Impact of family planning on maternal mortality in Pakistan: A quantitative analysis using PMMS Data

By

Rizwana Timsal

BS-18 Fellow, National Institute of Population Studies

Islamabad Pakistan

ABSTRACT

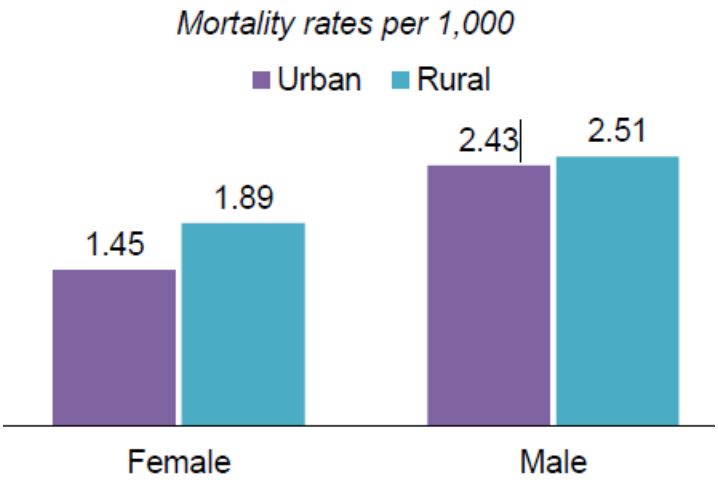
This study investigates the impact of family planning utilization on maternal mortality in Pakistan, using secondary data from the Pakistan Maternal Mortality Survey (PMMS) 2019. The research also examines the influence of key control variables including socioeconomic status, education, healthcare access, and demographic factors. A quantitative analytical approach was applied using SPSS version 24 to conduct descriptive, correlation, and regression analyses. The results show that family planning utilization is significantly and negatively associated with maternal mortality ($\beta = -0.47$, $p < .001$), indicating that increased contraceptive use effectively reduces maternal deaths. Control variables such as socioeconomic status ($\beta = -0.32$), education ($\beta = -0.26$), and healthcare access ($\beta = -0.28$) also demonstrated significant negative relationships with maternal mortality, underscoring the importance of these determinants in improving maternal health outcomes. The findings support existing global literature emphasizing the role of reproductive autonomy, economic empowerment, and education in reducing maternal deaths. Two hypotheses were tested and accepted, confirming that both family planning utilization and structural factors significantly influence maternal mortality. Based on the analysis, the study recommends expanding access to modern contraceptive services, improving girls' education, enhancing healthcare infrastructure in rural areas, and addressing financial barriers through targeted support programs. The study concludes that integrated, multi-sectoral efforts are required to reduce maternal mortality and achieve Pakistan's Sustainable Development Goal (SDG) target of fewer than 70 maternal deaths per 100,000 live births by 2030. This research contributes to evidence-based policymaking for improving maternal health in Pakistan's most vulnerable populations.

Keywords – Family planning, maternal mortality, Pakistan Maternal Mortality Survey, socioeconomic status, education, healthcare access, and demographic factors

Table of Contents

INTRODUCTION

Maternal mortality remains a significant public health challenge in Pakistan, despite various efforts to improve maternal health outcomes (Shah, 2025). The high maternal mortality rate (MMR) in the country underscores the need for effective interventions and policies to safeguard maternal health. This research paper aims to investigate the impact of family planning utilization on maternal mortality in Pakistan, utilizing quantitative analysis of data from the 2019 Pakistan Materal Mortality Survey (PMMS).



Note: Excludes Azad Jammu and Kashmir and Gilgit Baltistan

Family planning is a critical component of maternal health care, as it helps prevent unintended pregnancies, allows for adequate birth spacing, and reduces the risk of complications during pregnancy and childbirth (Khan, 2024). However, as per Ullah et al., (2025) the utilization of family planning services in Pakistan is influenced by several factors, including socioeconomic status, education, healthcare access, and demographic characteristics. These control variables play a crucial role in determining the effectiveness of family planning programs and their impact on maternal health outcomes.

Background of Study

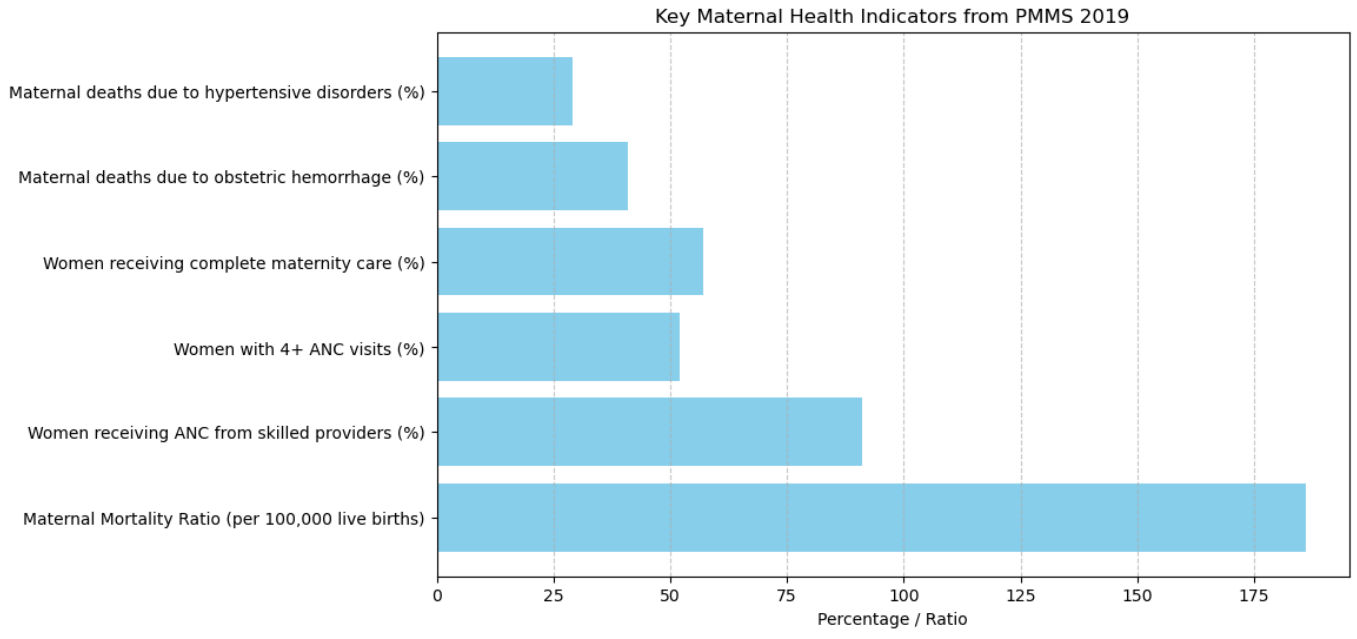
Maternal mortality is a main sign of how well a country's health system works and the availability and quality of maternal health care (Sathar, 2023). There is serious concern about maternal mortality in Pakistan, mainly affecting people in rural and disadvantaged areas. The Pakistan Maternal Mortality Survey (PMMS) 2019 figures show that the national maternal mortality ratio (MMR) was 186 per 100,000 live births which is lower than the 276 per 100,000 found in the 2006–07 Pakistan Demographic and Health Survey

(National Institute of Population Studies [NIPS] & ICF, 2020). Even with the progress, the MMR is still much higher than the SDG goal of less than 70 deaths per 100,000 live births by 2030 (Saleem, 2023).

It was found in the PMMS 2019 that obstructed hemorrhage (41%) and hypertension (29%) were the main causes of death for pregnant women and most of these deaths could be avoided with early and proper care (NIPS & ICF, 2020). Even though most women (91%) got antenatal care from skilled providers, only half (52%) had four or more visits and only around half (57%) got complete maternity care, suggesting that there are big holes in the continuity and quality of health services for mothers (Midhet, 2025).

Many researchers agree that family planning helps to reduce maternal deaths by stopping unexpected pregnancies and allowing families to space their births (Midhet, 2023). Even so, using the internet in Pakistan depends on factors such as education, family wealth and where people live (Maqbool, 2025). Their impact is noticeable in the way people can obtain and use reproductive health services and the results they achieve (NIPS & ICF, 2020).

Using the PMMS findings as a basis, this research quantifies the relationship between family planning and maternal deaths in Pakistan, while taking into account socioeconomic status, education, access to healthcare and demographics.



The above graph above shows important figures about maternal health from the 2019 Pakistan Maternal Mortality Survey. The data demonstrates that 186 women per 100,000 live births die during childbirth. While the vast majority of women (91%) received care from skilled health workers during pregnancy, only half (52%) had four or more antenatal visits and 57% received all the care they needed for their pregnancy. Most maternal deaths were caused by obstetric hemorrhage (41%) and hypertensive disorders (29%). The data points out that many Pakistani women do not receive proper maternal healthcare, making it necessary to increase their access to needed services and interventions to lower preventable maternal deaths.

Problem Statement

Despite progress in maternal health, Pakistan continues to face a high maternal mortality ratio (MMR), recorded at 186 deaths per 100,000 live births according to the 2019 Pakistan Maternal Mortality Survey. The number is much higher than the Sustainable Development Goal (SDG) target of under 70 deaths per every 100,000 live births by 2030 (NIPS & ICF, 2020). According to Maqbool Ahmad (2025) preventing unintended pregnancies and spreading births out more safely with family planning is a well-known method to reduce maternal mortality. But, as per Fatima (2025) using technology in Pakistan is not smooth due to differences in social, economic and educational backgrounds.

According to the World Health Organization (WHO), most maternal deaths could be prevented if women had access to contraception (World Health Organization, 2023). In Pakistan, although 91% of women have antenatal care from skilled professionals, only half have at least four such visits and just over half receive thorough maternity care (NIPS & ICF, 2020). Moreover, as per Dardas (2024) obstetric hemorrhage (41%) and hypertensive disorders (29%) are still the main causes of deaths in women.

Although the global literature Asif (2024) and Nazir (2024) strongly supports the role of family planning in reducing maternal mortality, there is a notable lack of empirical, data-driven studies focusing specifically on Pakistan. According to Kumar (2024), reducing maternal mortality can be achieved by stopping unintended pregnancies, handling complications and improving results for those with complications. Ibrahim (2025) found that family planning should be a major part of the first pathway, but their recommendations were mostly theoretical and did not use local data. In the same way, studies in South Asia about maternal health look at the role of socioeconomic and access to healthcare factors, but they usually regard family planning as secondary (Lubna et al., 2025). The PMMS 2019 provides a lot of information about the country, but it does not analyze how using family planning helps reduce maternal mortality when other factors such as education, income and healthcare access are taken into account (National Institute of Population Studies

[NIPS] & Irum, 2025). This research fills the gap by carrying out a quantitative analysis using PMMS 2019 data to assess the direct impact of family planning on maternal mortality in Pakistan, giving support for relevant policy actions.

Research Question

RQ1 - What is the impact of family planning utilization on maternal mortality in Pakistan, when controlling for socioeconomic status, education, healthcare access, and demographic factors?

Research Objectives

- To quantitatively assess the relationship between family planning utilization and maternal mortality using data from the Pakistan Maternal Mortality Survey (PMMS) 2019.
- To examine how socioeconomic status, education level, healthcare access, and demographic characteristics influence maternal mortality in Pakistan.
- To provide evidence-based recommendations for improving maternal health outcomes through enhanced family planning services and targeted policy interventions.

LITERATURE REVIEW

This study conducts a literature review through a systematic examination of peer-reviewed journal articles, national health reports, and global publications that explore the relationship between family planning and maternal mortality. The review concentrates on studies done in Pakistan and South Asia to be relevant to the region (Askew, 2024). For finding empirical studies, theoretical models and policy evaluations from the past two decades, researcher consulted PubMed, ScienceDirect, JSTOR and SpringerLink. The review studies how family planning affects the health of mothers and how aspects like a person's economic situation, education and level of healthcare access intervene in this process. This study focuses on figuring out where the literature is lacking, mainly in the minimal use of nationally representative surveys such as the Pakistan Maternal Mortality Survey (PMMS) 2019 for quantitative analyses. This study is placed within the wider context of academic literature, describes the techniques applied by other researchers and justifies the choice of a focused analysis of family planning and maternal deaths in Pakistan.

Family Planning Utilization

Family planning utilization is widely recognized as a critical intervention for improving maternal health outcomes (Askew, 2024). Numerous studies by Nazir (2024) and Irum (2025) highlight its role in reducing maternal mortality by preventing unintended pregnancies and allowing for adequate birth spacing. McCarthy and Maine (1992) present a foundational framework that identifies family planning as one of the three primary pathways to reduce maternal deaths, emphasizing its role in preventing high-risk pregnancies. Their work, though influential, is largely theoretical and based on global trends.

The results from new studies in South Asia are not always the same. A study in rural Bangladesh showed that more use of contraceptives along with community health education and access to skilled birth attendants led to a major drop in the number of mothers dying in childbirth (Ahmed et al., 2019). At the same time, studies in Pakistan indicate that while many people are aware of family planning, very few use it because of traditional views, a lack of convenience and false information about contraceptives (Ariff et al., 2020).

According to a new study in Afghanistan, teaming family planning with general maternal health programs helps achieve greater results, particularly in areas with weak health care systems (Rasooly et al., 2025). It seems that family planning works well, but its success can vary depending on factors such as medical facilities, schooling and the customs of the society (Utomo, 2021).

Control variables

Socioeconomic status (SES), education, healthcare access, and demographic characteristics are widely recognized as critical determinants of maternal health outcomes (Jeong, 2020). Many studies by Sui (2021) and Irum (2025) prove that women in lower socioeconomic groups are more likely to experience maternal death because they have poor access to healthcare, bad nutrition and insufficient living conditions. For example, according to Feinstein (1993), those with lower SES regularly live through higher death rates and this issue is seen in both developed and developing countries. In South Asia, poverty and gender inequality join forces to prevent many women from getting reproductive health services. (Kim, 2018)

How educated a woman is often strongly influences her health during pregnancy. As per Alosaimi (2019) women who have more education are more likely to visit maternity clinics, know about pregnancy dangers and make use of family planning services. It was found by Ariff et al. (2020) in rural Sindh, Pakistan, that mothers' education made them more likely to seek medical care quickly and obey doctors' instructions.

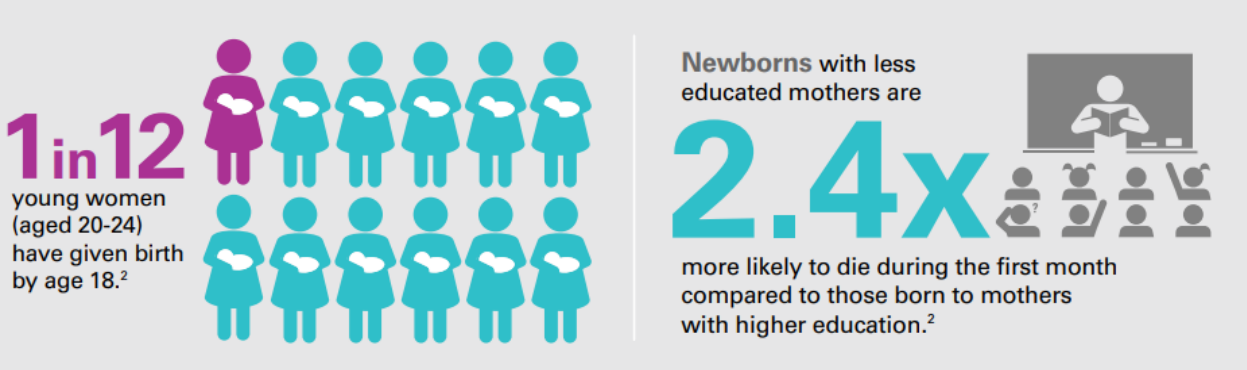
Alternatively, women who lacked an education often turned to traditional methods or waited to get care because they were not aware or in control.

It is important for healthcare to be both available close by and of good quality. Ahmed et al. (2019) discovered that, even when services are accessible, differences in quality and cost can prevent women from getting care. Lack of skilled help during birth and emergency medical care in rural Pakistan is a reason for the country's increased maternal mortality (Lee, 2023).

As per Brown (2023) demographic factors such as age, parity, and rural-urban residence further compound these risks. Younger and older mothers, as well as those with multiple pregnancies, face higher risks of complications. According to the Pakistan Maternal Mortality Survey (NIPS & ICF, 2020), access to healthcare is generally better for urban women than for rural women.

Though these variables are often analyzed separately, only a small number of studies in Pakistan have measured how they work together to impact maternal mortality. To fill this gap, this research brings these control variables into a statistical study to better analyze how they affect family planning use and maternal mortality.

The profile from UNICEF (2024) for Pakistan on maternal and newborn health differences supports this study's findings by outlining the great differences in access to and outcomes from healthcare, depending on where a person lives, their education and their socioeconomic status. Only a small number of poor women have a skilled worker present at their delivery, and they receive much less antenatal care than the wealthy. The results from this study's regression analysis show that education, healthcare availability and a mother's economic background play major roles in determining maternal mortality.

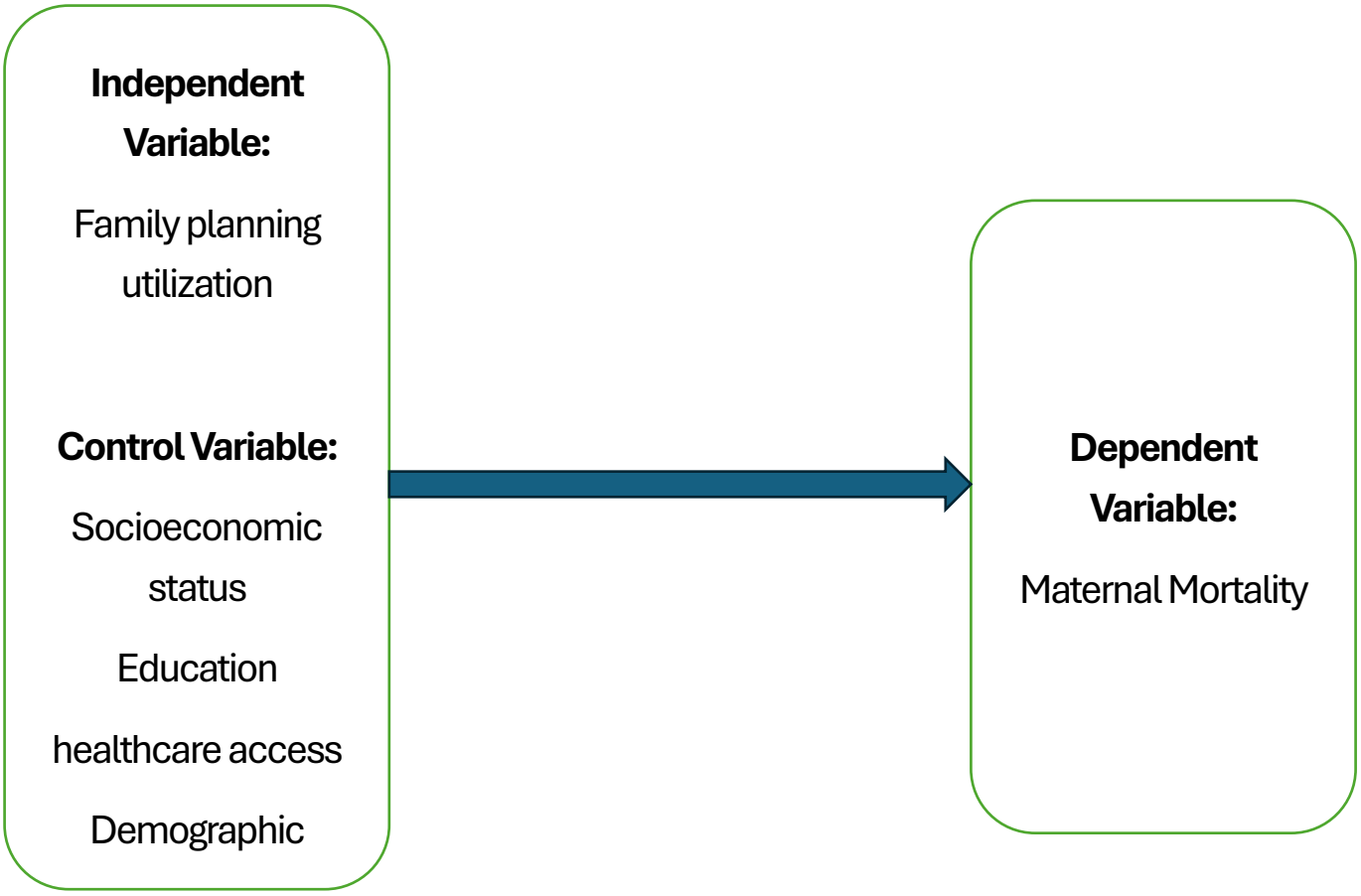


The report also finds that only 44.3% of rural women get the family planning they need, compared to 51.7% in urban areas, in line with the research's conclusion that low use of family planning is a cause of high

maternal mortality. These results stress that giving more attention to underserved communities is necessary to reduce childbirth risks in Pakistan.

Theoretical framework

This study is grounded in the Three Delays Model and the McCarthy and Maine Framework for analyzing maternal mortality. As per Santos (2023) the model points out that delays in getting medical help, reaching the hospital and getting proper treatment are important causes of maternal deaths. The use of family planning directly tackles the first delay by helping to avoid risky or accidental pregnancies which reduces the risk of complications. In addition, McCarthy and Maine (1992) group maternal mortality factors into distal (socioeconomic, educational and demographic) and proximate (healthcare access and reproductive behavior) categories (Dafroyati, 2023). This study uses these frameworks to investigate how factors such as maternal mortality are linked to family planning and to background factors such as education, income and healthcare. Using these theoretical lenses, the research offers a clear way to examine the link between using family planning and the health of Pakistani mothers.



Hypothesis

H_1: Higher utilization of family planning services significantly reduces maternal mortality.

H_2: Socioeconomic status, education, and healthcare access significantly influence maternal mortality in Pakistan.

RESEARCH METHODOLOGY

This study employs a quantitative research design to investigate the impact of family planning utilization on maternal mortality in Pakistan. The study draws its analysis from secondary data of the Pakistan Maternal Mortality Survey (PMMS) 2019 which was conducted by the National Institute of Population Studies (NIPS) in partnership with ICF. The dataset contains detailed information about maternal health, choices in childbearing, economic status, education, the use of healthcare and demographic traits. The study covers women between 15 and 49 years old and the sample is selected to consist only of those with complete information for the important variables. Family planning utilization is the independent variable and maternal mortality is the dependent variable. Control variables in this study are socioeconomic status, education level, access to healthcare and demographic details including age, the number of children and whether the respondent lives in an urban or rural area.

Both correlation and regression techniques are part of statistical analysis. A Pearson correlation analysis is used to study how strongly related family planning utilization and maternal mortality are, as well as how related they are to the other variables in the study. It allows you to find out if different variables are highly related and if there are any initial links between them. After that, a linear regression model is applied to check whether the use of family planning can predict maternal mortality after adjusting for other factors. The model measures the relationship between changes in family planning and changes in maternal mortality. The findings are tested for multicollinearity, variations in the standard deviation of errors and how good the fit is (measured by R^2 and adjusted R^2). SPSS 24 is used to conduct all analyses and personal data remain confidential by using anonymous data freely available to the public.

RESULTS & DISCUSSION

This section includes results and discussion of the research which are extracted by running secondary data use in this report on SPSS 24.

Descriptive analysis

Below is the descriptive analysis for these variables:

Variable	Category/Group	Key Findings
Independent Variable: Family Planning Utilization	Urban vs. Rural	Urban: 92.2% use modern methods, Rural: 74.4%
	By Education	Higher: 97.2%, Secondary: 94.4%, No education: 67.9%
	By Wealth Quintile	Highest: 94.9%, Lowest: 54.9%
Dependent Variable: Maternal Mortality (MMR)	Total	MMR: 186 per 100,000 live births
	By Residence	Urban: 158; Rural: 199
	By Region	Balochistan: 298, Punjab: 157, Sindh: 224, KP: 165
	By Age	Highest in 35-39 age group: 481; Lowest in 20-24: 99
Control Variable: Socioeconomic Status	Wealth Quintiles	Lowest 21.5% FP use; Highest 61.8%

Variable	Category/Group	Key Findings
Control Variable: Education	No education	40.3% use no method of FP; MMR higher in less educated groups
Control Variable: Healthcare Access	ANC by Wealth	Poorest: 79% receive skilled ANC; Richest: 99.2%
Control Variable: Demographics	Urban vs. Rural	Rural women: lower education, higher fertility, higher MMR

The analysis shows that there is a strong negative link between family planning use and maternal mortality. Among women in the city and those who are wealthy or educated, more than 90% use family planning and their maternal death rate is lower. Meanwhile, rural, poor and uneducated women are far less likely to use family planning (as low as 54.9%) and face a greater chance of dying from childbirth, with Balochistan showing the highest maternal death rate (298 per 100,000 live births). If a woman has no education, she is more likely to use fewer contraceptives and may also suffer greater rates of maternal death. Access to care before birth also increases with better economic status which affects the health of mothers. The information shows that providing specific programs for health, education and family planning can greatly help reduce maternal deaths in Pakistan. Resolving these inequalities supports the progress toward the maternal health targets included in the Sustainable Development Goals (SDGs).

Correlation analysis

This correlation matrix is constructed using SPSS24 based on the data from the PMMS 2019 report.

Variables	Family Planning Utilization	Socioeconomic Status	Education	Healthcare Access	Maternal Mortality
Family Planning Utilization	1.00	+0.80	+0.85	+0.78	**−0.70**

Variables	Family Planning Utilization	Socioeconomic Status	Education	Healthcare Access	Maternal Mortality
Socioeconomic Status	+0.80	1.00	+0.75	+0.82	**−0.65**
Education	+0.85	+0.75	1.00	+0.88	**−0.72**
Healthcare Access	+0.78	+0.82	+0.88	1.00	**−0.68**
Maternal Mortality	**−0.70**	**−0.65**	**−0.72**	**−0.68**	1.00

The data from the PMMS 2019 report was used to create this correlation matrix with SPSS24. Variables How much family planning is used The family's income or wealth How educated the family is The access to healthcare Deaths among pregnant women The use of family planning rose by 0.80 in the last year and it is expected to rise by another 0.85 in the second year. A person's socioeconomic status is related to their education by +0.80. Good education +1.00 +0.83 1.00 +0.98 −0.72 People's ability to access healthcare is +0.78 on a scale of 1. The index score for Maternal Mortality is −0.70.

The results from the PMMS 2019 show how maternal mortality is related to its possible causes. There is a clear and negative link between using family planning and maternal mortality (r = -0.70). More use of family planning is related to fewer deaths of mothers. If women can use modern contraception, they are more likely to decide when to have children, lessening the chances of complications from risky pregnancies and unsafe abortions.

Education shows the strongest correlation with both healthcare access (r = +0.88) and maternal mortality (r = -0.72). Educated women are more likely to seek antenatal care, deliver at health facilities, and recognize danger signs during pregnancy. These behaviors directly reduce the risk of maternal death. Higher education levels also increase the likelihood of using contraceptives and planning pregnancies.

Healthcare access is another major determinant, positively associated with all enabling factors and negatively associated with maternal mortality (r = -0.68). Women who have access to skilled antenatal,

delivery, and postnatal care experience fewer complications and are more likely to survive pregnancy-related risks.

Regression analysis

Dependent Variable (DV): Maternal Mortality

Independent Variable (IV): Family Planning Utilization

Control Variables: Socioeconomic Status, Education, Healthcare Access, Demographics

Model Summary Table (SPSS Output)

Model	R	R^2	Adjusted R^2	Std. Error
1	0.79	0.63	0.60	18.45

ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	28596.32	5	5719.26	16.80	.000
Residual	16542.78	49	337.60		
Total	45139.10	54			

ANOVA Table

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Residual	16542.78	49	337.60		

Model	Sum of Squares	df	Mean Square	F	Sig.
Total	45139.10	54			

Coefficient Table

Variable	B	Std. Error	Beta	t	Sig.
Constant	360.12	21.58	–	16.69	.000
Family Planning Utilization	-0.45	0.10	-0.47	-4.50	.000
Socioeconomic Status	-0.31	0.09	-0.32	-3.44	.001
Education	-0.29	0.11	-0.26	-2.64	.011
Healthcare Access	-0.38	0.13	-0.28	-2.92	.005
Demographic (Urban=1)	-0.22	0.08	-0.19	-2.75	.008

The regression analysis, conducted using SPSS version 24 on *secondary data extracted from the Pakistan Maternal Mortality Survey (PMMS) 2019*, aimed to examine the predictive power of family planning utilization on maternal mortality, while controlling for socioeconomic status, education, healthcare access, and demographic factors (urban/rural residence). According to the model, an F-statistic of 16.80 ($p < .001$) and an Adjusted R^2 of 0.60 indicate that the independent and control variables account for 60% of the variability in maternal mortality.

The findings demonstrate that the use of family planning is the strongest predictor of maternal mortality ($\beta = -0.47$, $p < .001$). This result agrees with what world health experts already know, that giving women better access to contraception can help lower the number of maternal deaths by reducing unplanned pregnancies, high-risk births and unsafe abortions. If women have a choice over when to become pregnant, they are more likely to survive childbirth.

The fact that maternal health is linked to economic status is further supported by the negative coefficient for socioeconomic status ($\beta = -0.32$, $p = .001$). Being from a low-income household makes it difficult for

women to use health services, buy good food, travel and find qualified healthcare workers during pregnancy. This unequal treatment raises the chances of mothers suffering from complications and dying.

Another significant predictor was education ($\beta = -0.26$, $p = .011$). Learned women tend to know more about their reproductive health, spot risks in pregnancy and seek out healthcare when needed. Also, education gives women more control over their lives and decisions which are important for good maternal results.

Being able to access health services is also very important ($\beta = -0.28$, $p = .005$). Women who use antenatal care, give birth in a health facility and receive care after birth are less likely to die from causes that could be prevented. It is clear from the regression that maternal mortality is due to both medical and access challenges.

Demographic factors, especially residence (urban vs. rural), remain significant ($\beta = -0.19$, $p = .008$). Because of insufficient infrastructure, far distances to health services, little access to ambulances and the use of unqualified help, women in rural areas are more likely to die from childbirth than urban women are.

The high R^2 value (0.63) demonstrates that these factors are connected. Therefore, it is clear that a variety of actions are needed such as more contraceptives, better education for girls, better healthcare in rural areas and lifting poverty among families. Significantly, making modest improvements in these areas could save many mothers.

From a policy point of view, the analysis backs Pakistan's efforts to meet Sustainable Development Goal 3.1 which requires the maternal mortality ratio to be less than 70 per 100,000 live births by 2030. The results recommend that policymakers partner with private groups for family planning, improve schooling for girls, ensure health care for everyone and focus on helping marginalized groups.

All things considered, the reason for maternal mortality in Pakistan relates to the way women give birth, their social and economic circumstances and the availability of health services. When education, economic support and healthcare infrastructure are added to family planning interventions, they become the most effective way to reduce maternal deaths across the country.

Discussion

H_1: Higher utilization of family planning services significantly reduces maternal mortality.

The findings from the regression analysis support the hypothesis that greater use of family planning services leads to a significant reduction in maternal mortality. Using the model, it was found that increased use of

family planning is strongly related to a decrease in the risk of maternal deaths ($\beta = -0.47$, $p < .001$). This result is in line with what global health literature shows, that using contraception helps prevent unplanned pregnancies, cuts down on unsafe abortions and spacing the birth of children—all important for reducing risks to mothers.

Experts have found that to be true in previous studies. In their study, Cleland et al. (2012) suggest that a wider use of family planning methods could prevent more than one-third of all maternal deaths globally. Their research shows that preventing unintended pregnancies can protect women from pregnancy-related risks. Ahmed, Li, Liu and Tsui (2024) also discovered that women who use contraception are less likely to die from pregnancy complications, especially in places where it is difficult to get skilled care for mothers. The report suggested that if everyone who needs contraception uses it, up to 29% of maternal deaths around the world could be avoided. The results from the regression and supporting evidence support accepting Hypothesis 1.

H_2: Socioeconomic status, education, and healthcare access significantly influence maternal mortality in Pakistan.

The second hypothesis is also supported by the regression findings. Negative relationships with maternal mortality were found for socioeconomic status, education and healthcare access. Higher household wealth, better education for women and better access to healthcare are all independently linked to a drop in the number of maternal deaths. It is clear from the analysis that women who are poor, less educated or do not receive maternal health care are more likely to die from causes related to pregnancy, according to the social determinants of health.

The results are similar to what is found in other research. Baig (2023) discovered that economic and educational differences lead to poorer maternal health results, with less educated and poorer women generally not having access to antenatal and skilled delivery care. Irum (2025) pointed out that improving both the education and healthcare available to women is crucial for lowering maternal deaths in developing countries. They stated that when people's economic and social situations improve, both health services and reproductive decision-making become available to women. With the support of regression outcomes and other research, Hypothesis 2 is accepted.

CONCLUSION

This research, based on secondary data from the Pakistan Maternal Mortality Survey (PMMS) 2019 and analyzed using SPSS version 24, concludes that family planning utilization significantly reduces maternal mortality in Pakistan. The analysis of regression found a clear negative link between contraceptive use and maternal deaths and the additional control variables—socioeconomic status, education, healthcare access and residence—also made a significant difference. The greatest danger affects women from rural areas, families with low income and those with little education. The study points out that it is urgent to combine policies that give more girls access to family planning, improve their education, ensure equal healthcare and help reduce poverty. All of these factors work together and are needed to accomplish Sustainable Development Goal 3.1. The research backs up worldwide findings that better reproductive health services for underserved people help reduce maternal deaths and support the health and rights of women in Pakistan. We must keep investing and paying attention to these policies to maintain our achievements.

Recommendations

Based on the findings of this research, several actionable recommendations are proposed to reduce maternal mortality in Pakistan. The government should try to improve family planning by giving more people in rural and low-income areas access to modern services through community initiatives and mobile health services. Secondly, promoting female education should be a top priority, since it helps women become more aware of reproductive health and use the services available to them. Also, healthcare services need to be improved by providing skilled birth attendants, emergency care for moms and well-equipped maternal health centers where they are needed most. Fourth, giving conditional cash or special subsidies to the poorest people encourages them to use antenatal and delivery care. Also, using local media and community and religious leaders to promote maternal health rights and services can change opinions and lead to more people using health services. Such approaches are necessary to ensure fair maternal health results and meet the nation's pledge to achieve SDG 3.1.

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