

Socio-economic Effects on Pregnant Women in Nepal

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Abstract

This research paper investigates the contemporary condition of maternal health among pregnant women in Nepal by integrating recent national surveys, governmental reports, and scholarly research. The study aims to explore the relationship between anemia and pregnancy. The impact analysis is the approach in this paper. Critical indicators assessed encompass maternal mortality, antenatal care (ANC) coverage, institutional deliveries, nutritional status (including anemia and under-nutrition), as well as disparities based on geographic and socio-economic factors. Nepal has achieved significant advancements in maternal health—there has been an increase in facility-based births and skilled ANC coverage—however, considerable obstacles persist: the national maternal mortality ratio (MMR) exceeds the targets set by the Sustainable Development Goals, ongoing issues with anemia and micronutrient deficiencies, regional inequalities (with notably elevated MMR in certain provinces), and suboptimal outcomes for populations in remote and marginalized communities. The manuscript concludes with strategic policy and programmatic suggestions aimed at expediting equitable enhancements in maternal nutrition, the quality of ANC, and the incorporation of mental health screening within maternal healthcare services. The study has been undertaken based on secondary sources of information to examine the impact of socio-economic conditions and socio-cultural realities on the health of pregnant women in Nepal.

Keywords: maternal health, economy, pregnancy, anemia, under-nutrition, antenatal care, maternal mortality

Introduction

A key component of public health policy and a gauge of the effectiveness of the healthcare system is maternal health. Nepal has seen significant improvements in access and results over the past three decades, moving from extremely high maternal mortality and minimal care coverage. However, maternal mortality is still higher than the Sustainable Development Goal (SDG) target of less than 70 per 100,000 live births, and pregnant women in Nepal continue to face risks related to nutrition, such as under-nutrition and anemia, as well as geographic disparities in access to services and new mental health issues. In order to provide a current picture of pregnant women's health in Nepal, identify any gaps, and offer evidence-based recommendations, this document synthesizes the most recent research that is currently available, including government reports, peer-reviewed studies, and data from national

surveys. Because pregnancy naturally increases the body's requirement for blood and nutrients, anemia and pregnancy have a close association. Anemia can readily develop and damage both the mother and the unborn child if these demands are not addressed.

There is an explicit relationship between women's pregnancy and their socio-economic conditions that determine whether they can afford to buy healthy foods or not. During pregnancy, a woman's blood volume increases by 30–50%. More iron is needed to make extra red blood cells for the mother's body, the growing fetus, and the placenta. If iron intake is low, iron-deficiency anemia occurs, the most common type in pregnant women. Pregnant women suffer anemia because of insufficient iron intake from diet, poor absorption of iron, folate deficiency, vitamin B12 deficiency, short intervals between pregnancies and heavy menstrual bleeding before pregnancy. Besides, hookworm and other infections are common to pregnant women. Because of anemia to the mother, she has to suffer extreme fatigue and weakness, dizziness and shortness of breath, heart strain, increased risk of infections, and postpartum depression. Meanwhile, they have higher chance of blood loss complications during delivery as well.

Literature Review

The study by Prabha Khanal (2022, p. 93) has shown that approximately 16 percent of women give birth to children before turning 20. In a similar vein, 22% of women are overweight and 17% are underweight. This suggests that malnutrition is a significant issue in Nepal. In Nepal, anemia, or iron deficiency, is a major health issue for women. According to the 2016 Nepal Demographic and Health Survey, 41% of women between the ages of 15 and 49 suffer from anemia. 41 percent of pregnant women give birth at home, which can be hazardous for both the mother and the unborn child, and about 6 percent do not receive prenatal care. In addition to other significant issues like poverty, education, and work, social, economic, and environmental factors also influence the health of women. This study examines a number of variables that affect Nepali women's health, including family planning, education, fertility, marriage age, and the use of maternal health services (Khanal, 2022, p. 95).

Khanal (2022, p. 97) has further stated that one of the factors influencing women's health is their age upon marriage. Early marriage increases the likelihood of early pregnancy, which can be harmful to a woman's health. Women's health and marriage age are negatively correlated; an early marriage can have an adverse effect on a woman's socioeconomic standing and health. Women's early childbearing and reproductive health outcomes are directly impacted by the occurrence of early marriage. Anemia is more common in young moms. Maternal morbidity, newborn mortality, and maternal mortality can all be decreased by preventing early marriage. Women who have children at a young age are forced to live

in poverty because they are denied the chance to receive an education and have fewer work options. On the other side, premature birth can raise maternal and newborn mortality and morbidity and jeopardize the health of both the mother and the kid. The World Health Organization estimates that 40% of expectant mothers globally suffer from anemia. Low nutrition may be the primary cause of Nepal's rising anemia rates among pregnant and non-pregnant women. Even if the food is not properly consumed, awareness may cause the body to absorb less nutrition. Anemia could result from that (Khanal, 2022, p. 100).

Pregnant women from households experiencing food insecurity are more likely to have anxiety, sadness, low weight growth, and unfavorable delivery outcomes (Parajuli et al., 2025, p. 343). According to their study, in Nepal's Kailali district, 31.4% of pregnant women suffer from undernutrition. The results were nearly identical to those reported from Kenya (31.7%) and Ethiopia (nearly 28%). Using MUAC <23 cm as the criterion, a comparable study conducted in rural Ethiopia found that 21.4% of pregnant women suffered from malnutrition. According on MUAC values, 25% of pregnant women in Bangladesh were malnourished; according to a research. These statistics closely match the study's findings, indicating that malnutrition is a prevalent problem in areas with little resources, especially in South Asia and sub-Saharan Africa. In Kailali, between 10% and 12% of expectant mothers said they were concerned about the availability of food, ate a small selection of foods, or ate foods they did not want to eat. These results are in line with a comprehensive study conducted in middle- and low-income nations, which found that moderate food insecurity affects 10% to 15% of pregnant women in low-income nations, negatively affecting nutritional outcomes (Parajuli et al., 2025).

In a similar vein, a study conducted in Kenya discovered a substantial correlation between food insecurity and negative birth outcomes, anxiety, and maternal malnutrition. The Kailali district's high rates of adolescent pregnancy (30.4%) and early marriage (43.9%) are in line with research from South Asia, where cultural norms continue to contribute to high rates of early marriage. In South Asia, 40% of women get married before turning 18, which increases the risk of teenage pregnancies and worsens maternal health outcomes, according to UNICEF (2020). This reinforces the need for community-based interventions to delay marriage and first pregnancies (Parajuli et al., 2025).

The goal of the current analysis is to determine the prevalence of adolescent moms who have given birth in a hospital. It concentrates on the different causes of adolescent pregnancy and briefly discusses the related medical, legal, and social factors. The majority of the adolescent mothers was from lower socioeconomic classes and had not finished their

secondary education. Thirty-four cases involved a caesarean section, while thirty-five cases involved vaginal delivery. There were 67 live births; one was a preterm birth that happened spontaneously at week 23 of pregnancy, and the other was a stillbirth involving anencephalic fetus (Nepal et al., 2018).

In poorer nations, anemia affects almost half of expectant mothers. Premature labor, low birth weight, maternal mortality, and prenatal mortality are now the main risk factors for unfavorable pregnancy outcomes. According to the World Health Organization (WHO), anemia is a disorder where the quantity of red blood cells or their ability to carry oxygen is not enough to meet the body's requirements. Anemia is defined as a Hemoglobin (Hb) content of less than 11 g/dl in pregnant women who live at an elevation of 1000 meters or less. The known aggravating factors that raise the risk of anemia include a poor or inadequate nutrition, low socioeconomic position, inadequate health services, illiteracy, deficiencies in vital elements (such as iron, vitamin A, vitamin B12, and folic acid), repeated pregnancies, etc. Pregnant women from low-income Janajati and Dalit communities living in high-altitude regions of mid-western Nepal were more likely to develop anemia than women from upper castes, according to multiple logistic regression analysis. This finding was not surprising given the circumstances of our study. The centuries-old caste system still exists in the western high isolated mountainous region of Nepal; the discriminating Dalits and Janajatis are denied access to economic opportunities, have their usage of public facilities restricted, and are typically ignored by society. Furthermore, they may have been more susceptible to anemia due to illiteracy, hunger, lack of access to healthcare services, and traditional restricting beliefs that are prevalent among them (Sharma, 2020).

Methods

This research work is grounded in literature synthesis and secondary data. The Central Bureau of Statistics' national maternal-mortality analyses and related reports, the 2022 Nepal Demographic and Health Survey (NDHS), peer-reviewed journal articles and institutional studies released between 2019 and 2025 that address anemia, maternal nutrition, ANC and facility delivery, and regional disparities were among the primary sources. Peer-reviewed research on anemia and nutrition in pregnant women, government publications on MMR, national survey reports, and program assessment papers were the focus of key searches. To reflect the current situation, the most recent national estimates were given priority whenever feasible. Besides, the studies by the recent scholars on health of pregnant women in Nepal have been the basis of drawing and integrating the contents to demonstrate the relevance and significance of the topic.

Result Analysis

According to recent national studies, Nepal's maternal mortality ratio for the period of November 2020–November 2021 is roughly 151 per 100,000 live births, with significant provincial variation (e.g., Lumbini and Karnali among the highest MMRs). Although this number is a significant improvement over previous decades, it still exceeds the SDG target of less than 70 per 100,000 live births and shows a persistent risk of maternal deaths that may be prevented. Approximately 94% of women aged 15–49 had antenatal care from a skilled provider, and approximately 79% of births took place in a health institution, according to national survey data from the 2022 NDHS. The uptake of 4+ ANC encounters varies significantly by province and by socio-economic position, and despite good overall coverage; the percentage of women obtaining the necessary number of ANC visits remains variable.

Micronutrient deficiencies and under-nutrition continue to be serious issues. Significant percentages of pregnant women with MUAC under-nutrition (e.g., around 31.7% undernourished in a Janakpurdham study) and insufficient consumption of essential micronutrients (iron, calcium, and folate) are documented in local and institutional studies. According to several recent analyses, anemia among pregnant women is between 40 and 46 percent in numerous areas, although prevalence estimates vary among studies and settings (hospital-based and community surveys). This suggests that anemia is still a major public health issue in spite of supplementation programs (Nepal Health Research Council eLibrary). There are significant disparities even when national aggregates demonstrate progress. Poorer and remote mountainous districts report more negative effects and less use of services. Households with lower socioeconomic position and poorer mother education are less likely to obtain full ANC and facility delivery, and provincial MMRs differ (e.g., Bagmati lower, Lumbini and Karnali higher). Food insecurity and gendered intra-household food allocation are associated with poorer maternal nutritional status in local studies. Maternal mortality and morbidity have been linked to mental health issues and self-harm, according to reports and reviews. Suicide and self-harm among pregnant and postpartum women are listed as non-negligible causes of death in recent surveillance and programmatic documents. These documents also support the integration of mental health screening and referral within maternal services.

Discussion

Teenage girls who are single are viewed by society as juvenile and immature, but once they are married, they are granted adult rights and advantages. In addition to illiteracy, teenage girls are discouraged from accessing medical contraception due to societal barriers. For a woman to carry a condom or other kind of birth control is stigmatizing. Furthermore, the woman can be accused of adultery if she asks her partner for protective sex. Teenage weddings and subsequent pregnancies are also attributed to the desire for virgin brides. Legal practice and societal custom are incompatible. Since she is seen as a minor, a girl under the age of eighteen is legally prohibited from driving, but she is allowed to become pregnant in her family, where she is treated as an adult. In this sense, teenage pregnancies are typically coerced and unplanned rather than voluntary. The teenagers in the present study may be minors as per existing law, yet they are responsible adult mothers capable of making decision for their newborns.

Mothers' lives are significantly impacted psychologically by the society in which we live. The husband and in-laws greet, care for, and pay attention to a pregnant woman. The young mother can think that a father will be a decent and trustworthy husband. A husband who becomes a father experiences intense feelings of love and caring, and he may mentally feel proud of his manhood in the eyes of his peers. These exuberant emotions may encourage the husband and wife's peer group to become pregnant and then give birth as teenagers. Adolescent pregnancy has negative health effects on both the mother and her unborn child.^{5,16, 17} Adolescent women have the danger of giving birth to babies who are underweight and of dying as babies. Teenage marriage and pregnancies have been found to occur in low-socioeconomic families; adolescent pregnant women do not receive additional care or nutrition during their pregnancy. Being relieved from the household chores during pregnancy is also rare.

Pregnancy is regarded as a morally acceptable conduct for married individuals in Nepalese society and culture. In the current study, five adolescent mothers were single. Although the findings are insignificant in terms of numbers, the psychological and physical effects of teenage pregnancies among single people can have a far more serious effect on the health of the woman. Teenage pregnancies are caused by the temporary appeal of having a lover and a child as well. In this context, marriage within the same caste group is the other societal concern. Adolescents who fall in love with someone from a different caste cause major problems for their families.

In order to marry the person their parents have selected, the young lovers must either forget their true love or run away from the family. Another cause of unintended pregnancies, which can also be linked to alcohol, drug, and/or unplanned sex, is the curiosity and risk-taking behavior that occurs throughout testosterone years. Another factor that increases the risk of domestic violence is teenage marriage and pregnancy. Domestic abuse is associated with low academic success and IQ, impulsive behavior, physical aggression, family incoherence, and low socioeconomic level. When a husband suspects his adolescent wife of cheating, he may abuse her.

In Nepal, it is socially unacceptable for girls to become pregnant before marriage, and they are frequently viewed as social outcasts. Pregnant adolescents may opt to flee their families or commit suicide in desperation due to their fear of abuse by their parents due to social stigma or taboo. Pregnancy and childbirth also reduce educational attainment by limiting education. Low levels of education are directly associated with low incomes, demanding jobs, government-subsidized housing, inadequate childcare, and a lack of support. A period of homelessness or temporary relocation to family members may result from having been evicted from one's house. Girls whose families force them into an impulsive marriage make it through this social disaster. However, they are forced to have an abortion because they are unlikely to have family support, which affects the teen's health.

Nepal's health system has made significant strides, including nearly universal contact with qualified ANC providers and a significant percentage of facility births, thanks to investments in community health workers, birthing centers, conditional cash transfers, and expanded facility networks. Maternal mortality has been steadily declining from the extremely high levels in the 1990s and 2000s thanks in part to these improvements. The high number of service contacts shown in the 2022 NDHS data provides a chance to raise the standard of care at those contacts. Nonetheless, the home maternal health burdens are explained by three interrelated issues. Delivering the entire package—complete micronutrient counseling, anemia screening and treatment, danger-sign education, and birth readiness—is not always ensured by high contact rates. Inconsistent results are caused by variations in facility and provincial quality. In Nepalese context, Anemia and malnutrition are still common. High rates of anemia compromise the health of both mothers and newborns (e.g., low birth weight, increased risk of bleeding). The impact of supplementing programs is diminished by food insecurity, a lack of dietary diversification, and deficiencies in iron-folic acid adherence (Nepal Health Research Council eLibrary).

Socio-economic and geographic disparities cause the conversion of national advancements into fair local results as hampered by remote locations, transportation obstacles, poverty, and low levels of female education. Geography matters, as evidenced by the higher provincial MMRs. Three strategic changes are required to hasten progress: 1. Transition from coverage to quality by enhancing ANC content 2. Providing respectful maternity care 3. Ensuring facilities prepared for emergencies involving obstetrics. Community nutrition education, iron-folate delivery and adherence support deworming when necessary, hemoglobin monitoring, and home food-security initiatives are intertwined. Nutritional counseling can enhance MUAC and dietary practices (Nepal Health Research Council eLibrary). The concerned authorities need to reduce disparities in equality by giving priority to outreach and improved referrals for isolated provinces, providing conditional transportation assistance, and focusing on female empowerment and education initiatives that address socioeconomic determinants. Allocating resources should be guided by provincial statistics.

Limitations

The secondary sources and published research up until 2025 served as the foundation for this work. Since publication, some programmatic or facility-level data may have changed. Divergent anemia prevalence reported by hospital or local studies (e.g., lower in single tertiary-hospital reports compared to higher in community surveys) are probably the result of setting and measurement differences; representatives from national MMR reports and the NDHS should be used in national planning, supplemented by local surveillance. Besides, the study could have been based on the primary data that would increase the validity and reliability. However, this study has remained limited to the secondary sources of information.

Conclusion

Nepal is at a crossroads of increasing facility births and high ANC contact that offers a chance to eradicate avoidable maternal deaths and significantly enhance pregnancy outcomes. However, progress is required for reducing anemia and under-nutrition, filling gaps in care quality, and allocating resources to provinces and populations that are still at a disadvantage. Priority actions to attain equitable improvements in maternal health and move closer to the SDG MMR target include implementing integrated nutrition and quality-improvement interventions, bolstering emergency and referral obstetric care in high-burden provinces, and incorporating mental health support into maternal services.

It is imperative to enhance the quality of ANC packages by making sure that every ANC visit regularly includes mental health screening, food and supplementation counseling, hemoglobin tests, nutrition evaluation (MUAC/weight), and birth readiness. Incorporate quality-improvement cycles and checklists into facilities. The health authorities need to increase and assess anemia reduction initiatives by combining iron-folic acid with family involvement, adherence counseling, routine hemoglobin testing, and focused food security initiatives in high-prevalence areas. Furthermore, they can use facility and community data to track the effects of the program. The government should address provincial disparities by giving priority to Lumbini, Karnali, and other high-burden locations for emergency obstetric capacity, transportation programs, and community education using the most recent MMR and NDHS province data.

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