8040456>
- Liu, K. and Zhang, Q. (2023). Parent-child perception differences in home-based parental involvement and children's mental health in china: the effects of peer support and teacher emotional support. *Psych Journal*, 12(2), 280-296. <https://doi.org/10.1002/pchj.630>
- Liu, S., Chang, F., Chen, C., Shih, S., Meng, B., Ng, E., ... & Fang, W. (2021). Effects of parental involvement in a preschool-based eye health intervention regarding children's screen use in china. *International Journal of Environmental Research and Public Health*, 18(21), 11330. <https://doi.org/10.3390/ijerph182111330>
- Luecking, C., Dobson, P., & Ward, D. (2020). Barriers and facilitators of parent engagement with health promotion in child care: a mixed-methods evaluation. *Health Education & Behavior*, 47(6), 914-926. <https://doi.org/10.1177/1090198120952040>
- Machmud, D. (2023). The influence of mother's parenting patterns on stunting incidence in children aged 0-23 months in gorontalo district. *International Journal of Current Science Research and Review*, 06(08). <https://doi.org/10.47191/ijcsrr/v6-i8-73>
- Mitchell, S., Spry, J., Hill, E., Coad, J., Dale, J., & Plunkett, A. (2019). Parental experiences of end of life care decision-making for children with life-limiting conditions in the paediatric intensive care unit: a qualitative interview study. *BMJ Open*, 9(5), e028548. <https://doi.org/10.1136/bmjopen-2018-028548>
- Monsalves-Álvarez, M. (2024). Community strategies for health promotion and prevention of chronic non-communicable diseases with a focus on physical activity and nutrition: the uro/focos study protocol. *Frontiers in Public Health*, 11. <https://doi.org/10.3389/fpubh.2023.1268322>
- Murarkar, S., Gothankar, J., Doke, P., Dhumale, G., Pore, P., Lalwani, S., ... & Deshmukh, R. (2021). Prevalence of the acute respiratory infections and associated factors in the rural areas and urban slum areas of western maharashtra, india: a community-based

- cross-sectional study. *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.723807>
- Naing, K., Htun, Y., Tun, K., Win, T., Lin, H., & Sein, T. (2022). Involvement of high school teachers in health promoting school program in selected township, yangon region, myanmar: a cross-sectional mixed methods study. *Plos One*, 17(6), e0270125. <https://doi.org/10.1371/journal.pone.0270125>
- Nugroho, R. (2024). Correlation of maternal parenting style with behavior in maintaining oral hygiene of children with type 1 diabetes mellitus. *World Journal of Advanced Research and Reviews*, 21(1), 2119-2124. <https://doi.org/10.30574/wjarr.2024.21.1.0235>
- Owusu-Sarpong, A. (2022). The impact of rotavirus vaccine on diarrheal diseases among children under five years: a retrospective analysis of data from 2012 to 2015 in the yilo krobo municipality of ghana. *Postgraduate Medical Journal of Ghana*, 7(2), 68-71. <https://doi.org/10.60014/pmjpg.v7i2.170>
- O'Connor, S., Brenner, M., & Coyne, I. (2019). Family-centred care of children and young people in the acute hospital setting: a concept analysis. *Journal of Clinical Nursing*, 28(17-18), 3353-3367. <https://doi.org/10.1111/jocn.14913>
- Park, S. and Cho, I. (2022). Factors affecting parent health-promotion behavior in early childhood according to family cohesion: focusing on the covid-19 pandemic. *Journal of Pediatric Nursing*, 62, 121-128. <https://doi.org/10.1016/j.pedn.2021.08.022>
- Paul, P. and Mondal, D. (2020). Maternal experience of intimate partner violence and its association with morbidity and mortality of children: evidence from india. *Plos One*, 15(4), e0232454. <https://doi.org/10.1371/journal.pone.0232454>
- Pelham, W. (2023). How can clinicians improve parental monitoring of adolescents? a content review of manualized interventions.. <https://doi.org/10.31234/osf.io/7fuhn>
- Piotrowska, P., Tully, L., Collins, D., Sawrikar, V., Hawes, D., Kimonis, E., ... & Dadds, M. (2019). Parentworks: evaluation of an online, father-inclusive, universal parenting intervention to reduce child conduct problems. *Child Psychiatry & Human Development*, 51(4), 503-513. <https://doi.org/10.1007/s10578-019-00934-0>
- Pritlove, C., Markowitz, B., Mukerji, G., Advani, A., & Parsons, J. (2020). Experiences and perspectives of the parents of emerging adults living with type 1 diabetes. *BMJ Open Diabetes Research & Care*, 8(1), e001125. <https://doi.org/10.1136/bmjdrc-2019-001125>
- Putri, A. and Rong, J. (2021). Parenting functioning in stunting management: a concept analysis. *Journal of Public Health Research*, 10(2), jphr.2021.2160. <https://doi.org/10.4081/jphr.2021.2160>
- Rahayuningsih, S., Setiawan, A., Warisno, A., Andari, A., & Anshori, M. (2023). The importance of kyai charismatic leadership in the formation of akhlakul karimah. *JMKSP (Jurnal Manajemen Kepemimpinan Dan Supervisi Pendidikan)*, 8(2), 461-471. <https://doi.org/10.31851/jmksp.v8i2.11227>
- Rasmita, D. (2023). Information giving by nurses in empowering parents to care for children with cancer. *Nurse and Holistic Care*, 3(2), 64-73. <https://doi.org/10.33086/nhc.v3i2.4675>
- Rehan, A., Kishore, S., Singh, M., Jain, B., & Parveen, R. (2022). Factors associated with under nutrition among 6-59 months old children in rishikesh, uttarakhand. *National Journal of Community Medicine*, 11(03), 122-127. <https://doi.org/10.5455/njcm.20200424065415>
- Russo, M., Rebessi, I., & Neufeld, C. (2021). Parental training in groups: a brief health promotion program. *Trends in Psychiatry and Psychotherapy*. <https://doi.org/10.47626/2237-6089-2019-0055>
- Sarfo, J., Amoadu, M., Gyan, T., Osman, A., Kordorwu, P., Adams, A., ... & Ofosu-Appiah, P. (2023). Acute lower respiratory infections among children under five in sub-saharan africa: a scoping review of prevalence and risk factors. *BMC Pediatrics*, 23(1). <https://doi.org/10.1186/s12887-023-04033-x>
- Sari, F., Murti, B., Sutisna, S., & Kusnandar, K. (2020). Health promotion model for improvement of the nutritional status of children under five years. *Global Journal of Health Science*, 12(8), 144. <https://doi.org/10.5539/gjhs.v12n8p144>

- Scott, K., Shutts, K., & Devine, P. (2020). Parents' role in addressing children's racial bias: the case of speculation without evidence. *Perspectives on Psychological Science*, 15(5), 1178-1186. <https://doi.org/10.1177/1745691620927702>
- Shukla, A., Arya, G., Gupta, A., Kumar, N., & Barman, S. (2023). Assessment of clinic-biochemical parameters in severe acute malnutrition children admitted in a tertiary care hospital of western uttar pradesh, india. *Asian Journal of Medical Sciences*, 14(8), 91-97. <https://doi.org/10.3126/ajms.v14i8.53344>
- Siddiqi, M. and Mueeed, A. (2021). Risk factors of childhood diarrhoeal diseases in bangladesh: evidence from a nationwide cross-sectional survey. *Journal of Health Systems and Policies*, 3(2), 97-109. <https://doi.org/10.52675/jhesp.893192>
- Sierra, A. and Cañas, J. (2019). Related factors to integrated management of childhood illnesses at 18 colombian cities.. <https://doi.org/10.21203/rs.2.18660/v1>
- Sultana, M., Sarker, A., Sheikh, N., Akram, R., Ali, N., Mahumud, R., ... & Alam, N. (2019). Prevalence, determinants and health care-seeking behavior of childhood acute respiratory tract infections in bangladesh. *Plos One*, 14(1), e0210433. <https://doi.org/10.1371/journal.pone.0210433>
- Szepesenwol, O., Shai, D., Zamir, O., & Simpson, J. (2020). The effects of morbidity-mortality and economic unpredictability on parental distress: a life history approach. *Journal of Social and Personal Relationships*, 38(1), 189-209. <https://doi.org/10.1177/0265407520959719>
- Tabrizi, J., Bazargani, H., Ardakani, M., & Saadati, M. (2020). Developing safe community and healthy city joint model. *Journal of Injury and Violence Research*, 12(3). <https://doi.org/10.5249/jivr.v12i3.1343>
- Teferi, E., Gemechu, D., & Ismael, A. (2022). Impact of preventive and early treatment of childhood pneumonia and diarrhea in ethiopia, analysis from health management information system (hmis) report 2010 -2016. *International Journal of Frontline Research in Pharma and Bio Sciences*, 1(1), 027-033. <https://doi.org/10.56355/ijfrpbs.2022.1.1.0003>
- Tshivhase, L., Madumo, M., & Govender, I. (2020). Challenges facing professional nurses implementing the integrated management of childhood illness programme in rural primary health care clinics, limpopo province, south africa. *South African Family Practice*, 62(1). <https://doi.org/10.4102/safp.v62i1.5060>
- Tørslev, M., Thøgersen, D., Bonde, A., Bloch, P., & Varming, A. (2021). Supporting positive parenting and promoting healthy living through family cooking classes. *International Journal of Environmental Research and Public Health*, 18(9), 4709. <https://doi.org/10.3390/ijerph18094709>
- Venugopal, S., Srivijayan, A., & Ramanath, A. (2019). Study on breast feeding and complementary feeding practices in rural mothers, tamilnadu, india. *Pediatric Review International Journal of Pediatric Research*, 6(2), 97-102. <https://doi.org/10.17511/ijpr.2019.i02.10>
- Weaver, M., Neumann, M., Lord, B., Wiener, L., Lee, J., & Hinds, P. (2020). Honoring the good parent intentions of courageous parents: a thematic summary from a us-based national survey. *Children*, 7(12), 265. <https://doi.org/10.3390/children7120265>
- Wiggins, E. (2023). The benefits of nurturant-involved parenting for children's internalizing symptoms and cardiometabolic health in high-risk contexts. *Development and Psychopathology*, 35(5), 2420-2429. <https://doi.org/10.1017/s0954579423000652>
- Woodard, N., Bors, D., Hussain, A., Huq, M., & Knott, C. (2022). Motives driving non-healthcare community organizations to engage in health promotion activities. *Journal of Community Health*, 47(5), 765-773. <https://doi.org/10.1007/s10900-022-01108-1>
- Wray, J., Ridout, D., Jones, A., Davis, P., Wellman, P., Rodrigues, W., ... & Brown, K. (2021). Morbidities after cardiac surgery: impact on children's quality of life and parents' mental health. *The Annals of Thoracic Surgery*, 112(6), 2055-2062. <https://doi.org/10.1016/j.athoracsur.2020.11.003>

Xiong, Y., Qin, X., Wang, Q., & Ren, P. (2021). Parental involvement in adolescents' learning and academic achievement: cross-lagged effect and mediation of academic engagement. *Journal of Youth and Adolescence*, 50(9), 1811-1823. <https://doi.org/10.1007/s10964-021-01460-w>