AIR POLLUTION'S TOLL: GENDERED IMPACTS ON LIFE EXPECTANCY IN UZBEKISTAN

Umida Yakubjanova

Leading Specialist at Institute for Macroeconomic and Regional Studies under the Cabinet of Ministers of the Republic of Uzbekistan

Abstract

This study investigates the alarming impact of air pollution on life expectancy in Uzbekistan, focusing on the differential vulnerabilities experienced by men and women. Utilizing recent data on air quality, mortality rates, and socio-economic factors, the research employs statistical modeling techniques to quantify the specific influence of various pollutants on life expectancy for each gender. The findings reveal a stark reality: men in Uzbekistan are disproportionately impacted by air pollution, leading to a significant reduction in life expectancy compared to women. This gender disparity highlights the urgency of implementing targeted climate governance strategies to mitigate air pollution and protect public health. The study underscores the need for policy interventions that address the root causes of air pollution, promote sustainable development, and prioritize health equity for all citizens. By taking decisive action to improve air quality, Uzbekistan can safeguard the life expectancy of its citizens, foster a healthier future for its people, and create a more sustainable and resilient nation.

Keywords: Uzbekistan, health disparities, gender, mortality rates, environmental sustainability, public health, policy interventions, many nations

INTRODUCTION

Uzbekistan, a nation rich in history and cultural heritage, faces a growing threat to its people's health and well-being: air pollution. While the country has witnessed impressive economic progress and social development in recent years, the adverse impacts of air pollution on life expectancy cannot be ignored. This study

delves into the urgent issue of air pollution and its significant, gendered consequences on life expectancy in Uzbekistan.

Air pollution, particularly in urban areas, has reached alarming levels in Uzbekistan. Rapid industrialization, urbanization, and reliance on fossil fuels have contributed to a surge in particulate matter, ozone, and other harmful pollutants. These pollutants pose a serious threat to human health, impacting respiratory systems, cardiovascular function, and overall well-being. The World Health Organization (WHO) estimates that air pollution contributes to millions of premature deaths worldwide annually, highlighting the urgent need for global action.

While numerous studies have investigated the link between air pollution and life expectancy, few have specifically explored gender-based disparities in these impacts. This research aims to bridge this gap by examining the differential effects of air pollution on life expectancy for men and women in Uzbekistan. By exploring gender-specific vulnerabilities and the underlying social and economic factors that contribute to these disparities, the study seeks to shed light on the complex interplay between environmental degradation, public health, and societal well-being. This research underscores the importance of adopting a gender-sensitive approach to climate governance and public health interventions, recognizing the unique challenges and needs of different populations within a society.

RESULTS AND DISCUSSIONS

The results of our analysis reveal a concerning reality: air pollution in Uzbekistan poses a significant threat to life expectancy, particularly for men. Statistical modeling, controlling for relevant socioeconomic factors, demonstrates a strong association between exposure to various air pollutants and reduced life expectancy, especially for the male population.

• Men are more vulnerable: The coefficients for air pollution variables in the regression models consistently demonstrate a stronger negative impact on life

expectancy for men compared to women. This suggests that men experience greater physiological sensitivity to air pollution or may be exposed to higher levels due to occupational or lifestyle factors.

• Specific pollutants: Particulate matter (PM2.5 and PM10) and ozone (O3) emerged as the most significant contributors to reduced life expectancy, particularly for men. These pollutants are known to have detrimental effects on respiratory and cardiovascular health, leading to increased risks of chronic diseases and premature death.

• Spatial disparities: Analysis of spatial variations in air pollution levels and life expectancy revealed regional disparities, with urban areas exhibiting higher pollution levels and corresponding lower life expectancies, particularly for men. This suggests that targeted interventions are needed to address the unique challenges of different regions.

These findings underscore the urgent need for policymakers to prioritize climate governance strategies that mitigate air pollution and protect public health, specifically considering the greater vulnerability of men in Uzbekistan. The disparities observed in this study highlight the need for gender-sensitive interventions that address the unique health risks faced by men. Such interventions could include targeted public health campaigns, occupational health and safety regulations, and the development of gender-responsive urban planning strategies.

CONCLUSION

This study paints a stark picture of the impact of air pollution on life expectancy in Uzbekistan, highlighting the disproportionate toll it takes on men. The findings call for urgent and gender-sensitive action to mitigate air pollution and protect public health. Investing in cleaner energy, promoting sustainable transportation, strengthening environmental regulations, and addressing occupational health concerns are crucial steps towards achieving this goal. By prioritizing climate governance and health equity, Uzbekistan can create a future

where its citizens can breathe freely, live longer, and enjoy a healthier and more sustainable life.

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