# Systematic Literature Review Analysis: Effectiveness of Family Planning Programs in Reducing Maternal and Child Mortality Rates

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# Informasi Artikel

## **Abstract**

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The Family Planning program has long been known as an important intervention in efforts to reduce maternal and child mortality rates. This research aims to analyze the effectiveness of the Family Planning Program in reducing maternal and child mortality rates using the Systematic Literature Review (SLR) method. This research uses the SLR method by collecting and analyzing literature from various academic databases. Inclusion criteria included studies evaluating the impact of Family Planning programs on maternal and child mortality rates, published between 2019 and 2024. The literature selection process was carried out in two stages: initial screening and quality assessment using PRISMA guidelines. A total of 15 studies met the inclusion criteria and were analyzed in this study. The findings show that the Family Planning Program is effective in reducing maternal mortality through increasing access to reproductive health services, health education, and use of contraception. Apart from that, the Family Planning program is also effective in reducing child mortality by improving maternal health and preventing unwanted pregnancies. Challenges identified include limited access to health services in remote areas, cultural barriers, and lack of policy support. Family Planning programs have proven effective in reducing maternal and child mortality rates. To increase its effectiveness, it is necessary to increase accessibility, service quality, and adequate policy support. It is hoped that these recommendations will help in improving the implementation of Family Planning programs and maternal and child health policies in the future.

#### **Keywords:**

Family Planning Program Maternal Death Child Death

### Abstrak

Program Keluarga Berencana telah lama dikenal sebagai intervensi penting dalam upaya menurunkan angka kematian ibu dan anak. Penelitian ini bertujuan untuk menganalisis efektivitas Program Keluarga Berencana dalam menurunkan angka kematian ibu dan anak dengan menggunakan metode Systematic Literature Review (SLR). Penelitian ini menggunakan metode SLR dengan mengumpulkan dan menganalisis literatur dari berbagai database akademik. Kriteria inklusi mencakup penelitian yang mengevaluasi dampak program Keluarga Berencana terhadap angka kematian ibu dan anak, yang diterbitkan antara tahun 2019 dan 2024. Proses seleksi literatur dilakukan dalam dua tahap: penyaringan awal dan penilaian kualitas menggunakan pedoman PRISMA. Sebanyak 15 penelitian memenuhi kriteria inklusi dan dianalisis dalam penelitian ini. Temuan menunjukkan bahwa Program Keluarga Berencana efektif dalam menurunkan angka kematian ibu melalui peningkatan akses terhadap layanan kesehatan reproduksi, pendidikan kesehatan, dan penggunaan kontrasepsi. Selain itu, program Keluarga Berencana juga efektif dalam menurunkan angka kematian anak melalui peningkatan kesehatan ibu dan mencegah kehamilan yang tidak diinginkan. Tantangan yang teridentifikasi meliputi terbatasnya akses terhadap layanan kesehatan di daerah terpencil, hambatan budaya, dan kurangnya dukungan kebijakan. Program Keluarga Berencana terbukti efektif menurunkan angka kematian ibu dan anak. Untuk meningkatkan efektivitasnya, perlu dilakukan peningkatan aksesibilitas, kualitas layanan, dan dukungan kebijakan yang memadai. Rekomendasi ini diharapkan dapat membantu dalam meningkatkan pelaksanaan program Keluarga Berencana dan kebijakan kesehatan ibu dan anak di masa depan.

Kata kunci: Program Keluarga Berencana, Kematian Ibu, Kematian Anak

#### INTRODUCTION

The Family Planning program has a very important role in the context of public health, especially in efforts to reduce maternal and child mortality rates. This program aims to provide education and access to safe and effective contraceptive methods, so that married couples can plan and organize the birth of children according to health, social and economic conditions.(Jahanfar et al., 2024). With good Family Planning , it is hoped that the quality of life of mothers, children and the family as a whole can improve.

The success of the Family Planning Program has a direct impact on reducing maternal and child mortality rates. For mothers, this program helps reduce the risk of unwanted pregnancies and high-risk pregnancies, such as pregnancies that are too young or too old, as well as pregnancies that are too close together. These conditions are often associated with complications of pregnancy and childbirth which can increase the risk of maternal death. Additionally, by spacing births, mothers have more time to recover physically and mentally after giving birth, which in turn improves health and well-being.

For children, the Family Planning Program also provides significant benefits. Children born with sufficient birth spacing have a greater chance of growing healthily because they receive more optimal attention and nutrition from their parents. Reducing the rate of unplanned births also reduces the risk of malnutrition and disease, which are often the main causes of child death in many developing countries. Thus, the Family Planning Program does not only focus on aspects of population control, but also on improving the quality of life of mothers and children.

Apart from the direct impact on health, the Family Planning Program also contributes to social and economic aspects. Families with a planned number of children tend to have greater opportunities to provide better education and more stable economic prosperity. This has a positive impact on children's social development and opens up opportunities for a better life in the future. Family Planning programs are considered one of the most effective and strategic public health interventions in an effort to reduce maternal and child mortality rates and improve overall quality of life. (Chukwu & Adibe, 2023).

Maternal and child mortality rates are still a big challenge in many countries, especially in developing countries. According to data from the World Health Organization (WHO), every year around 295,000 women die during and after pregnancy and childbirth. Most of these deaths occur in regions with limited access to adequate health services, such as in sub-Saharan Africa and South Asia. Factors such as poverty, low education, and gender inequality exacerbate these conditions, leaving many women without the care they need during pregnancy and childbirth.

One of the main causes of high maternal mortality rates is pregnancy complications that are not handled properly, such as heavy bleeding, infection, preeclampsia, and complications due to unsafe abortion. Lack of access to adequate health facilities and trained medical personnel is often the main obstacle in treating these complications. In many rural areas, long distances to health facilities and inadequate transportation make it increasingly difficult for pregnant women to receive immediate care when complications occur.

Child mortality rates are also still high in several developing countries. WHO reported that in 2019, around 5.2 million children under the age of five died, with the majority of deaths occurring in the neonatal period (the first 0-28 days of life)(Sari et al., 2023). The main causes of child death include complications of premature birth, neonatal infections, pneumonia, diarrhea and malnutrition. This condition is often exacerbated by a lack of access to basic health services, immunizations, clean water and good sanitation.

Inequality in health access is also a significant factor. In many developing countries, health services are often unevenly distributed between urban and rural areas(Ahmed et al., 2023). In rural areas, the available health facilities are often minimal and do not have adequate medical equipment. In addition, skilled medical personnel such as midwives and obstetricians are rarely available in these areas, so pregnant women and children do not receive appropriate and quality care.

Social and cultural problems also contribute to high maternal and child mortality rates. In some cultures, women often have limited access to education and information regarding reproductive health and Family Planning. Apart from that, the practice of early marriage and teenage pregnancies also poses a high risk to the health of mothers and children. Therefore, efforts to reduce maternal and child mortality rates require a comprehensive approach, including increasing access to health services, health education, empowering women, and strengthening inclusive and equitable health policies.

The Family Planning program plays an important role in efforts to reduce maternal and child mortality by providing access to various safe and effective contraceptive methods. By using contraception, married couples can plan pregnancy better, so that the pregnancy that occurs is the desired and planned pregnancy (Memon et al., 2023). This helps reduce the risk of unwanted pregnancies which often lead to unsafe abortions, which is one of the main causes of high maternal mortality rates.

Family Planning programs also contribute to the ideal birth spacing between children. Birth spacing that is too close can increase the risk of pregnancy and childbirth complications, as well as placing excessive physical and mental stress on the mother. By providing information and access to contraception, this program helps mothers have sufficient time to recover after giving birth before becoming pregnant again, which can significantly reduce the risk of health complications and death.

Family Planning programs also play a role in improving children's welfare by reducing the rate of unplanned births. Children born into families who are physically, mentally and financially prepared tend to have better access to nutrition, health care and education (Hastuti et al., 2022). This is important to reduce child mortality, especially in the toddler years, where access to good care and nutrition is critical for survival and growth.

Family Planning programs also support maternal reproductive health by providing education about the importance of prenatal and postnatal care, as well as signs of complications that require immediate medical attention. This education is very important, especially in areas with limited access to health services. With adequate knowledge, mothers can more quickly recognize and seek medical help if problems occur during pregnancy or childbirth, which can prevent serious complications and death.

Family Planning programs also contribute to women's empowerment by providing greater control over reproductive health. When women have the option to plan their families, they can focus more on education and career, which in turn improves their social and economic status. These improvements not only have a positive impact on one's own well-being, but also on the well-being of families and children, creating a healthier and more prosperous environment overall.

The Family Planning program is one of the most effective and multifaceted public health interventions in an effort to reduce maternal and child mortality rates and improve the quality of life of the family as a whole.(El-Shal et al., 2023).

Even though many countries have adopted and implemented Family Planning Programs for decades, maternal and child mortality rates still remain high in many regions. This raises fundamental questions about how effective this program is in achieving its main goal, namely reducing maternal and child mortality rates. To answer this question, an in-depth analysis of various studies that have been conducted regarding the effectiveness of Family Planning programs is needed.

The main aim of this research is to analyze and identify the effectiveness of the Family Planning Program in reducing maternal and child mortality rates through a study of existing literature. Using the Systematic Literature Review (SLR) method, this research aims to collect, evaluate and synthesize the results of research that has been conducted previously regarding the impact of Family Planning programs on maternal and child health.

This research will examine various studies that have been published over a certain period of time, to get a comprehensive picture of how Family Planning programs have been implemented in

various countries and contexts, and how much influence they have had on reducing maternal and child mortality rates. By analyzing these studies, this research aims to identify key factors that influence program success, including aspects such as accessibility of contraceptive services, public education, and government policy support.

This research also aims to identify gaps or limitations in the existing literature. By understanding areas that have received insufficient attention or research, the need for further studies or additional interventions that can strengthen the effectiveness of Family Planning programs can be identified. For example, if it is found that there is a lack of research on the impact of Family Planning programs in rural areas or on certain socio-economic groups, then this could be the basis for recommendations for further, more focused research.

It is hoped that the results of this research can make a significant contribution to the development and improvement of the Family Planning Program in the future. The findings from this research will provide deeper insight into how this program can be optimized to reduce maternal and child mortality rates, as well as provide evidence-based policy recommendations to policy makers, health practitioners and international organizations working in the field of maternal and child health. child.

# **METHOD**

This research uses the Systematic Literature Review (SLR) method to analyze and identify the effectiveness of the Family Planning Program in reducing maternal and child mortality rates. The SLR method was chosen because it allows researchers to collect, evaluate and synthesize existing research results systematically and transparently. Through this approach, it is hoped that a comprehensive understanding of the topic under study can be obtained, as well as identifying areas that still require further research.

The data collection process begins by determining inclusion and exclusion criteria for the studies to be reviewed. Studies included in this analysis are research published in scientific journals, official reports, or other reliable sources that discuss the effectiveness of Family Planning programs in reducing maternal and child mortality. Inclusion criteria include research conducted within a certain time period, using valid methodology, and relevant to the research objectives. In contrast, exclusion criteria include studies that do not meet sound methodological standards, are not relevant to the topic, or are not available in a language that the researcher can understand.

The literature search strategy was carried out through various academic databases such as Scopus and Google Scholar(Systematic Critical Literature Review, 2016). Keywords used in the search included "Family Planning Programs," "maternal mortality rate," "child mortality rate," "effectiveness," and combinations of these terms. The literature search was also limited to a specific time range to ensure that only recent and relevant studies were included in the analysis.

The literature selection procedure consists of two screening stages. The first stage was an initial screening based on title and abstract, where studies that were irrelevant or did not meet the inclusion criteria were immediately excluded. The second stage is secondary screening where the full texts of studies that pass the initial screening are read and further evaluated. Study quality assessment is carried out using tools such as PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) to ensure that only studies that meet high quality standards are included in the final synthesis.

The data analysis techniques used in this research include qualitative and quantitative approaches (Murad, 2020). A qualitative approach was used to explore the main themes, patterns, and factors that influence the effectiveness of Family Planning programs based on narratives and findings from the studies analyzed. Meanwhile, a quantitative approach involves meta-analysis to combine numerical data from various studies and produce more precise effect estimates regarding the impact of

Family Planning programs on reducing maternal and child mortality rates. It is hoped that the combination of these two approaches can provide a more comprehensive and valid picture of the effectiveness of the Family Planning Program.

#### **RESULTS AND DISCUSSION**

In this research, 15 relevant studies regarding the effectiveness of the Family Planning Program in reducing maternal and child mortality rates have been selected for further analysis. These studies cover a variety of research methodologies, including observational studies, clinical trials, and meta-analyses, providing a comprehensive overview of the topic under study. The majority of selected studies come from developing countries in Asia, Africa and Latin America, where maternal and child mortality remains a significant health problem.

These studies were published within the last 5 years, with the main focus on the period 2019 to 2024. This ensures that the analysis includes the latest data and findings regarding the implementation and impact of the Family Planning Program. Various aspects of Family Planning programs are analyzed in these studies, including contraceptive accessibility and use, reproductive health education and outreach, as well as policy interventions and government support.

In general, the selected studies showed significant variation in results and findings. Several studies report significant reductions in maternal and child mortality rates as a result of increased contraceptive use and better Family Planning . For example, studies in Kenya and Bangladesh show that Family Planning program interventions accompanied by health education and community support succeeded in reducing maternal and child mortality rates substantially. On the other hand, some studies show less than optimal results, especially in areas with limited access to health services or in communities with strong cultural barriers to contraceptive use.

These studies also identify various factors that influence the effectiveness of Family Planning programs, such as the mother's education level, awareness of the importance of reproductive health, and support from partners and family. Studies in several African countries show that increasing public education and awareness about reproductive health plays an important role in increasing the success of Family Planning programs. Meanwhile, studies in South Asia highlight the importance of government policy support and the availability of resources to ensure equitable access to Family Planning services.

Overall, the description of the selected studies provides a strong basis for further analysis of the effectiveness of Family Planning programs. These studies not only provide insight into the program's impact across various geographic and cultural contexts, but also identify key factors influencing success and challenges faced in program implementation. It is hoped that an in-depth analysis of these studies will provide evidence-based recommendations to increase the effectiveness of Family Planning programs in reducing maternal and child mortality rates in the future.

# **Systematic Literature Review Analysis**

No	Article Title	Description	Findings
1		This study explores the level and	_
	determinants of	determinants of the use of long-	indicate that the level of use of
	long-acting Family	term Family Planning in Eastern	long-term Family Planning in
	Planning utilization	Ethiopia. The research method	Eastern Ethiopia remains low,
	among reproductive-	used was a cross-sectional	with factors such as education,
	aged women in	survey involving women of	economic status, and
	Harar, Eastern	reproductive age.	accessibility of health services

	Ethiopia(Alemayehu et al., 2021)		serving as important determinants.
2	Models and policies for family development, population control, and Family Planning: A scoping review(Astuti et al., 2024)	This study is a scoping review that aims to identify models and policies used in family development, population control, and Family Planning in various countries.	This study concludes that various models and policies have been implemented in various countries to support family development, population control, and Family Planning, but further research is needed to evaluate their effectiveness and impact.
3	Thirty-five years later: Long-term effects of the Matlab maternal and child health/Family Planning program on older women's wellbeing(Barham et al., 2021)	This study evaluates the long-term effects of the Maternal and Child Health Program/Family Planning Program in Matlab on the well-being of older women. The research method used is secondary data analysis from a survey conducted in Bangladesh.	The findings of this study indicate that the Maternal and Child Health Program/Family Planning Program in Matlab has a significant long-term impact on the well-being of older women, including improving social and health status.
4	Family Planning and Child Health Care: Effects of the Peruvian Programa de Salud Reproductiva y Planificación Familiar, 1996–2000(Battaglia & Pallarés, 2020)	This study analyzes the effects of the Programa de Salud Reproductiva y Planificación Familiar in Peru on child and family health care. The research method used is secondary data analysis from population surveys.	The findings of this study show that the Programa de Salud Reproductiva y Planificación Familiar in Peru has had a positive impact on child and family health care, including increased access to health services and reduced child mortality rates.
5	The benefits of Family Planning (FP) use in Benin: An application of the Demographic Dividend Model (DemDiv)(Dansou, 2019)	This study uses the Demographic Dividend model to examine the benefits of using Family Planning in Benin. The research method used is survey data analysis and mathematical modeling.	The findings of this study indicate that the use of Family Planning in Benin can generate economic and social benefits through increased productivity and resource savings.
6	Discontinuation of performance-based financing in primary health care: Impact on Family Planning and maternal and	This study evaluates the impact of ending performance-based financing in primary health care on Family Planning and maternal and child health. The research method used is secondary data analysis from	The findings of this study suggest that ending performance-based financing could lead to reduced access to Family Planning and maternal and child health services.

	child health(El-Shal et al., 2023)	case studies in developing countries.	
7	How do education and Family Planning accelerate fertility decline?(Liu & Raftery, 2020)	This study investigates the relationship between education and Family Planning in accelerating fertility decline. The research method used is population survey data analysis and statistical modeling.	The findings of this study suggest that education and Family Planning play an important role in accelerating fertility decline, with increasing levels of education and access to Family Planning services contributing to declining birth rates.
8	Community and Health Care Provider Perspectives on Barriers to and Enablers of Family Planning Use in Rural Sindh, Pakistan: Qualitative Exploratory Study (Memon et al., 2023)	This study explores community and health care provider views on barriers and drivers of Family Planning use in rural Sindh, Pakistan. The research method used is an exploratory qualitative study.	The findings of this study indicate that barriers to the use of Family Planning in rural Sindh, Pakistan, include social stigmatization, lack of knowledge, and limited availability of services.
9	Factors that influence unmet need for Family Planning (Obeagu & Bunu, 2023)	This study analyzes the factors that influence the unmet need for Family Planning . The research method used is analysis of population survey data in Nigeria.	The findings of this study show that factors such as education, social status, and access to health services can help reduce maternal and child deaths
10	Quality of Health Services in the Family Planning Program in Donggala Regency, Indonesia(Rajindra et al., 2020)	This study evaluates the quality of health services in the Family Planning Program in Donggala District, Indonesia. The research methods used were surveys and interviews with program participants.	The findings of this study indicate that the quality of health services in the Family Planning Program in Donggala District, Indonesia, varies, with some areas having better services than others.
11	The Effect Of Children's Value On Family Planning Participation On Mothers Of Couples Of Reproductive Age(Rambe, 2020)	This study evaluates the influence of children's values on participation in Family Planning among mothers of reproductive age couples. The research method used was survey data analysis and interviews with mothers.	The findings of this study indicate that children's values have a significant influence on participation in Family Planning among mothers of reproductive age couples, with mothers who value children's education and well-being tending to be more active in Family Planning programs.

12	The road from ICPD to SDGs: Health returns of reducing the unmet need for Family Planning in India(Rana & Goli, 2021)	This study investigates the health impacts of reducing unmet need for Family Planning in India. The research method used is population survey data analysis and statistical modeling.	The findings of this study suggest that reducing the unmet need for Family Planning in India could provide significant health benefits, including reduced maternal and child mortality and improved reproductive health.
13	The impact of Family Planning on maternal mortality in Indonesia: What future contribution can be expected?(Utomo et al., 2021)	This research analyzes the impact of Family Planning on maternal mortality rates in Indonesia and its potential contribution in the future. The research method used is population survey data analysis and statistical modeling.	The findings of this study show that Family Planning has a significant impact in reducing maternal mortality in Indonesia, with the potential to make a further contribution in the future through increasing access to reproductive health services.
14	Maternal depression and loss of children under the one-child Family Planning policy in China: A cross-sectional study of 300 000 women(Wang et al.,	This study explores the association between maternal depression and child loss under China's one-child Family Planning policy. The research method used is a cross-sectional study with secondary data.	The findings of this study indicate that maternal depression is associated with a higher risk of child loss under China's one-child Family Planning policy, highlighting the significant psychological impact of this
	2021)		policy on mothers.

From the data sources provided, there were 15 studies that met the inclusion criteria in this SLR analysis. These studies cover various topics related to the effectiveness of Family Planning Programs in reducing maternal and child mortality rates in various contexts and countries. In general, the characteristics of these studies vary in terms of methodology, time span, and research location.

Most studies used observational research designs, population surveys, or secondary data analysis to evaluate the impact of Family Planning programs on maternal and child health. The research methods used include statistical analysis, mathematical modeling, as well as qualitative research such as interviews and focus group discussions. The time span of these studies also varies, from 2019 to 2024,

allowing for a broader understanding of the development and implementation of the Family Planning Program in different time periods.

The characteristics of the participants in these studies also vary, ranging from women of reproductive age, mothers with children under five, to health workers and the general public in various countries. Some studies focus on evaluating specific programs at the local or regional level, while others take a broader approach to identifying models and policies that can support overall Family Planning program effectiveness.

Thus, although there are variations in the characteristics of the selected studies, overall they provide a valuable contribution to understanding how effective Family Planning programs are in reducing maternal and child mortality at the global level. Further analysis of the findings from these studies is expected to provide deeper insights and evidence-based recommendations to improve the effectiveness of Family Planning programs in the future.

Based on an analysis of a number of studies that meet the inclusion criteria, there are consistent findings showing the effectiveness of the Family Planning Program in reducing maternal mortality. In general, these studies show that widespread implementation of Family Planning programs can have a significant positive impact on maternal health, especially in reducing the risk of death due to pregnancy and childbirth complications.

Several studies conducted in various countries, including Bangladesh, Peru, and Indonesia, show that increasing access to Family Planning services and reproductive health education has contributed significantly to reducing maternal mortality rates. Interventions such as providing contraception, policy support, and strengthening reproductive health services have been shown to be effective in reducing the risk of potentially fatal pregnancy complications.

In addition, these studies also highlight the important role of Family Planning programs in increasing awareness of safe and responsible reproductive health practices. Reproductive health education integrated with Family Planning programs has helped reduce maternal mortality by increasing access to accurate information and quality health services.

However, several studies also show that challenges remain in implementing Family Planning programs, including limited access to health services, cultural barriers, and lack of adequate policy support. Therefore, while Family Planning programs have proven effective in reducing maternal mortality, continued efforts are needed to improve the accessibility, quality, and public acceptance of Family Planning services. Thus, the Family Planning program can continue to be an effective strategy in promoting maternal health and reducing maternal mortality rates globally.

# The effectiveness of Family Planning programs in reducing child mortality.

Based on the analysis of a number of studies that meet the inclusion criteria, the Family Planning Program has also been proven to be effective in reducing child mortality. Findings from various studies show that widespread implementation of Family Planning programs can have a significant positive impact on children's health, especially in reducing the risk of death at an early age and under five.

Studies conducted in various countries, such as Bangladesh, Peru and Indonesia, show that increasing access to Family Planning services has an indirect impact on reducing child mortality rates. By providing better access to contraception and reproductive health services, Family Planning Programs help prevent unwanted pregnancies and enable couples to plan their families better.

Several studies also highlight that Family Planning programs can reduce child mortality through improving maternal health. By providing better access to antenatal services, safe delivery and postnatal care, the Family Planning Program helps reduce the risk of complications that can lead to child death.

Reproductive health education integrated in the Family Planning Program also plays an important role in increasing understanding of maternal and infant health care among the community.

Challenges remain in efforts to reduce child mortality through Family Planning programs (El-Shal et al., 2023). Several studies show that limited access to health services, especially in rural or remote areas, as well as a lack of knowledge about safe reproductive health practices, are still obstacles to the effectiveness of Family Planning programs. Therefore, there needs to be continuous efforts to increase the accessibility, quality and public acceptance of Family Planning programs, so that they can become an effective strategy in reducing child mortality throughout the world.

# **Factors That Influence the Effectiveness of Family Planning Programs.**

A number of factors have an important role in influencing the effectiveness of the Family Planning Program in reducing maternal and child mortality rates. One of the main factors is accessibility to reproductive health and Family Planning services. Limited access to health services, especially in rural or remote areas, can hinder participation in Family Planning programs and reduce their effectiveness in reducing maternal and child mortality rates.

Educational factors also play an important role. Low levels of education are often associated with a lack of knowledge about reproductive health and Family Planning, which can hinder participation in Family Planning programs. On the other hand, increasing the level of public education can increase understanding of the benefits of the Family Planning Program and encourage more active participation.

Cultural and religious factors can also influence the effectiveness of Family Planning programs. Some societies or religious groups may have beliefs or norms that inhibit the use of contraception or participation in Family Planning programs. Therefore, it is important to understand and respect local cultural and religious values in designing and implementing effective Family Planning programs.

Apart from these factors, policy support and investment from the government also have a major impact on the effectiveness of the Family Planning Program. Policies that support universal access to reproductive health services, integrated reproductive health education in the education curriculum, and investment in adequate health infrastructure can increase the effectiveness of Family Planning programs in reducing maternal and child mortality rates. By paying attention to these factors and integrating them in the planning and implementation of the Family Planning Program, it is hoped that the effectiveness of the program can be increased and its impact in reducing maternal and child mortality rates can be maximized.

# **CONCLUSION**

Based on the literature review carried out in this analysis, it can be concluded that the Family Planning Program has been consistently proven to be effective in reducing maternal and child mortality rates. The selected studies show that the implementation of Family Planning programs has had a significant positive impact on maternal and child health in various countries. Family Planning programs play an important role in increasing access to reproductive health services, reducing the risk of unwanted pregnancy, and increasing understanding of safe reproductive health practices. Even though there are challenges in implementation and community acceptance of the Family Planning Program, these findings confirm that the Family Planning Program remains an effective strategy in improving maternal and child health.

# **Practical Implications**

Based on these findings, there are several recommendations that can be taken for implementing and improving the Family Planning Program. First, efforts are needed to increase the accessibility of reproductive health and Family Planning services, especially in rural or remote areas. This can be done

through providing easily accessible health services, training health workers, and intensive promotion of the benefits of the Family Planning Program. Apart from that, integrated reproductive health education in the education curriculum also needs to be strengthened to increase public understanding of the importance of Family Planning .

In addition to implementation recommendations, these findings also have implications for maternal and child health policy. The government needs to provide strong policy support and adequate investment in Family Planning programs. This includes providing adequate funding for reproductive health services, developing policies that support universal access to contraception, and integrating reproductive health education in formal and non-formal education programs. Thus, it is hoped that the Family Planning Program can continue to be one of the main strategies in efforts to reduce maternal and child mortality rates and improve overall reproductive health.

# REFERENCES

- Ahmed, K. J., Tan, Y., & Rudd, D. (2023). Changing fertility, child mortality and contraceptive prevalence rates in Bangladesh: Effects of disaster risk reduction and family planning programs. ... and Health Hazards: Addressing Hazards to .... https://doi.org/10.1007/978-3-031-26592-1\_20
- Alemayehu, A., Demissee, A., Feleke, D., & ... (2021). Level and determinants of long-acting family planning utilization among reproductive age women in Harar, Eastern Ethiopia. *Women's ...*. https://doi.org/10.1177/17455065211063279
- Astuti, D. A., Hasibuan, K., Realita, F., & ... (2024). Models and policies for family development, population control, and family planning: A scoping review. In *International Journal of ...*. researchgate.net. https://www.researchgate.net/profile/Urfa-Khairatun-Hisan/publication/378480342\_Models\_and\_policies\_for\_family\_development\_population\_control\_and\_family\_planning\_a\_scoping\_review/links/65dc2517adc608480aec561d/Models-and-policies-for-family-development-population-control-and-family-planning-a-scoping-review.pdf
- Barham, T., Champion, B., Foster, A. D., & ... (2021). Thirty-five years later: Long-term effects of the Matlab maternal and child health/family planning program on older women's well-being. *Proceedings of the ...*. https://doi.org/10.1073/pnas.2101160118
- Battaglia, M., & Pallarés, N. (2020). Family Planning and Child Health Care: Effect of the Peruvian Programa de Salud Reproductiva y Planificación Familiar, 1996–2000. *Population and Development Review*. https://doi.org/10.1111/padr.12312
- Chukwu, O. A., & Adibe, M. (2023). Challenges in last mile distribution of family planning commodities: Effects on product availability and accessibility in Nigeria. ... International Journal of Health Planning .... https://doi.org/10.1002/hpm.3650
- Dansou, J. (2019). The benefits of family planning (FP) use in Benin: An application of the Demographic Dividend Model (DemDiv). In *Gates open research*. ncbi.nlm.nih.gov. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6826173/
- El-Shal, A., Cubi-Molla, P., & Jofre-Bonet, M. (2023). Discontinuation of performance-based financing in primary health care: Impact on family planning and maternal and child health. In *International Journal of Health ...*. Springer. https://doi.org/10.1007/s10754-022-09333-w
- Hastuti, A. P., Mufarokhah, H., Kurniawan, A. W., & ... (2022). Determinant factors related to the unmetneed of family planning program among married women in Indonesia. In *Indian Journal of ....* ijfmt.com. https://www.ijfmt.com/scripts/IJFMT%20Vol%2016%20No%204%20October-December%202022%20with%20DOI\_1%20(1)-compressed.pdf#page=133

- Jahanfar, S., Maurer, O., Lapidow, A., Oberoi, A. R., & ... (2024). A meta-analysis into the mediatory effects of family planning utilization on complications of pregnancy in women of reproductive age. In *PLoS* .... journals.plos.org. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0294475
- Liu, D. H., & Raftery, A. E. (2020). How do education and family planning accelerate fertility decline? *Population and Development Review*. https://doi.org/10.1111/padr.12347
- Memon, Z. A., Mian, A., Reale, S., Spencer, R., & ... (2023). Community and Health Care Provider Perspectives on Barriers to and Enablers of Family Planning Use in Rural Sindh, Pakistan: Qualitative Exploratory Study. In *JMIR formative ....* formative.jmir.org. https://formative.jmir.org/2023/1/e43494/
- Murad, D. F. (2020). *Systematic Literature Review (SLR) Approach*. Center for Open Science. https://doi.org/10.31219/osf.io/v7239
- Obeagu, E. I., & Bunu, U. O. (2023). Factors that influence unmet need for family planning. In ... Journal of Current Research in Biology .... researchgate.net. https://www.researchgate.net/profile/Kiu-Publication-Extension/publication/370622433\_Factors\_that\_influence\_unmet\_need\_for\_family\_planning/links/645a492e2edb8e5f094ad34d/Factors-that-influence-unmet-need-for-family-planning.pdf
- Rajindra, R., Andri, M., & Yani, A. (2020). Quality of Health Services in the Family Planning Program in Donggala Regency, Indonesia. *Systematic Reviews in ....* https://search.ebscohost.com/login.aspx?direct=true\&profile=ehost\&scope=site\&authtype=crawler\&jrnl=09758453\&AN=156302248\&h=Ym%2B0nkTHUnid8sq2NaNMudnpmlxfqp8JIP35EvaTy25EDcrfcUOQqtu28dGXsXfMnhcYdTunZGu1qVJRmzxAeg%3D%3D\&crl=c
- Rambe, H. M. (2020). The Effect Of Children's Value On Family Planning Participation On Mothers Of Couples Of Reproductive Age. In *International Archives of Medical Sciences and Public ...*. pcijournal.org. https://pcijournal.org/index.php/iamsph/article/download/12/7
- Rana, M. J., & Goli, S. (2021). The road from ICPD to SDGs: Health returns of reducing the unmet need for family planning in India. *Midwifery*. https://www.sciencedirect.com/science/article/pii/S026661382100187X
- Sari, I. P., Sucirahayu, C. A., Hafilda, S. A., Sari, S. N., Safithri, V., Fitria, F., Febriana, J., & Hasyim, H. (2023). FAKTOR PENYEBAB ANGKA KEMATIAN IBU DAN ANGKA KEMATIAN BAYI SERTA STRATEGI PENURUNAN KASUS (STUDI KASUS DI NEGARA BERKEMBANG): SISTEMATIC REVIEW. *PREPOTIF: JURNAL KESEHATAN MASYARAKAT*, 7(3), 16578–16593.
- Systematic critical literature review. (2016). Nordic Council of Ministers. https://doi.org/10.6027/9789289344999-6-en
- Utomo, B., Sucahya, P. K., Romadlona, N. A., & ... (2021). The impact of family planning on maternal mortality in Indonesia: What future contribution can be expected? In *Population Health ...*. Springer. https://doi.org/10.1186/s12963-020-00245-w
- Wang, H., Frasco, E., Shang, J., Chen, M., Xin, T., & Tang, K. (2021). Maternal depression and loss of children under the one-child family planning policy in China: A cross-sectional study of 300 000 women. *BMJ Open*. https://bmjopen.bmj.com/content/11/7/e048554.abstract
- Wazir, M. A., Alazar, Y. M., & Kadirov, B. (2021). Family planning: Smartest investment for achieving the sustainable developments goals for Pakistan. In *J Pak Med Assoc.* researchgate.net. https://www.researchgate.net/profile/Muhammad-Wazir/publication/355789536\_Family\_Planning\_Smartest\_investment\_for\_achieving\_the\_Sustainable\_Development\_Goals\_for\_Pakistan/links/61a66181743d9629db276484/Family-

Planning-Smartest-investment-for-achieving-the-Sustainable-Development-Goals-for-Pakistan.pdf