

Original article

Contemporary Trends in Life Expectancy in the State of Jammu and Kashmir: Insight from the Global burden of Disease 2017

Nadia Qazi, Huaqing Zhao, Riyaz Bashir.

Introduction

Life expectancy can be compared across various regions, allowing for the assessment of factors that contribute to disparities on a worldwide scale. The average life expectancy has increased globally from 46.5 years in 1950 to 72.0 in 2016.¹ The average life expectancy in developed countries is higher than developing countries, due to factors such as industrialization, income, Education and literacy rate, and conditions of healthcare facilities.² Peace and environmental stability plays a role in life expectancy, as armed conflict leads to disease, poverty, and instability for a community.³

Following the birth of the liberation movement in 1988 by Kashmiri militants, the civilian population has been caught in the crossfire between Kashmiri militants and the Indian army.⁴ Since 1988, 81% of the population has witnessed firing weapons and explosions, and 74% have been exposed to combat zones.⁴ We wanted to assess the impact of armed conflict in Kashmir on gender-specific life expectancy trends from 1990 to 2016.

Methods

The Global Burden of Disease Study (GBD) is a comprehensive research program that measures death and life expectancy through diseases, disorders, and various risk factors from 1990 to 2016. Through interactive maps and diagrams, GBD has the ability to differentiate between various geographical differences as well as discover trends. GBD facilitates the capability to analyze global health threats from the past and from the ones that exist today.

The life expectancy trend is estimated for children at birth (aged 0 to 6 days). Life expectancy can vary depending on factors such as location, age, and sex. We assessed the impact of armed-conflict on the trend in life expectancy by comparing Jammu and Kashmir to Himachal Pradesh, the closest Indian state geographically to Kashmir. We also compared the trend in gender-specific life expectancy for Kashmir to other conflict-ridden territories in Asia and average life expectancy in India.

Results

Life expectancy in Jammu and Kashmir and in India has increased since 1990 with the average age in India consistently being lower than in Kashmir (Figure 1). In India, the number increased from 58.96 years in 1990 to 68.55 years in 2016. The life expectancy in Jammu and Kashmir increased from 60.53 years in 1990 to 69.91 years in 2016. Life expectancy for Kashmiri men increased by 8.10 years, from 60.24 years in 1990 to 68.34 years in 2016. For Kashmiri women, life expectancy has increased by 10.86 years, from 60.92 years in 1990 to 71.78 years in 2016 (figure 2). Himachal Pradesh, a state with similar geographical features to Kashmir, had an average life expectancy of 73.78 years in 2016, the second highest in the country.

The life expectancy in the conflict-ridden territories around the world differ. Sri Lanka had a high average life expectancy of 77.19 years in 2016. Palestine had an average life expectancy of 76.61 years in 2016 with a significant drop in life expectancy between the years

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2000 to 2010. In 2016, Bangladesh’s average life expectancy was 72.89 years. Assam and Myanmar, both conflict-ridden regions as well, had lower average life expectancies of 65.1 years and 68.35 years, respectively, in 2016.

Discussion

From 1990 to 2016, the state of Jammu and Kashmir observed an increased in life expectancy which mirrored the life expectancy trends in India as well as Himachal Pradesh. These trends indicate that gender specific life expectancy of the overall population in Jammu and Kashmir was not significantly affected by the armed-conflict. Previous studies have shown that conflict in regions like Africa, Eastern

Mediterranean and South East Asia reduced the life expectancy by 0.039 a year.³ We believe that the life expectancy trends in Kashmir did not significantly change because of the other factors like education and continued improvements in healthcare delivery. Another finding of our study was that over the three decades that GBD collected the life expectancy data, most of the conflict-ridden regions in Asia have seen an increase in life expectancy. However, areas like Palestine have seen a drop in this rate between years 2000 and 2010. The current study cannot assess any causal relationship between the conflict and the life expectancy. Factors that do affect life expectancy include socioeconomic status, education, national income, physician density, as well as HIV prevalence

rate.⁵ Conflict-ridden territories deal with greater exposure to stress, which effects the mental and physical health of the populations.⁶ Mental maltreatment leads to increased rates of cardiovascular diseases and higher rates of mortality, consequently effecting life expectancy.⁶ Around the world, as communicable diseases decrease, noncommunicable diseases surface due to an unhealthy lifestyle consisting of the prolonged usage of tobacco, an unhealthy diet, and lack of exercise. This unhealthy lifestyle causes the development of diabetes, obesity, and hypertension. In

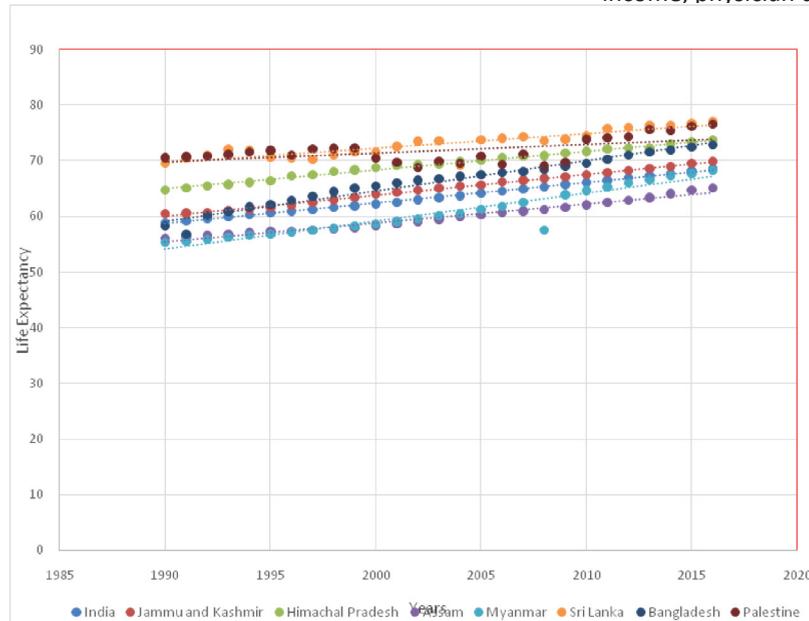


Figure 1. Life expectancy trends in various regions (1990 - 2016)

Region	Life Expectancy Men 1990	Life Expectancy Men 2016	Change in Life Expectancy men	Life Expectancy women 1990	Life Expectancy women 2016	Change in Life Expectancy women
Jammu and Kashmir	60.24	68.34	8.1	60.92	71.78	10.86
Himachal Pradesh	64.23	70.97	6.74	65.4	76.88	11.48
Assam	55.63	63.54	7.91	56.58	66.94	10.36
Myanmar	52.53	64.89	12.36	58.43	71.84	13.41
Sri Lanka	65.62	73.63	8.01	74.79	80.77	5.98
Bangladesh	57.34	71.71	14.37	59.54	74.24	14.7
Palestine	68.58	75.46	6.88	72.66	77.71	5.05

Figure 2. Gender-specific life expectancy trends in 1990 vs. 2016 in various regions

order to increase life expectancy in areas of conflict, doctors need to be able to identify and treat noncommunicable diseases and their risk factors.⁷

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