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Gender Gaps in Healthcare and Nutritional Outcomes: A District-Level Analysis in Haryana

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Abstract *— Gender inequality in healthcare and nutrition continues to be a significant issue in India, especially in states with deep-rooted patriarchal values like Haryana. Although the country has experienced substantial economic growth and improved public health infrastructure, gender disparities in accessing healthcare and achieving nutritional health remain evident throughout Haryana. This research examines gender differences in healthcare access and nutritional status across districts in Haryana, using a detailed district-level analysis. The study uses secondary data from sources such as the National Family Health Survey (NFHS-5, 2019–21), the Census of India, and official government reports. It assesses gender disparities by analysing key indicators of healthcare access, such as antenatal care and institutional deliveries, as well as nutritional outcomes, including anaemia prevalence and body mass index (BMI). Descriptive and comparative analyses are performed to investigate differences across genders and districts. The findings highlight notable gender disparities in healthcare use and nutritional health, with women generally experiencing worse outcomes than men across various districts. Significant differences between districts suggest that state-level averages hide regional inequalities. Areas with lower female literacy rates, limited healthcare services, and strong socio-cultural norms tend to show greater gender gaps. The study finds that tackling gender inequality in healthcare and nutrition in Haryana needs district-specific, gender-sensitive policies. Enhancing women-focused healthcare services, providing better nutritional support for at-risk groups, and challenging social norms are key to ensuring gender-equitable health outcomes. This research adds empirical evidence to the ongoing discussion on gender disparities in Haryana and provides valuable insights for designing targeted policies.*

Keywords *— **Gender Inequality, Healthcare Access, Nutritional Outcomes, District-Level Analysis, Women's Health, Gender and Development.***

I. INTRODUCTION

Gender inequality in health and nutrition remains a significant development issue in India, especially in socially and culturally stratified states like Haryana. Despite notable economic growth and better healthcare infrastructure, differences in access to healthcare, nutritional intake, and health outcomes between men and women persist (Sen, 2001). These disparities stem from patriarchal social structures, son preference, and unequal household resource distribution, which consistently disadvantage women and girls throughout their lives. Haryana presents an interesting paradox: while it is among India's more economically developed states with higher per capita income, it also exhibits some of the poorest gender indicators, including a low sex ratio, poor nutritional health among women, and limited access to maternal healthcare (Government of India, 2021). Research shows that women's health in Haryana is affected not only by the availability of healthcare services but also by socio-cultural norms that restrict women's mobility, decision-making, and healthcare access (Jeffery & Jeffery, 2012). Health and nutrition are crucial for gender equality, as they directly influence

women's productivity, reproductive health, and overall well-being. Key indicators such as maternal mortality, anaemia, body mass index (BMI), institutional deliveries, and access to antenatal and postnatal care provide valuable insights into gender-based disparities World Health Organisation (WHO), 2020). Data from the National Family Health Survey (NFHS) reveal that women in Haryana face higher rates of anemia and nutritional deficiencies than men, with significant variations across districts (IIPS & ICF, 2021).

Conducting a district-level analysis is essential to uncover gender disparities in healthcare and nutrition, as state-level data often masks significant regional differences. Haryana's districts differ widely in terms of healthcare infrastructure, literacy, urbanisation, and socio-economic factors, all of which affect gender-related health outcomes (Kumar & Singh, 2019). Recognising these spatial inequalities is vital for crafting targeted policies and effectively implementing gender-sensitive health initiatives. This study examines gender gaps in healthcare access and nutritional results across Haryana's districts by analysing key health and nutrition indicators. By adopting a district-focused approach, it aims to contribute to the broader conversation on gender inequality and to offer empirical evidence to guide policy development within programmes such as the National Health Mission, Poshan Abhiyaan, and Beti Bachao Beti Padhao.

II. REVIEW OF LITERATURE

A significant amount of research has explored gender disparities in India's healthcare and nutrition, revealing ongoing inequalities influenced by socio-cultural, economic, and institutional factors. Scholars contend that women's health disadvantages are not merely biological but fundamentally socially constructed, stemming from unequal access to resources, decision-making power, and healthcare services (Sen, 2001). Several national studies have documented gender gaps in healthcare use, especially in maternal and reproductive health. Kabeer (2016) notes that women's access to healthcare is strongly affected by their socio-economic status, education level, and household autonomy. Factors like limited mobility, early marriage, and low bargaining power often hinder women from seeking prompt medical attention, leading to poorer health outcomes.

Nutritional inequality is a critical component of gender disparity. Data from the National Family Health Survey (NFHS) show that women are more prone than men to suffer from anaemia, undernutrition, and micronutrient deficiencies (IIPS & ICF, 2021). Agarwal (2018) observes that within households, food distribution often favours male members, especially in northern Indian states, leading to continued nutritional disadvantages for women and girls. Studies in Haryana reveal a notable gender paradox. Despite economic progress, the state performs poorly on key gender health indicators. Jeffery and Jeffery (2012) point out that deeply ingrained patriarchal norms, a preference for sons, and strict gender roles heavily influence women's health decisions in Haryana. Similarly, Bhat and Zavier (2007) indicate that gender bias begins early in life in Haryana, impacting girls' survival, nutrition, and healthcare access.

In recent years, focus on district-level analysis has increased as researchers recognise that state averages conceal significant disparities within regions. Kumar and Singh (2019) highlight notable differences in healthcare infrastructure and maternal health outcomes across Haryana's districts, underlining the need for localised analysis. Likewise, Mohanty et al. (2016) contend that districts with higher female literacy rates and better public health services tend to see relatively improved nutritional and health outcomes for women. Existing research highlights how public health interventions help decrease gender disparities. Initiatives such as the National Health Mission and Poshan Abhiyaan have enhanced maternal healthcare and nutrition, although their impacts differ by district (Government of India, 2021). Experts warn that addressing deep-seated social norms and gender relations is crucial, as policy measures alone may not achieve full effectiveness (Kabeer, 2016).

In summary, the existing literature indicates that gender gaps in healthcare and nutrition are complex and differ across regions. While earlier research provides valuable insights at the national and state levels, detailed district-level studies, particularly in Haryana, are scarce. This study seeks to address that gap by thoroughly analysing gender disparities in

healthcare access and nutritional outcomes within Haryana's districts.

III. OBJECTIVES OF THE STUDY

This study aims to investigate gender disparities in healthcare access and nutritional outcomes across Haryana's districts. Its specific objectives include:

> To evaluate gender disparities in healthcare access across Haryana's districts, this objective examines differences in the use of key services like antenatal care, institutional deliveries, and public health facilities between men and women.

> This objective focuses on assessing gender disparities in nutritional outcomes across districts of Haryana by examining indicators such as anaemia prevalence, body mass index (BMI), and related health measures.

> To derive policy implications for addressing gender inequalities in healthcare and nutrition in Haryana, this objective focuses on identifying gender-responsive, district-specific policy interventions to improve healthcare access and nutritional outcomes among women, based on the empirical findings.

IV. DATA SOURCES AND METHODOLOGY

4.1. Study Area:

The research examines Haryana, a northern Indian state divided into various districts with diverse socio-economic and demographic characteristics. Although Haryana has made economic strides, it still faces notable gender gaps in health and nutrition. To better understand these differences, a district-level analysis reveals local patterns of gender inequality that may be hidden in broader state-level data.

4.2. Data Sources:

This study relies solely on secondary data from reputable, nationally recognised sources. The main data sources comprise:

- **National Family Health Survey (NFHS-5, 2019–21)**: Provides district-level data on healthcare utilisation, maternal health, and nutritional indicators disaggregated by gender.
- **Census of India (2011)**: Used for demographic and background variables such as population distribution and literacy.
- **Government of India Reports** : published by the Ministry of Health and Family Welfare and related departments for contextual and policy analysis.

These sources ensure consistency, comparability, and validity of data across districts.

V. INDICATORS USED IN THE STUDY

The study uses specific indicators aligned with its objectives to analyse gender differences in healthcare access and nutritional outcomes.

5.1. Healthcare Access Indicators:

- Antenatal care coverage
- Institutional deliveries
- Access to public healthcare facilities

5.2. Nutritional Outcome Indicators:

- Prevalence of anaemia
- Body Mass Index (BMI) levels
- Indicators of undernutrition and nutritional deficiency

These indicators are commonly employed in gender and health research, offering a thorough understanding of gender-related disadvantages.

VI. METHODOLOGICAL FRAMEWORK

The study uses a descriptive and comparative analytical approach to evaluate gender disparities across districts. The methodology involves:

- A gender-based comparison of healthcare and nutritional indicators to highlight disparities between men and women.
- District-level comparison to highlight spatial variations in gender gaps.
- Use of percentage analysis and simple statistical measures to interpret patterns and trends in the data.

The analysis emphasises relative disparities rather than absolute values, enabling the identification of districts with pronounced gender inequalities.

VII. POLICY-ORIENTED ANALYTICAL APPROACH

Aligned with Objective 3, the findings are analysed from a policy standpoint. Districts with ongoing gender disparities in healthcare and nutrition are scrutinised within the framework of current public health initiatives, such as the National Health Mission and Poshan Abhiyaan. This strategy supports the development of targeted, gender-sensitive policy suggestions tailored to each district.

VIII. RESULTS AND DISCUSSION

8.1. Gender Gaps in Healthcare Access:

The district-level analysis highlights notable gender disparities in healthcare access across Haryana. While the state's healthcare infrastructure has generally improved, women still face challenges in obtaining essential services. Indicators such as antenatal care coverage and institutional deliveries vary widely between districts. Districts with higher urbanisation and female literacy rates show better healthcare utilisation among women, whereas predominantly rural and culturally conservative districts tend to have lower access. In many areas, women's healthcare-seeking behaviour is limited by factors like reduced autonomy, reliance on male family members for decisions, and social norms that restrict movement. These findings are consistent with earlier research suggesting that healthcare access depends not only on physical availability but also on social and gender dynamics within households (Kabeer, 2016). Despite efforts under the National Health Mission, disparities between districts indicate uneven implementation and outreach. The ongoing gender gaps in healthcare access reveal that expanding infrastructure alone is not enough without tackling social barriers faced by women.

8.2. Gender Differences in Nutritional Outcomes:

The analysis of nutritional indicators reveals clear gender-based disparities across districts in Haryana. Women experience significantly higher rates of anaemia and undernutrition compared to men, reflecting longstanding nutritional deprivation trends. Districts with lower socio-economic development tend to have worse nutritional outcomes for women. Factors such as intra-household food distribution, early marriage, multiple pregnancies, and limited access to nutritional supplements play a role in their poor nutritional health. These findings align with national data from NFHS, which show that northern Indian states, including Haryana, continue to face persistent female nutritional disadvantages (IIPS & ICF 2021).

Variation in nutritional outcomes across districts underscores the importance of education, health awareness, and local health services. Districts that effectively implement nutrition schemes and have higher female literacy tend to show better results, indicating that social factors play a crucial role in determining nutritional status.

8.3. Interpreting District-Level Variations:

A key discovery of the research is that state-level averages mask significant differences across districts in gender disparities in healthcare and nutrition. While some districts have made strides in narrowing these gaps, others remain far behind. This varied spatial distribution underscores the importance of micro-level analysis to grasp the complexities of gender inequality. Districts with deeply rooted patriarchal norms and lower female involvement in education and employment generally perform worse in both healthcare and nutrition metrics. These findings support the view that gender inequality in health is complex and shaped by concurrent social, economic, and cultural factors (Sen, 2001).

8.4. Policy Implications:

Aligned with Objective 3, the results highlight the importance of tailored, gender-sensitive policy measures at the district level. One-size-fits-all policies might not effectively tackle local issues. Enhancing outreach programs, boosting awareness among women, and supporting female education are vital strategies to help lessen disparities in healthcare and nutrition.

Programs like Poshan Abhiyaan and the National Health Mission should include district-specific strategies that consider social norms and gender dynamics. Increasing the participation of local self-governments and community organisations can improve program effectiveness and help target vulnerable women.

IX. CONCLUSION AND POLICY RECOMMENDATIONS

9.1. Conclusion:

This study examined gender disparities in healthcare access and nutritional outcomes across districts in Haryana, using a district-level approach. The findings reveal that, despite economic growth and expanded healthcare infrastructure, gender inequalities in health and nutrition persist across the state, with significant district variations. Women in many areas still struggle to access essential healthcare services and tend to have poorer nutritional outcomes than men. These disparities vary depending on local socio-economic factors, female literacy rates, healthcare outreach efforts, and entrenched patriarchal norms. The analysis shows that state averages mask substantial spatial inequalities, underscoring the importance of district-specific evaluations in gender research. The persistent high rates of anaemia, undernutrition, and limited healthcare use among women reflect deep-rooted structural and social barriers. The study confirms that gender inequality in healthcare and nutrition is a complex issue influenced by social norms, intra-household resource allocation, and unequal access to public services. Addressing these challenges requires moving beyond general policies to develop tailored, context-specific strategies.

9.2. Policy Recommendations:

In light of the findings, the study proposes the following policy recommendations to reduce gender inequalities in healthcare and nutrition in Haryana:

A.District-Specific Health Interventions: Policymakers should adopt district-specific strategies based on localised needs and gender gaps. Districts with severe disparities require intensified healthcare outreach, improved monitoring, and targeted resource allocation.

B. Strengthening Women-Centric Healthcare Services: Expansion of maternal and reproductive health services should be accompanied by efforts to enhance women's awareness, mobility, and decision-making power. Frontline health workers can play a crucial role in bridging gender gaps at the community level.

C. Focused Nutritional Programs for Women and Girls: Nutritional interventions under schemes such as *Poshan Abhiyaan* must prioritise adolescent girls, pregnant women, and lactating mothers, particularly in districts with high anaemia and undernutrition rates.

D. Integration of Gender Sensitisation with Health Policies:

Healthcare policies should incorporate gender-sensitisation components to address social norms that restrict women's access to nutrition and healthcare. Community engagement and male involvement are essential for sustainable change.

E. Improved Monitoring and Gender-Disaggregated Data Use: Strengthening district-level data systems and regularly monitoring gender-disaggregated indicators can help track progress and improve policy responsiveness.

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