Policy Brief Series # 80

Provincial Comparison of Mortality Risk Factors

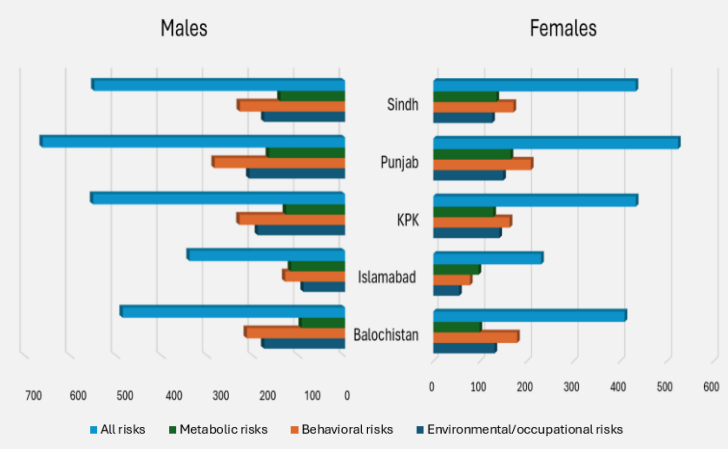
INTRODUCTION

Mortality patterns in Pakistan vary sharply across provinces, shaped by differences in socio-economic conditions, environmental exposure, and health system performance. These disparities are not gender-neutral: men and women face distinct mortality risks depending on where they live and the hazards they are exposed to. Using mortality and risk-factor estimates from the **Institute for Health Metrics and Evaluation (IHME)**, this brief examines how key drivers—such as tobacco use, air pollution, workplace hazards, and metabolic risks—affect men and women differently across provinces. The analysis provides a comparative assessment of major causes of death and leading risk factors to inform more targeted, evidence-based health and regulatory planning in Pakistan.

KEY FINDINGS

- **Punjab carries the highest mortality burden** in Pakistan, with 663 deaths per 100,000 men and 524 per 100,000 women, while **Islamabad reports the lowest mortality rates** (340 men; 230 women).
- **Men experience substantially higher mortality than women** across all provinces, largely due to greater exposure to behavioral risks, hazardous occupations, and environmental factors.
- **Air pollution is a leading contributor to mortality**, with the highest rates observed in Punjab and Khyber Pakhtunkhwa (237 deaths per 100,000 each), followed by Balochistan (186) and Sindh (178).
- **Behavioral risks, particularly tobacco use**, remain a persistent cause of premature mortality nationwide, especially among men.
- **Islamabad shows a distinct urban risk profile**, where **metabolic risks among women** (97 deaths per 100,000) exceed behavioral risks, indicating a rising burden of lifestyle-related non-communicable diseases.

Figure 1: Risk Factors for Deaths by Region and Gender



KEY MESSAGES

1. **Pakistan is undergoing a dual mortality transition**: traditional environmental and occupational risks persist, while urban areas—especially Islamabad—are seeing a rapid rise in metabolic and lifestyle-related non-communicable diseases.
2. **Mortality risk in Pakistan is highly uneven and gendered**, varying sharply by province and driven primarily by differences in environmental exposure, occupational hazards, and behavioral risks rather than gaps in healthcare access.
3. **Preventable, non-medical risks dominate mortality**, with air pollution, unsafe workplaces, and tobacco use emerging as the most critical levers for regulatory and cross-sectoral policy action.

RECOMMENDATIONS

1. **Shift from uniform provincial or national health planning toward locally tailored risk-reduction strategies**, using district- and city-level mortality and risk-factor profiles to guide air-quality control, occupational safety enforcement, and NCD prevention efforts.
2. **Strengthen air-quality regulation and enforcement**, particularly in Punjab and Khyber Pakhtunkhwa, focusing on traffic emissions and industrial pollution.
3. **Enhance occupational safety standards** and enforcement, especially in high-risk, male-dominated sectors.
4. **Scale up tobacco-control and nutrition interventions**, with priority action in Punjab where behavior-related mortality is highest.
5. Reorient urban health strategies in Islamabad toward **early prevention, screening, and management of metabolic and lifestyle-related diseases.**
6. **Increase investment in NCD prevention and primary care,** ensuring timely detection and effective management across provinces.

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