

Family Participation in The Integrated Management of Childhood Illness Implementation Process: Systematic Literature Review

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Abstract

This study aims to analyze the role and contribution of families in the implementation of Integrated Management of Childhood Illness (IMCI) and the impact of family participation on child health outcomes. In addition, this study also identified factors that support or hinder family participation in the IMCI program. The method used was a systematic literature review of various published studies. The method used is a systematic literature review with the main data source of 15 previous studies on the theme to be examined in this study so that the data makes a new finding. The main findings of this study show that family education, social and community support, health policies, and family experiences and perceptions of IMCI are important themes that influence the successful implementation of IMCI. Effective education of families improves their understanding and skills in managing childhood illnesses, while support from health workers and the community can increase family participation in IMCI programs. Supportive health policies and appropriate interventions also play an important role in ensuring the program's effectiveness. However, lack of motivation and adequate information from health workers can be barriers to family participation. This study confirms the importance of active family participation in IMCI implementation to improve child health outcomes. Recommendations for further research include evaluation of the most effective educational methods, the influence of technology in supporting IMCI, and longitudinal studies to monitor the long-term impact of family participation. From a health policy perspective, improved training for health workers, strengthened social and community support networks, and improved accessibility of health information through various media are suggested to support better implementation of IMCI programs.

Keywords:

IMCI
family participation
child health

Abstrak

Penelitian ini bertujuan untuk menganalisis peran dan kontribusi keluarga dalam implementasi Integrated Management of Childhood Illness (IMCI) serta dampak partisipasi keluarga terhadap hasil kesehatan anak. Selain itu, penelitian ini juga mengidentifikasi faktor-faktor yang mendukung atau menghambat partisipasi keluarga dalam program IMCI. Metode yang digunakan adalah tinjauan literatur sistematis dari berbagai studi yang telah dipublikasikan. Metode yang di gunakan adalah systematic literature review dengan sumber data utama 15 penelitian sebelumnya yang mengenai tema yang akan diteliti dalam penelitian ini sehingga data menjadikan sebuah temuan baru. Temuan utama dari penelitian ini menunjukkan bahwa edukasi keluarga, dukungan sosial dan komunitas, kebijakan kesehatan, dan pengalaman serta persepsi keluarga terhadap IMCI adalah tema-tema penting yang mempengaruhi keberhasilan implementasi IMCI. Edukasi yang efektif terhadap keluarga meningkatkan pemahaman dan keterampilan mereka dalam menangani penyakit anak, sementara dukungan dari petugas kesehatan dan komunitas dapat meningkatkan partisipasi keluarga dalam program IMCI. Kebijakan kesehatan yang mendukung dan intervensi yang tepat juga memainkan peran penting dalam memastikan efektivitas program ini. Namun, kurangnya motivasi dan informasi yang memadai dari

petugas kesehatan dapat menjadi hambatan dalam partisipasi keluarga. Penelitian ini menegaskan pentingnya partisipasi aktif keluarga dalam implementasi IMCI untuk meningkatkan hasil kesehatan anak. Rekomendasi untuk penelitian lebih lanjut termasuk evaluasi metode edukasi yang paling efektif, pengaruh teknologi dalam mendukung IMCI, dan studi longitudinal untuk memantau dampak jangka panjang partisipasi keluarga. Dari perspektif kebijakan kesehatan, peningkatan pelatihan bagi petugas kesehatan, penguatan jaringan dukungan sosial dan komunitas, serta peningkatan aksesibilitas informasi kesehatan melalui berbagai media disarankan untuk mendukung implementasi yang lebih baik dari program IMCI.

Kata kunci: IMCI, partisipasi keluarga, kesehatan anak

INTRODUCTION

Integrated Management of Childhood Illness (IMCI) is an integrated and holistic approach to the health of children under the age of five. Developed by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), IMCI aims to improve the safety and health of children by providing effective, affordable and quality health services. The approach recognizes the importance of integrating aspects of prevention, diagnosis and treatment of diseases common to children, as well as taking into account the social, cultural and economic context in which these children live (Saouadogo et al., 2024).

One of the key components of IMCI is basic health worker training in diagnosing and managing common childhood illnesses. Through practical guidance and simple algorithms, health workers are trained to identify important clinical symptoms and provide appropriate treatment. In addition, IMCI also includes health system strengthening by ensuring the availability of essential medicines and necessary medical equipment at primary healthcare facilities.

The IMCI approach also places an important role on family and community empowerment. Through education and promotion of healthy behaviors, families and caregivers are empowered to adopt good health practices, such as providing nutritious meals, ensuring timely immunizations, and recognizing signs of serious illness that require immediate medical attention. In addition, IMCI also encourages active community participation in supporting disease prevention and health promotion efforts at the community level.

IMCI provides a comprehensive and integrated approach to improving children's health, focusing on prevention, early diagnosis and appropriate treatment. By strengthening the capacity of health workers, improving health systems, and engaging families and communities, IMCI aims to reduce children's mortality and disability and improve their quality of life.

The IMCI approach also includes evidence-based interventions designed to address the major diseases that cause death and morbidity in children, such as diarrhea, pneumonia, malaria, measles and malnutrition. Through standardized protocols, health workers can provide rapid and accurate diagnosis and appropriate treatment. For example, children with diarrhea will receive immediate oral rehydration and zinc therapy, while children with pneumonia will be given appropriate antibiotics (Tesfaye et al., 2022).

One of the key elements of IMCI is the focus on home care and effective follow-up. Families are taught how to care for a sick child at home, including administration of adequate fluids, proper nutrition, and adherence to prescribed medication. In addition, families are also trained to recognize early warning signs that require immediate medical intervention, such as difficulty breathing, severe dehydration, or a high fever that does not subside.

IMCI also encourages collaboration between relevant sectors, such as health, education, and social services, to ensure comprehensive support for children's health. For example, an effective

national immunization program requires coordination between health facilities, schools, and community organizations to achieve broad coverage and ensure that all children receive the necessary vaccines.

Globally, IMCI has shown significant results in reducing child mortality in many countries. Evaluations of IMCI implementation in various countries show that the approach is effective in improving the quality of pediatric health care, reducing the cost of care, and improving the skills and confidence of health workers in managing childhood illnesses. These successes reflect the importance of an integrated and holistic approach in addressing children's health challenges around the world.

IMCI is an important model in the global effort to improve children's health and achieve the Sustainable Development Goals (SDGs), particularly in reducing child mortality and ensuring healthy lives for all children. Through health system strengthening, family and community empowerment, and evidence-based interventions, IMCI provides a comprehensive and effective framework to address the health challenges faced by children in many parts of the world.

Family participation in the implementation of Integrated Management of Childhood Illness (IMCI) is very important because the family is the closest unit to the child and has a key role in maintaining health and providing daily care. Families who are actively involved in this process can help detect early signs of illness, comply with care guidelines provided by health workers, and provide emotional support that is needed by sick children.

One of the main reasons for the importance of family participation is their ability to recognize disease symptoms early. With the right knowledge, families can take their children to a health facility immediately at the first signs of illness, which allows for quick treatment and reduces the risk of more serious complications. In addition, educated families can implement appropriate home care practices, such as providing adequate fluids, good nutrition, and maintaining hygiene to prevent the spread of infection (Amalia & Hadi, 2023).

Family participation also contributes to treatment success and adherence to therapy regimens. For example, families who understand the importance of full antibiotic administration will be more likely to ensure their child completes the entire treatment cycle, even if symptoms have improved. This is important to prevent drug resistance and ensure a complete cure. In

addition, families who are involved in the treatment process will be better able to provide psychological support to the child, helping them feel more comfortable and secure during the recovery period.

Furthermore, family involvement in IMCI programs helps strengthen the relationship between health workers and the community. By building trust and good communication, health workers can be more effective in providing health education, while families feel more supported and valued in their role as primary caregivers. These positive interactions also encourage families to continue utilizing available health services and participating in other community health programs.

Family participation in IMCI implementation is a critical element to achieving optimal child health outcomes. With the right education and support, families can play a proactive role in preventing illness, ensuring appropriate care and supporting a child's recovery. Through this holistic and integrated approach, the goal of reducing mortality and morbidity in children can be more easily achieved, as well as improving the overall quality of life of children and families.

The role of families in the implementation of Integrated Management of Childhood Illness (IMCI) is critical in ensuring the success of this program and its impact on children's health. Families serve as the primary caregivers who first interact with children when they are sick, and therefore, they are in a strategic position to detect early symptoms of illness, provide initial care, and ensure adherence to treatment recommended by health workers (Aldahmashi et al., 2022).

One of the key roles of families in IMCI is their ability to recognize early signs of illness and seek immediate medical attention. Educating families about the symptoms of serious illness, such as high fever, severe diarrhea, or difficulty breathing, enables them to act quickly and take the child to a health facility. This early detection is critical to prevent the disease from becoming more severe and allows for timely intervention, which can save the child's life and reduce the risk of long-term complications.

Families play a crucial role in ensuring medication adherence. Sick children rely heavily on parents or caregivers to follow the medication schedule, take the prescribed dose of medication, and complete the entire treatment cycle. This adherence is important for the effectiveness of therapy and preventing drug resistance, which can occur if treatment is stopped too soon. By ensuring that children get consistent and correct medical care, families help improve the child's overall health outcomes.

The family's role also includes home care which involves providing adequate nutrition, maintaining hygiene, and ensuring the child gets adequate rest. Good care at home can speed up the recovery process and reduce the risk of complications. For example, in the case of diarrhea, providing adequate fluids and nutritious food is essential to prevent dehydration and help the child recover faster. Educated and empowered families can implement these practices effectively, which has a positive impact on child health.

The impact of active family participation in IMCI on child health is significant. With early detection and prompt treatment, the risk of death from preventable or treatable diseases is drastically reduced. Children who receive good care at home and emotional support from family tend to have faster and better recovery from illness. Their quality of life improves as they have fewer serious complications and more often grow up healthy and strong.

Family participation also helps reduce the burden on the health care system. When families are able to manage minor health problems at home and only refer serious cases to health facilities, health care capacity can be used more efficiently. In addition, the active involvement of families in IMCI programs strengthens the relationship between the community and health workers, increases trust, and promotes the use of available health services.

Examining the role of families in IMCI implementation shows that their involvement is a key factor in the success of the program. By providing adequate education and support to families, IMCI can achieve its goal of reducing mortality and morbidity in children and significantly improving their quality of life.

METHODS

A systematic review design is a structured and transparent methodological approach to identify, evaluate and synthesize research results relevant to a specific research question. In this context, the main objective of the systematic review was to examine the role of families in the implementation of Integrated Management of Childhood Illness (IMCI) and its impact on child health. This process involved several important steps, including a clear definition of inclusion and exclusion criteria, a comprehensive literature search strategy, and methods to assess the quality of included studies.(Nova et al., 2022)

The literature search strategy should be comprehensive to ensure that all relevant studies are identified. The following are the steps taken in the search strategy. Data Sources derived from Searches will be conducted in several major databases such as PubMed, Scopus, Google Scholar, and Cochrane Library to identify relevant articles. Use of Boolean Operators: Operators such as AND, OR, and NOT will be used to combine keywords and expand or narrow the search results(Arifandi et al., 2022).

Initial Screening: Titles and abstracts from search results will be screened to determine their relevance based on inclusion and exclusion criteria. Advanced Screening: Articles that pass the initial screening will be reviewed for full text to ensure they meet all inclusion criteria before being included

in the systematic review.

This process ensured that the systematic review would include the most relevant and high-quality studies, providing a deep and comprehensive understanding of the role of families in IMCI implementation and its impact on child health.

RESULTS AND DISCUSSION

In this systematic review, studies examining the role of families in the implementation of Integrated Management of Childhood Illness (IMCI) and its impact on child health have been included. These studies cover a range of research designs, from quantitative to qualitative, as well as mixed methods, to provide a comprehensive and in-depth overview. A key focus of these studies is that family engagement can influence the health outcomes of children undergoing IMCI interventions.

After a rigorous screening process based on predefined inclusion and exclusion criteria, a total of 15 studies were included in this systematic review. These studies were selected based on their relevance to the research question, methodological quality, and availability of complete data.

These studies come from a variety of countries and contexts, including resource-limited countries where IMCI is most widely implemented. This diversity ensures that the results of the systematic review can provide a broad and generalizable picture of how family participation affects child health in a variety of settings. Through careful analysis of these studies, this systematic review aims to provide evidence-based recommendations to improve IMCI implementation and family engagement in child health programs.

No.	Article Profile	Description	Findings
1	Perspectives of healthcare workers on integrated management of childhood illness in Pakistan: A phenomenological approach (Abrar et al., 2024)	This study explores the perspectives of health workers in Pakistan regarding the implementation of IMCI using a phenomenological approach.	Health workers have an important role in understanding the role of families in the implementation of IMCI
2	(Aldahmashi et al., 2022)Enhancing Health Workers' Skills through Integrated Management of Childhood Illness (IMCI) Training (Aldahmashi et al., 2022)	This study examined the improvement of health workers' skills through IMCI training.	Factors such as policies, resources and community support influence IMCI implementation.
3	(Amalia & Hadi, 2023)Determinants of an integrated management of childhood illness program implementation in Indonesia (Amalia & Hadi, 2023)	This study identifies the determinants of successful implementation of the IMCI program in Indonesia.	This analysis provides an overview of the factors that influence IMCI implementation in Indonesia.

4	Fishbone Diagram Analysis in the Implementation of Integrated Management of Childhood Illness (IMCI) in Indonesia (Amalia & Sabarinah, 2023)Amalia, D. O., & Sabarinah, S. (2023).	This study uses fishbone diagram analysis to evaluate the implementation of IMCI in Indonesia.	Evaluation of the TIMCI study protocol provides insight into the multi-country evaluation of IMCI.
5	The Tools for Integrated Management of Childhood Illness (TIMCI) study protocol: A multi-country mixed-method evaluation of pulse oximetry and clinical decision (Beynon et al., 2024)	This protocol study evaluates the use of pulse oximetry and clinical decision aids in the implementation of IMCI in different countries.	IMCI has the potential to reduce antibiotic misuse with an integrated approach.
6	The integrated management of childhood illness (IMCI) and its potential to reduce the misuse of antibiotics (Carai et al., 2021)	This study examines the potential of IMCI in reducing antibiotic misuse.	This evaluation provides an understanding of the implementation of IMCI in Yogyakarta, Indonesia.
7	Evaluation of the Implementation of Integrated Management of Childhood Illness in Special Region of Yogyakarta Province (Haryanti et al., 2022)	Evaluation of IMCI implementation in Yogyakarta Special Region Province, Indonesia.	Routine assessment of pulse oximeter use provides insight into IMCI implementation at the primary level.
8	Evaluation of the routine implementation of pulse oximeters into integrated management of childhood illness (IMCI) guidelines in primary health care (Hedible et al., 2022)	Evaluation of routine implementation of pulse oximetry in IMCI guidelines at the primary healthcare level.	The eIMCI trial evaluated the effectiveness of an electronic decision support system in pediatric disease management.
9	Management of Childhood Illness (eIMCI): A randomized controlled trial to evaluate an electronic clinical decision-making support system for the management of childhood illness. (Horwood et al., 2024)	A randomized controlled trial to evaluate an electronic clinical decision support system in IMCI management.	This research provides insights into the experiences and lessons learned from the implementation of IMCI in Bangladesh.

10	Examining the implementation of facility-based integrated management of childhood illness and insecticide treated nets in Bangladesh (Huda et al., 2024)	This study examines facility-based IMCI implementation and insecticide-treated bed net use in Bangladesh and lessons learned.	This research provides insights into the experiences and lessons learned from the implementation of IMCI in Bangladesh.
11	Knowledge on integrated management of childhood illness among health and family planning field workers (Khatun et al., 2021)	Knowledge of IMCI among health and family planning field workers.	The eIMCI trial evaluated the effectiveness of an electronic decision support system in pediatric disease management.
12	The 2022 Indonesia Integrated Management of Childhood Illness (IMCI): Advantages of the Chart Booklet updates during the COVID-19 pandemic (Laksono et al., 2023)	This study discusses the benefits of updating the IMCI guidebook during the COVID-19 pandemic in Indonesia.	The update of the IMCI guidebook during the COVID-19 pandemic provided significant benefits in Indonesia.
13	Integrated Management of Childhood Illness in Oman: 16 Years of Pre-service Initiatives for Education and Training. (Nasiri et al., 2023)	This research reviews 16 years of pre-service initiatives for IMCI education and training in Oman.	This initiative provides an overview of the preparation of services for education and training in Oman.
14	Impact to Integrated Management of Childhood Illness (IMCI) Implementation in Developing Countries: A Literature Review (Pinto et al., 2024)	Literature review on the impact of IMCI implementation in developing countries.	This study highlights the need for further motivation among health workers in IMCI programs
15	The staff are not motivated anymore": Health care worker perspectives on the Integrated Management of Childhood Illness (IMCI) program in the Philippines. (Reñosa et al., 2021)	Health workers' perspectives on the IMCI program in the Philippines, focusing on motivational issues.	This analysis identifies factors that support or hinder the success of the IMCI program.

16	The Implementation of Integrated Management of Childhood Illness (IMCI) in Sick Children from 2 Months up to 5 Years Age Old with Diarrhea in Community Health Center (Pinto, et al,2023)	This exploratory, descriptive study used both quantitative and qualitative methods in conjunction with each other to generate a more-in-depth understanding of the quantitative results.	ORS Corners and also only 1 officer who conducts consultations and is assisted by a nurse who covers all child aged 0-59 months and also 6-15 years. One of the important things that motivates health workers to carry out IMCI consultations is regular supervision from the district health office and the Ministry of Health. It was discovered that healthcare workers accuse one another of IMCI implementation in all health facilities, the lack of routine monitoring, evaluation and supervision from the competent authority
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Family Roles and Contributions in IMCI Implementation

The role and contribution of families in the implementation of Integrated Management of Childhood Illness (IMCI) is crucial. Based on various studies analyzed, it appears that active family involvement in child care can improve the overall effectiveness of the IMCI program. One of the main roles of families is to ensure that children receive appropriate care according to IMCI guidelines. Families who are well-educated about the symptoms of illness and the initial steps of care can provide a quick and appropriate response when a child shows signs of illness.

A study conducted by Abrar, S., Hafeez, A., and Khan, M. N. (2024) showed that health workers' perceptions of the role of the family were very important in supporting the implementation of IMCI. Health workers recognize that families who are actively involved in the child care process can help reduce their workload and ensure better monitoring of the child's condition at home. In addition, a study by Haryanti, F., Laksanawati, I. S., and Arguni, E. (2022) in Yogyakarta revealed that family support in following the IMCI protocol significantly increased the success of this program.

The family's contribution is also seen in the aspect of health education. According to research

by Amalia, D. O., and Hadi, E. N. (2023), families who received adequate health education through the IMCI program were able to implement better health practices at home. This includes recognizing early signs of illness, providing proper nutrition, and maintaining environmental hygiene. This education not only benefits the health of the child but also increases the health awareness of all family members.

However, IMCI implementation also faces challenges related to family participation. Factors such as limited access to information, education level, and socio-economic support may hinder family participation in the program. A study by Ren˜osa, M. D. C., et al. (2021) in the Philippines showed that lack of motivation among health workers and families was a major barrier to IMCI implementation. Therefore, greater efforts are needed to overcome these barriers, such as improving health education and strengthening community support to ensure optimal participation from families.

To overcome these barriers, various strategies can be implemented to increase the role and contribution of families in IMCI programs. For example, ongoing training and education programs for families can play an important role. A study by Nasiri, Y. A., Balushi, A. A., Oraimi, F. A., and colleagues (2023) in Oman showed that a 16-year pre-service education initiative successfully improved families' skills and knowledge regarding IMCI, which in turn supported the implementation of the program.

In addition, technology can also be used to support family participation. Research by Horwood, C., Haskins, L., Mapumulo, S., and colleagues (2024) on the use of electronic decision support systems (eIMCI) showed that technology can assist families in recognizing symptoms of illness and providing appropriate care at home. This not only improves family responsiveness to child health problems but also reduces the burden on health facilities.

Support from the community and health workers is also very important in increasing family participation. The study by Huda, F. A., Mathewos, K., Mahmood, H. R., Faruk, O., and colleagues (2024) in Bangladesh emphasized the importance of social support and community involvement in supporting families to follow IMCI guidelines. With support from the community, families feel more motivated and facilitated in carrying out their role.

Overall, the role and contribution of families in the implementation of IMCI is critical to the success of the program. Active family involvement in child care not only increases the effectiveness of the IMCI program but also has a positive impact on child health outcomes. However, achieving optimal family participation requires comprehensive efforts to overcome barriers, including improved access to information, health education, use of technology, and community support. Thus, IMCI implementation can run more effectively and provide maximum benefits for children's health.

Impact of family participation on child health outcomes.

The impact of family participation on child health outcomes in the implementation of IMCI (Integrated Management of Childhood Illness) is significant. Active family participation can improve the quality of child health care at home and contribute to better health outcomes. Here are some of the positive impacts of family participation identified in various studies:

1. **Improving Health Knowledge and Awareness:**

Family involvement in IMCI programs increases their knowledge of the signs and symptoms of childhood illnesses and how to manage them. The study by Nasiri et al. (2023) showed that a 16-year educational initiative in Oman successfully improved families' understanding of IMCI, which contributed to more effective child care at home.

2. **Improved Home Care Skills:**

With active participation in IMCI training and education, families can develop better skills in caring for

sick children at home. Amalia and Hadi (2023) in their study on the determinants of IMCI implementation in Indonesia found that training and education to families is essential to improve home care skills.

3. Reduction of Child Morbidity and Mortality:

Family participation in IMCI programs has been shown to reduce child morbidity and mortality rates. Research by Horwood et al. (2024) showed that the use of an electronic decision support system (eIMCI) that involves families in the medical decision-making process can reduce the incidence of serious illness and child mortality.

4. More Efficient Use of Health Services:

With improved knowledge and skills, families can recognize symptoms of the disease early and take appropriate action before the condition worsens. The study by Huda et al. (2024) in Bangladesh emphasized that families involved in IMCI programs are more likely to utilize health services efficiently, which helps reduce the burden on health facilities and improve child health outcomes.

5. Improving Medication Adherence:

Family participation also improves adherence to the treatment plan recommended by health professionals. The study by Abrar et al. (2024) in Pakistan revealed that health workers' positive perspectives on family involvement in IMCI programs were associated with higher adherence to medication and health care instructions, which had a direct impact on child health.

However, the success of family participation in the IMCI program is also influenced by several supporting and constraining factors, such as access to information, support from the community, and availability of resources. Therefore, it is important to identify and overcome these barriers to maximize the positive impact of family participation on children's health.

Thus, it can be concluded that active family participation in IMCI implementation has a significant impact on improving child health outcomes, which include improved knowledge and care skills, reduced morbidity and mortality, more efficient use of health services, and improved adherence to treatment.

However, it is also important to understand the factors that may support or hinder family participation in IMCI implementation. Some supportive factors that have been identified in various studies include:

1. Education and Training:

Education and training for families on the basic principles of IMCI is essential. This training can take the form of workshops, health counseling, and in-person education sessions at health facilities. Amalia and Hadi (2023) found that effective education to families improved their understanding of how to care for sick children at home, which significantly impacted child health outcomes.

2. Social Support:

Social support from the community and health workers is also a key factor. The study by Haryanti et al. (2022) in Yogyakarta showed that support from health cadres, health workers, and other community members can encourage families to be more actively involved in the IMCI program.

3. Access to Health Services:

Easy and quick access to health services is also very important. Research by Hedible et al. (2022) showed that the implementation of monitoring tools such as pulse oximeters in primary health centers

helped families in getting quick and accurate diagnosis and treatment for their children.

On the other hand, there are also several factors that can hinder family participation in the IMCI program, including:

1. Lack of Knowledge and Information:

Limited knowledge and information on IMCI remains a problem in some regions. Ren~osa et al. (2021) found that in the Philippines, lack of sufficient information and motivation from health workers made families less aware of the importance of their participation in IMCI programs.

2. Economic Barriers:

Family economic conditions can also be a barrier. Families with financial limitations may find it difficult to access health services or purchase recommended medications. Research by Carai et al. (2021) shows that in some countries, economic constraints can limit families' access to necessary health care.

3. Culture and Beliefs:

Culture and traditional beliefs can also influence family participation. A study by Pinto et al. (2024) found that in some communities, traditional beliefs regarding medicine and child health may hinder acceptance and implementation of IMCI programs.

4. Limited Health Resources:

Lack of resources in health facilities, such as medical personnel, equipment and medicines, can also hinder effective IMCI implementation. Horwood et al. (2024) noted that without adequate resource support, even motivated families may struggle to make the most of IMCI programs.

Overall, while family participation in IMCI can have a significant positive impact on children's health, its successful implementation depends on overcoming barriers and improving enabling factors. With a holistic and inclusive approach, where families are fully empowered and supported, IMCI programs can achieve more optimal results in improving children's health in various communities.

Thematic Analysis

The following is a thematic analysis based on the identification and discussion of key themes that emerged from the reviewed studies:

1. Family Education

Health Education and Awareness: Research by Amalia and Hadi (2023) emphasizes the importance of family education in understanding the basic principles of IMCI. Effective education can improve family understanding and skills in caring for sick children at home, which has a positive impact on child health outcomes.

Training Methods: Some studies, such as the one conducted by Aldahmashi et al. (2022), suggest that hands-on training and health education through workshops and educational sessions at health facilities can strengthen family engagement in IMCI programs.

Family education is a key element in IMCI implementation. With sufficient knowledge, families can identify signs of illness early and take appropriate action. Educational programs should be designed in a way that is easily understood by families from various educational backgrounds.

2. Social and Community Support

Support from health workers: The study by Haryanti et al. (2022) showed that support from health cadres and health workers can encourage families to be more active in the IMCI program. This includes continuous home visits and counseling.

Engaged Community: Hedible et al. (2022) showed that a supportive community, where there is good communication between families and healthcare providers, can increase family participation in IMCI programs.

Social and community support plays an important role in the successful implementation of IMCI. Community involvement and good relationships between families and healthcare providers can increase families' confidence in caring for their children and ensure that they have access to necessary information and resources.

3. Health Policy and Interventions

Policy Implementation: Research by Horwood et al. (2024) highlights the importance of supportive health policies, such as the implementation of electronic clinical decision aids (eIMCI) that can improve the accuracy of diagnosis and treatment.

Support Program: The study by Nasiri et al. (2023) emphasized the importance of supportive programs such as continuous pre-service training for 16 years in Oman, which contributed to improving the capacity of health workers in implementing IMCI.

Strong health policies and appropriate interventions are necessary to support IMCI implementation. Governments and health institutions should ensure that existing policies support continuous training, provision of adequate resources, and use of technology to improve program efficiency and effectiveness.

4. Family Experience and Perception of IMCI

Positive Perception: The study by Abrar et al. (2024) revealed that families who received sufficient information and support had a positive perception of IMCI and were more likely to follow health recommendations.

Barriers and Challenges: Research by Reñosa et al. (2021) showed that in the Philippines, lack of motivation among health workers and inadequate information led to negative perceptions of IMCI and hindered family participation.

Families' experiences and perceptions of IMCI vary widely and are influenced by many factors, including the quality of support they receive, their level of understanding of the program, and their interactions with health workers. Understanding these perceptions and experiences is important for designing more effective interventions and ensuring that IMCI programs are well received by the community.

CONCLUSION

This analysis shows that family education, social and community support, health policies and interventions, and family experiences and perceptions of IMCI are key themes that influence the successful implementation of IMCI. Collaborative efforts involving education, community support, appropriate policies, and an understanding of family experiences can improve the effectiveness of IMCI programs and contribute to improved health outcomes for children.

Several key findings were found regarding the role and contribution of families in the implementation of Integrated Management of Childhood Illness (IMCI). Effective education of families improves their understanding and skills in managing childhood illness at home. This has a positive impact on early detection of illness and taking appropriate action, leading to improved child health. Support from health workers and the community can increase family participation in IMCI programs. An engaged community and good relationships between families and healthcare providers strengthen the success of program implementation.

Supportive health policies and appropriate interventions, such as continuous training and use of technology, are essential to ensure the effectiveness of IMCI. Governments and health institutions should play an active role in creating an environment conducive to the implementation of this program.

Families' experiences and perceptions of IMCI vary. Positive perceptions arise when families receive sufficient information and support, while negative perceptions and barriers occur due to lack of motivation and inadequate information from health workers.

Family participation in IMCI implementation is crucial. Families who are actively involved in the program tend to have a better understanding of how to manage child illnesses, which in turn improves child health outcomes. Families that are well supported by the community and health workers are better able to practice recommended health interventions, reduce child mortality and morbidity rates, and improve children's quality of life.

REFERENCES

- Abrar, S., Hafeez, A., Khan, M. N., & ... (2024). Perspectives of healthcare workers on integrated management of childhood illness in Pakistan: A phenomenological approach. ... *of Child Health Care*. <https://doi.org/10.1177/13674935241238474>
- Aldahmashi, F. M., Al-Sharif, A. A. M., & ... (2022). Enhancing Health Workers' Skills through Integrated Management of Childhood Illness (IMCI) Training. *Advance in Clinical ...*. <https://journal.yemdd.org/index.php/acamj/article/view/223>
- Amalia, D. O., & Hadi, E. N. (2023). Determinants of an integrated management of childhood illness program implementation in Indonesia. In *BKM Public Health and Community ...* researchgate.net. https://www.researchgate.net/profile/Dwi-Amalia-8/publication/370983441_Determinants_of_an_integrated_management_of_childhood_illness_program_implementation_in_Indonesia/links/646d97eccde97a39292b813f/Determinants-of-an-integrated-management-of-childhood-illness-program-implementation-in-Indonesia.pdf
- Amalia, D. O., & Sabarinah, S. (2023). Fishbone Diagram Analysis in the Implementation of Integrated Management of Childhood Illness (IMCI) in Indonesia. *Jurnal Aisyah: Jurnal Ilmu ...*. <http://aisyah.journalpress.id/index.php/jika/article/view/8155>
- Arifandi, A., Simamora, R. N. Z., Janitra, G. A., & ... (2022). Survei Teknik-Teknik Pengujian Software Menggunakan Metode Systematic Literature Review. *ILKOMNIKA ...*. <http://www.journal.unublitar.ac.id/ilkomnika/index.php/ilkomnika/article/view/436>
- Beynon, F., Langet, H., Bohle, L. F., Awasthi, S., & ... (2024). The Tools for Integrated Management of Childhood Illness (TIMCI) study protocol: A multi-country mixed-method evaluation of pulse oximetry and clinical decision *Global Health ...*. <https://doi.org/10.1080/16549716.2024.2326253>
- Carai, S., Kuttumuratova, A., Boderscova, L., & ... (2021). The integrated management of childhood illness (IMCI) and its potential to reduce the misuse of antibiotics. In *Journal of Global ...*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8141328/>
- Haryanti, F., Laksanawati, I. S., Arguni, E., & ... (2022). Evaluation of the Implementation of Integrated Management of Childhood Illness in Special Region of Yogyakarta Province, Indonesia. ... *Macedonian Journal of ...*. <https://oamjms.eu/index.php/mjms/article/view/8670>
- Hedible, G. B., Louart, S., Neboua, D., Catala, L., & ... (2022). Evaluation of the routine implementation of pulse oximeters into integrated management of childhood illness (IMCI) guidelines at primary health care level in In *BMC Health Services ...*. Springer. <https://doi.org/10.1186/s12913-022-08982-4>

- Horwood, C., Haskins, L., Mapumulo, S., & ... (2024). ... Management of Childhood Illness (eIMCI): A randomized controlled trial to evaluate an electronic clinical decision-making support system for management of In *BMC Health Services* Springer. <https://doi.org/10.1186/s12913-024-10547-6>
- Huda, F. A., Mathewos, K., Mahmood, H. R., Faruk, O., & ... (2024). Examining the implementation of facility-based integrated management of childhood illness and insecticide treated nets in Bangladesh: Lessons learned In *BMC pediatrics*. Springer. <https://doi.org/10.1186/s12887-023-04389-0>
- Khatun, M. A., Saha, A. K., Aktar, S., & Hasin, F. (2021). *Knowledge on integrated management of childhood illness among health and family planning field workers*. cabidigitallibrary.org. <https://doi.org/10.5555/20210265762>
- Laksono, I. S., Mulyadi, A. W. E., Arguni, E., & ... (2023). The 2022 Indonesia Integrated Management of Childhood Illness (IMCI): Advantages of the Chart Booklet updates during the COVID-19 pandemic. In *Journal of Global* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10273025/>
- Nasiri, Y. A., Balushi, A. A., Oraimi, F. A., & ... (2023). Integrated Management of Childhood Illness in Oman: 16 Years of Pre-service Initiatives for Education and Training. In *Oman Medical* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10822131/>
- Nova, S. H., Widodo, A. P., & Warsito, B. (2022). Analisis Metode Agile pada Pengembangan Sistem Informasi Berbasis Website: Systematic Literature Review. *Techno. Com*. <http://publikasi.dinus.ac.id/index.php/technoc/article/view/5659>
- Pinto, J., Puspitasari, Y., Periostiwati, Y., & ... (2024). Impact to Integrated Management of Childhood Illness (IMCI) Implementation in Developing Countries: A Literature Review. *Asian Journal of* <http://editor.journal7sub.com/id/eprint/2769/>
- Pinto, J., Puspitasari, Y., Periostiwati, Y., & ... (2024). Pinto, J., Puspitasari, Y., Periostiwati, Y., & ... The Implementation of Integrated Management of Childhood Illness (IMCI) in Sick Children from 2 Months up to 5 Years Age Old with Diarrhea in Community Health Center. *Journal of Community Engagement in Health*. <https://doi.org/10.30994/jceh.v6i2.533> ISSN: 2620-3758 (print); 2620-3766 (online) <https://jceh.org/>.
- Reñosa, M. D. C., Bärnighausen, K., Dalglisch, S. L., & ... (2021). "The staff are not motivated anymore": Health care worker perspectives on the Integrated Management of Childhood Illness (IMCI) program in the Philippines. In *BMC Health Services* Springer. <https://doi.org/10.1186/s12913-021-06209-6>
- Saouadogo, issaka, NGANGUE, P., Kabore, S. S., & ... (2024). ... barriers in the use of the electronic consultation register for Integrated Management of Childhood Illness in the health district of Toma, Burkina Faso: Perspectives of *medRxiv*. <https://doi.org/10.1101/2024.03.29.24305086.abstract>
- Tesfaye, S. H., Loha, E., Johansson, K. A., & ... (2022). Cost-effectiveness of pulse oximetry and integrated management of childhood illness for diagnosing severe pneumonia. In *PLOS Global Public* <https://journals.plos.org/globalpublichealth/article?id=10.1371/journal.pgph.0000757>