

ABRIDGED LIFE TABLES- 2012-16

INTRODUCTION

The study of mortality which is the oldest subject in demography was first brought under systematic and rigorous analysis through the concept of life table. It is not exactly known when and by whom the concept of life table was conceived for the first time. However, from various literatures on mortality investigation and other allied topics it appears that probably the first rudimentary life table was prepared by a Roman author, Ulpian sometime during the third century A.D. But several demographers are of the opinion that the herald of life table was John Graunt, haberdasher at London in the seventeenth century. The next important advancement in the history of life table was made by Graunt's successor, Edmund Halley (1656-1742). There were many other contributors to the development of life table such as William Barton (1793), Dr. Price's Northampton (1873), and others.

2. However, the investigation on life table technique through appropriate scientific principles taking into consideration both deaths and the population exposed to risk of death classified by age, was carried out, for the first time in the history of life table, by Milne in 1857. It was based on the mortality experience in two parishes of Carlisle (English), in the period 1779-87. A large number of life tables have been published since then. In the early years, most of these pertained to European countries, particularly, Scandinavian countries, but now life tables are available for most countries of the world. The life expectancy at birth of the population in Carlisle, in 1779-87 was 38.72 years, close to that of India in the decade 1951-61 estimated by Coale and Hoover.

3. In India, life expectancy at various broad age groups has been estimated through Sample Registration System (SRS) since 1970-75. The Sample Registration System (SRS) is a large-scale demographic sample survey based on the mechanism of a dual record system with the objective of providing reliable estimates of fertility and mortality indicators at State and National levels for rural and urban areas separately. The estimated age-specific death rates derived from the SRS provide the necessary database for undertaking construction of abridged life tables. To adjust for the sampling fluctuation and for augmenting the sample size, five-year average is compiled for estimating age-specific death rates separately for rural and urban areas both for male and female. The life table for female of NCT of Delhi (Rural) could not be generated as no female deaths in the age group of 5-9 years was reported in the sample of 2012-16. The life table of Jammu & Kashmir excludes the data from Jhelum Valley for the year 2015 and Ladakh Natural Division for the year 2016.

4. The present report covers the life tables for the periods 2012-16. The life table has been constructed for all India and bigger States/UTs (having population 10 million and more) along with Himachal Pradesh. The life expectancy at birth for the country has undergone a significant change from 49.7 in 1970-75 to 68.7 in 2012-16, registering an increase of 19.0 years in the last four decades. It is worthy to mention that in 1970-75, the life expectancy at birth for male (50.5) was more than female (49.0). But the trend has been reversed since 1981-85. In 2012-16, the female life expectancy (70.2) is higher than that of male (67.4) by about three years. The gap between the rural and urban life expectancy has also narrowed down significantly during the same period. There are notable variations at the State level with Kerala in 1970-75 recording the highest life expectancy at birth of 62.0 years and Uttar Pradesh, the lowest, 43.0 years. In 2012-16, Kerala with 75.1 years retains its position and Uttar Pradesh with 64.8 years, has the lowest life expectancy at birth. The Report gives scenario of life expectancy at various quinquennial age groups also.

5. There are several methods for construction of life tables. In this report, the life tables have been generated using mortality package for life table estimation (MORTPAK 4), which is a United Nation's software package for mortality measurements. The various columns given in the abridged life table are ${}_nq_x$, l_x , ${}_nL_x$ and e_x . In the life table ${}_nq_x$ represents the probability of dying between exact age x and $x+n$, l_x is the expected number of persons surviving at exact age x out of the original cohort of say 1,00,000 persons; ${}_nL_x$ denotes the expected number of persons-years lived between ages x and $x+n$ years; and e_x denotes the expectation of life at age x viz. the average number of additional years a person would live if the current mortality trends were to continue.

6. The life expectancy at birth usually denoted by e_0^0 , measures the average number of years a person is expected to live under prevailing mortality conditions. Statement 1 shows the values of the expectancy of life at birth for India by sex and residence for the periods 1970-75 to 2012-16. The life expectancy at birth in 2012-16 has been 67.4 and 70.2 years for males and females respectively. The increase in life expectancy has been 0.5 years for males and 0.2 years for females over 2012-16 from 2011-15. The life expectancy has increased by 0.3 years for both rural and urban areas as compared to 2011-15.

Statement 1

Expectation of life at birth by sex and residence, India*, 1970-75 to 2012-16(e_0^0)

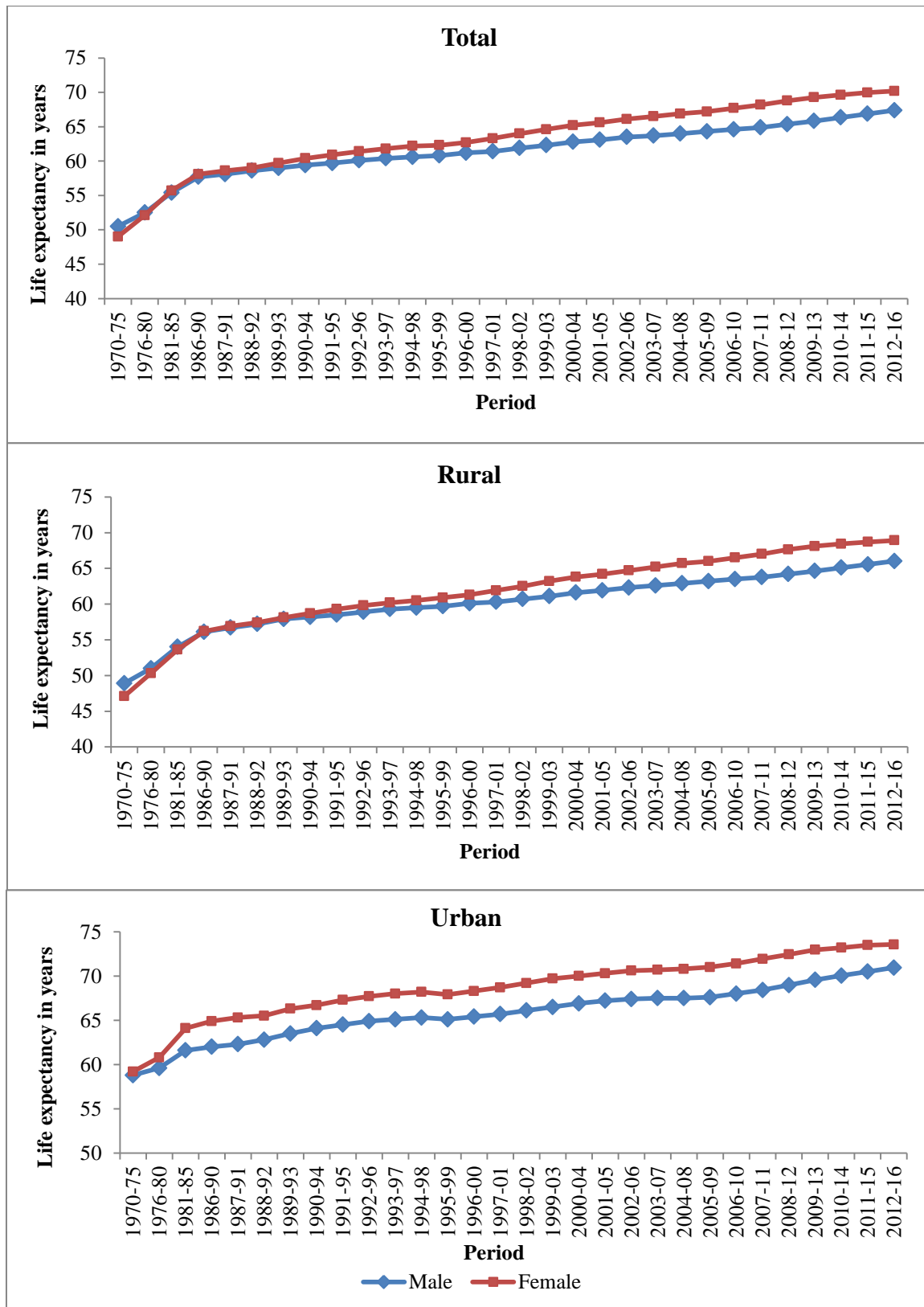
Period	Mid-Year	Total			Rural			Urban		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
1970-75	1973	49.7	50.5	49.0	48.0	48.9	47.1	58.9	58.8	59.2
1976-80	1978	52.3	52.5	52.1	50.6	51.0	50.3	60.1	59.6	60.8
1981-85	1983	55.4	55.4	55.7	53.7	54.0	53.6	62.8	61.6	64.1
1986-90	1988	57.7	57.7	58.1	56.1	56.1	56.2	63.4	62.0	64.9
1987-91	1989	58.3	58.1	58.6	56.8	56.7	56.9	63.8	62.3	65.3
1988-92	1990	58.7	58.6	59.0	57.4	57.2	57.4	64.1	62.8	65.5
1989-93	1991	59.4	59.0	59.7	58.0	57.9	58.1	64.9	63.5	66.3
1990-94	1992	60.0	59.4	60.4	58.6	58.2	58.7	65.4	64.1	66.7
1991-95	1993	60.3	59.7	60.9	58.9	58.5	59.3	65.9	64.5	67.3
1992-96	1994	60.7	60.1	61.4	59.4	58.9	59.8	66.3	64.9	67.7
1993-97	1995	61.1	60.4	61.8	59.9	59.3	60.2	66.6	65.1	68.0
1994-98	1996	61.4	60.6	62.2	60.1	59.5	60.5	66.8	65.3	68.2
1995-99#	1997	61.5	60.8	62.3	60.3	59.7	60.9	66.4	65.1	67.9
1996-00#	1998	61.9	61.2	62.7	60.7	60.1	61.3	66.7	65.4	68.3
1997-01#	1999	62.3	61.4	63.3	61.1	60.3	61.9	67.1	65.7	68.7
1998-02	2000	62.9	61.9	64.0	61.6	60.7	62.5	67.6	66.1	69.2
1999-03	2001	63.4	62.3	64.6	62.2	61.1	63.2	68.0	66.5	69.7
2000-04	2002	63.9	62.8	65.2	62.7	61.6	63.8	68.4	66.9	70.0
2001-05	2003	64.3	63.1	65.6	63.0	61.9	64.2	68.6	67.2	70.3
2002-06	2004	64.7	63.5	66.1	63.5	62.3	64.7	68.9	67.4	70.6
2003-07	2005	65.0	63.7	66.5	63.8	62.6	65.2	69.0	67.5	70.7
2004-08	2006	65.4	64.0	66.9	64.2	62.9	65.7	69.0	67.5	70.8
2005-09	2007	65.7	64.3	67.2	64.5	63.2	66.0	69.2	67.6	71.0
2006-10	2008	66.1	64.6	67.7	64.9	63.5	66.5	69.6	68.0	71.4
2007-11	2009	66.5	64.9	68.2	65.3	63.8	67.0	70.1	68.4	71.9
2008-12	2010	67.0	65.4	68.8	65.8	64.2	67.6	70.6	69.0	72.4
2009-13	2011	67.5	65.8	69.3	66.3	64.6	68.1	71.2	69.6	73.0
2010-14	2012	67.9	66.4	69.6	66.7	65.1	68.4	71.5	70.0	73.5
2011-15	2013	68.3	66.9	70.0	67.1	65.6	68.7	71.9	70.5	73.5
2012-16	2014	68.7	67.4	70.2	67.4	66.0	68.9	72.2	70.9	73.5

* : India includes all States/UT's

#: India does not include Jammu & Kashmir

Chart 1 presents the expectancy of life at birth between 1970-75 to 2012-16 periods separately for males and females, by residence.

Chart 1: Expectation of life at birth by sex and residence, India, 1970-75 to 2012-16



7. The values of expectancy of life at age 1 (e_1^0) by sex and residence at the national level are given in Statement 2. For the period 2012-16, the life expectancy after surviving through the first year of life has been 69.1 and 72.2 years for males and females respectively. Comparison of figures in Statement 2 with that in Statement 1 shows that the average expected life span has improved considerably after surviving through the first year of life for both males and females. This holds good for both the rural and urban areas. There has been considerable improvement in infant and child mortality under five years of age. The expectancy of life at age one in rural areas for females has surpassed that of males from 1987-91 (midyear 1989). Since 1987-91 (midyear 1989), the gap between the life expectancy of male and female in rural areas has been growing in favour of females from 0.2 years in 1989-93 to 3.2 years in 2012-16. In urban areas, the gap in the life expectancy of male and female has increased from 0.4 years in 1970-75 to 3.0 years in 2012-16.

Statement 2

Expectation of life at age 1 by sex and residence, India*, 1970-75 to 2012-16(e_1^0)

Period	Mid year	Total			Rural			Urban		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
1970-75	1973	56.2	57.0	55.6	54.9	55.8	54.1	63.3	63.1	63.5
1976-80	1978	58.6	58.6	58.6	57.4	57.6	57.3	64.0	63.4	64.7
1981-85	1983	60.9	60.8	61.1	59.6	59.8	59.4	66.0	64.9	67.3
1986-90	1988	62.4	62.2	62.6	61.3	61.4	61.4	66.3	65.1	67.6
1987-91	1989	62.8	62.5	63.1	61.8	61.7	61.9	66.3	65.3	67.9
1988-92	1990	63.0	63.0	63.2	62.1	61.9	62.0	66.7	65.5	68.0
1989-93	1991	63.6	63.2	63.9	62.5	62.3	62.5	67.4	66.2	68.8
1990-94	1992	64.1	63.6	64.5	63.0	62.7	63.1	68.0	66.8	69.3
1991-95	1993	64.5	63.9	65.1	63.4	63.0	63.8	68.6	67.2	69.9
1992-96	1994	64.9	64.3	65.6	63.9	63.4	64.4	68.9	67.5	70.3
1993-97	1995	65.3	64.5	66.0	64.4	63.7	64.8	69.2	67.7	70.5
1994-98	1996	65.5	64.6	66.3	64.6	63.8	65.0	69.2	67.7	70.6
1995-99#	1997	65.5	64.7	66.3	64.6	64.0	65.3	68.7	67.4	70.2
1996-00#	1998	65.7	64.8	66.6	64.8	64.1	65.5	68.9	67.5	70.4
1997-01#	1999	66.0	65.0	67.1	65.1	64.2	66.1	69.2	67.8	70.8
1998-02	2000	66.5	65.4	67.7	65.6	64.6	66.7	69.6	68.2	71.3
1999-03	2001	67.0	65.8	68.4	66.1	65.0	67.4	70.1	68.6	71.8
2000-04	2002	67.5	66.2	68.9	66.6	65.4	68.0	70.3	68.8	72.0
2001-05	2003	67.8	66.4	69.3	66.9	65.6	68.3	70.5	68.9	72.3
2002-06	2004	68.1	66.7	69.6	67.2	65.9	68.7	70.7	69.0	72.6
2003-07	2005	68.2	66.8	69.9	67.4	66.0	68.9	70.8	69.1	72.7
2004-08	2006	68.4	66.9	70.0	67.6	66.1	69.2	70.7	69.0	72.6
2005-09	2007	68.5	66.9	70.2	67.7	66.2	69.3	70.8	69.1	72.8
2006-10	2008	68.7	67.1	70.5	67.8	66.3	69.6	71.1	69.4	73.0
2007-11	2009	69.0	67.3	70.9	68.2	66.4	70.0	71.5	69.7	73.5
2008-12	2010	69.3	67.6	71.3	68.5	66.7	70.4	71.9	70.1	73.9
2009-13	2011	69.7	67.9	71.7	68.8	67.0	70.8	72.4	70.6	74.3
2010-14	2012	70.0	68.3	71.9	69.0	67.3	70.9	72.6	71.0	74.4
2011-15	2013	70.3	68.7	72.1	69.3	67.7	71.1	72.9	71.3	74.7
2012-16	2014	70.6	69.1	72.2	69.6	68.0	71.2	73.1	71.7	74.7

* : India includes all States/UT's

#: India does not include Jammu & Kashmir

8. Statement 3 below gives the estimates of life expectancy at birth by sex and residence in bigger States in the period 2012-16. Almost all the States have recorded a higher life expectancy for females in 2012-16 both across the rural and urban areas. Kerala has recorded the highest life expectancy at birth for males and females in rural areas where as Himachal Pradesh has recorded the highest for males in urban areas and Jammu & Kashmir for females in urban areas in 2012-16. The lowest life expectancy at birth has been recorded in the State of Madhya Pradesh for rural males and Uttar Pradesh for rural females. In Urban, the lowest life expectancy at birth has been recorded in Chhattisgarh & Uttar Pradesh for males and females respectively during 2012-16.

Statement 3

Expectation of life at birth by sex and residence, India and bigger States/UTs, 2012-16, (e₀⁰)

India & bigger States/UTs	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
India*	68.7	67.4	70.2	67.4	66.0	68.9	72.2	70.9	73.5
Andhra Pradesh	69.6	68.0	71.4	68.3	66.4	70.4	72.9	71.9	73.9
Assam	65.5	64.4	66.8	64.4	63.3	65.8	72.5	71.7	73.4
Bihar	68.7	68.9	68.5	68.4	68.6	68.2	71.5	71.8	71.4
Chhattisgarh	65.2	63.6	66.8	64.4	62.9	65.9	68.7	66.8	70.7
NCT of Delhi	74.2	72.7	75.9	71.9	70.2	0.0	74.4	73.0	76.0
Gujarat	69.5	67.4	71.8	68.0	65.2	71.2	71.7	70.6	72.9
Haryana	69.4	67.2	72.0	68.4	66.1	71.3	71.3	69.3	73.5
Himachal Pradesh	72.3	69.4	75.5	72.0	69.0	75.3	76.6	75.0	78.6
Jammu & Kashmir	73.5	71.6	76.2	72.6	70.8	75.1	76.3	73.8	79.1
Jharkhand	67.9	67.8	68.0	67.0	67.1	66.8	72.1	71.4	72.9
Karnataka	69.1	67.6	70.7	67.4	65.7	69.2	72.3	71.1	73.7
Kerala	75.1	72.2	77.9	75.2	72.1	78.3	74.9	72.3	77.3
Madhya Pradesh	65.4	63.7	67.2	64.1	62.4	66.1	69.7	68.2	71.5
Maharashtra	72.2	70.8	73.7	70.8	69.5	72.2	74.2	72.6	76.0
Odisha	67.6	66.2	69.1	66.9	65.6	68.6	71.2	70.4	72.1
Punjab	72.5	71.0	74.2	71.3	69.9	72.9	74.3	72.6	76.6
Rajasthan	68.3	66.1	70.7	67.3	64.8	70.2	71.5	70.6	72.5
Tamil Nadu	71.4	69.5	73.4	69.9	68.0	71.9	73.2	71.3	75.2
Uttar Pradesh	64.8	63.9	65.6	63.8	62.8	64.7	68.4	67.9	68.8
Uttarakhand	71.5	68.5	74.8	71.0	67.7	74.6	72.9	70.9	75.2
West Bengal	70.8	69.8	71.9	69.8	68.7	71.1	73.1	72.4	73.8

* : India includes all States/UT's

Note: Andhra Pradesh includes Telangana.

9. Statement 4 and Chart 2 show the per annum average increase in the life expectancy at birth by sex in the period from 1970-75 to 2012-16 for India and bigger States. It is observed that in 2012-16 females have recorded higher increase in their life expectancy as compared to that of males. Per annum average increase in life expectancy for females is higher in comparison to that for males in all the bigger States and India. The maximum per annum average increase in life expectancy for males during the period 1970-2016 has been observed in Odisha and the minimum in Haryana. For females, the maximum annual increase has been recorded in Uttar Pradesh and the minimum in Kerala. This may also be due to the fact that Haryana & Kerala had significantly higher life expectancy in 1970-75 as compared to other States.

Statement 4

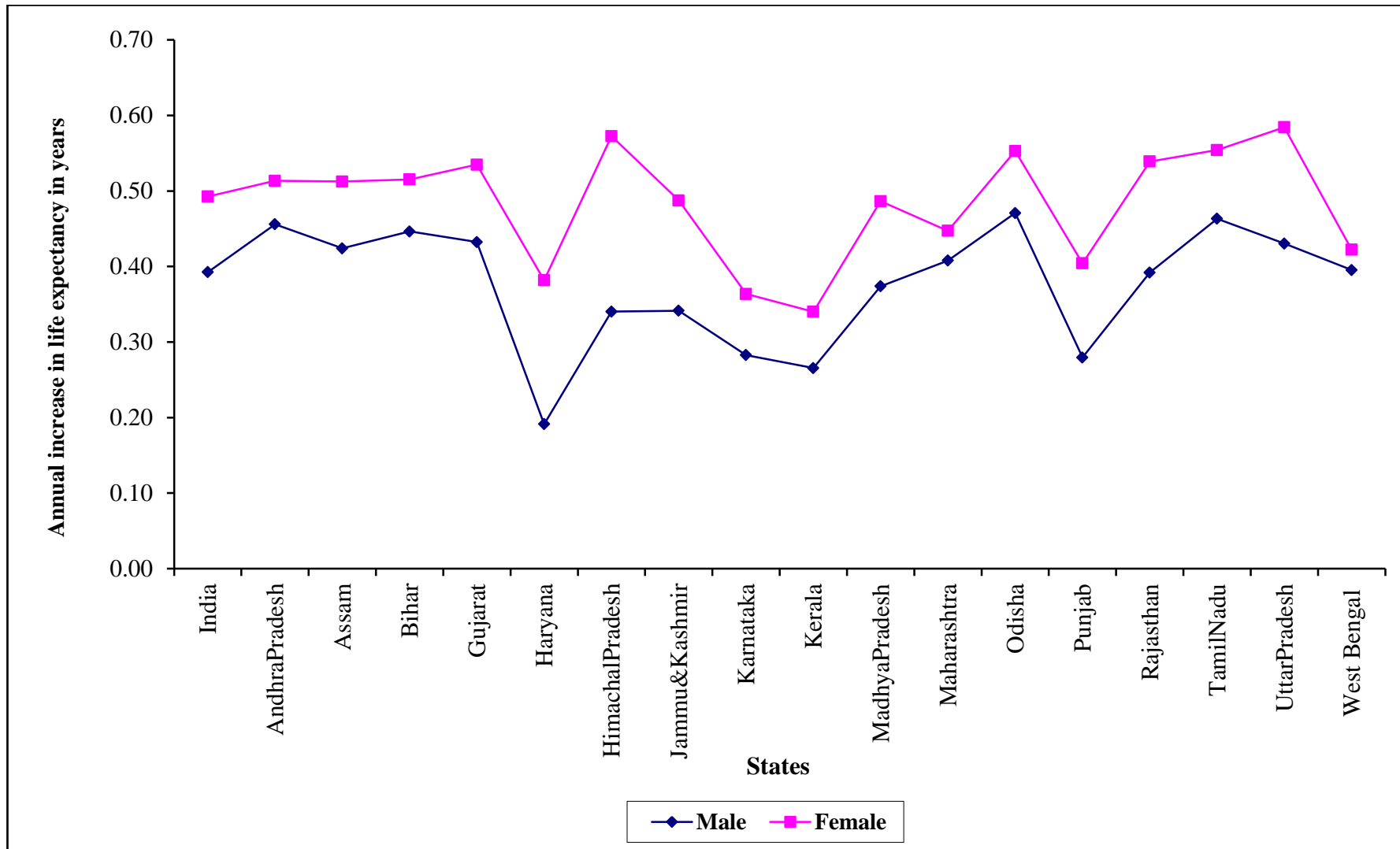
Increase in expectation of life at birth by sex, , India and bigger States,1970-75 and 2012-16

India & bigger States	1970-75				2012-16				Per annum increase in expectation of life	
	Total	Male	Female	F-M ratio	Total	Male	Female	F-M Ratio	Male	Female
India*	49.7	50.5	49.0	0.97	68.7	67.4	70.2	1.04	0.39	0.49
AndhraPradesh	48.8	48.4	49.3	1.02	69.6	68.0	71.4	1.05	0.46	0.51
Assam	45.5	46.2	44.8	0.97	65.5	64.4	66.8	1.04	0.42	0.51
Bihar (1981-85)	52.9	54.2	51.5	0.95	68.7	68.9	68.5	0.99	0.45	0.52
Gujarat	48.8	48.8	48.8	1.00	69.5	67.4	71.8	1.07	0.43	0.53
Haryana	57.5	59.0	55.6	0.94	69.4	67.2	72.0	1.07	0.19	0.38
HimachalPradesh	52.6	54.8	50.9	0.93	72.3	69.4	75.5	1.09	0.34	0.57
Jammu&Kashmir	56.1	56.9	55.2	0.97	73.5	71.6	76.2	1.06	0.34	0.49
Karnataka	55.2	55.4	55.1	0.99	69.1	67.6	70.7	1.05	0.28	0.36
Kerala	62.0	60.8	63.3	1.04	75.1	72.2	77.9	1.08	0.27	0.34
MadhyaPradesh	47.2	47.6	46.3	0.97	65.4	63.7	67.2	1.06	0.37	0.49
Maharashtra	53.8	53.3	54.5	1.02	72.2	70.8	73.7	1.04	0.41	0.45
Odisha	45.7	46.0	45.3	0.98	67.6	66.2	69.1	1.04	0.47	0.55
Punjab	57.9	59.0	56.8	0.96	72.5	71.0	74.2	1.04	0.28	0.40
Rajasthan	48.4	49.2	47.5	0.97	68.3	66.1	70.7	1.07	0.39	0.54
TamilNadu	49.6	49.6	49.6	1.00	71.4	69.5	73.4	1.06	0.46	0.55
UttarPradesh	43.0	45.4	40.5	0.89	64.8	63.9	65.6	1.03	0.43	0.58
WestBengal (1981-85)	57.4	56.8	58.0	1.02	70.8	69.8	71.9	1.03	0.40	0.42

*: India includes all States/UT's

Note: Andhra Pradesh includes Telangana.

Chart 2: Per annum increase in expectancy of life at birth by sex during 1970-75 to 2012-16, India and bigger States



10. The estimates of the expectancy of life at selected ages in 2012-16 for India and bigger States are given in Statement 5. The estimate at birth varies from 75.1 years in Kerala to 64.8 years in Uttar Pradesh during 2012-16. In all States, age specific death rate for the children of age less than one year is more than all other quinquennial age groups except higher ages. Therefore, expectancy of life at age one is higher than that at birth in all States but for Kerala where it is low by 0.1 years. Except life expectancy at birth, Jammu & Kashmir retains its position as the State having the highest expectancy of life for all ages. At the age 70, the minimum expectancy of life is in Chhattisgarh.

Statement 5

Expectation of life at selected ages, India and bigger States/UTs, 2012-16

India & bigger States/UTs	Expectation of life at age									
	0	1	5	10	20	30	40	50	60	70
India*	68.7	70.6	67.1	62.4	52.8	43.5	34.4	25.8	18.1	11.5
Andhra Pradesh	69.6	71.1	67.2	62.4	52.8	43.5	34.5	26.1	18.5	12.2
Assam	65.5	67.7	64.8	60.1	50.6	41.5	32.5	24.0	16.7	10.8
Bihar	68.7	70.3	67.1	62.3	52.7	43.3	34.0	25.0	17.0	10.0
Chhattisgarh	65.2	67.2	63.8	59.1	49.6	40.6	31.7	23.1	15.6	9.0
NCT of Delhi	74.2	74.7	70.9	66.1	56.4	47.1	37.6	28.6	20.4	13.2
Gujarat	69.5	71.6	68.1	63.3	53.7	44.4	35.3	26.5	19.0	12.2
Haryana	69.4	71.4	67.8	63.0	53.5	44.2	35.2	26.6	18.9	12.7
Himachal Pradesh	72.3	74.0	70.4	65.5	55.8	46.4	37.1	28.3	20.4	13.6
Jammu & Kashmir	73.5	75.5	71.7	66.9	57.3	47.7	38.5	29.6	21.8	14.8
Jharkhand	67.9	69.3	66.0	61.3	52.0	42.7	33.6	24.8	17.2	10.9
Karnataka	69.1	70.2	66.5	61.7	52.1	42.8	33.8	25.2	17.5	10.8
Kerala	75.1	75.0	71.0	66.1	56.4	46.8	37.4	28.4	20.1	12.9
Madhya Pradesh	65.4	68.2	65.2	60.5	51.2	42.3	33.3	24.6	16.9	10.6
Maharashtra	72.2	72.7	68.8	64.0	54.4	45.0	35.9	27.2	19.2	12.3
Odisha	67.6	69.6	66.5	61.8	52.5	43.4	34.3	25.7	18.1	11.9
Punjab	72.5	73.4	69.7	64.8	55.3	46.0	37.0	28.5	20.8	14.1
Rajasthan	68.3	71.1	67.6	62.9	53.3	44.0	34.9	26.2	18.7	12.1
Tamil Nadu	71.4	71.9	68.1	63.2	53.7	44.3	35.1	26.5	18.6	11.8
Uttar Pradesh	64.8	68.1	64.8	60.1	50.5	41.3	32.2	23.8	16.7	10.7
Uttrakhand	71.5	72.4	68.8	64.0	54.3	45.0	35.9	27.5	20.0	14.0
West Bengal	70.8	71.8	68.1	63.3	53.7	44.2	34.9	26.0	18.0	11.4

* : India includes all States/UT's

Note: Andhra Pradesh includes Telangana.

11. Statement 6 below gives estimates on expectancy of life at selected ages for males for India and bigger States, 2012-16. The expectancy of life at birth for males varied from 72.7 years in Delhi to 63.6 years in Chhattisgarh during 2012-16. At age 70, the expectancy of life for males varies from 13.7 years in Punjab to 8.0 years in Chhattisgarh during the period under reference.

Statement 6

Expectation of life at selected ages, males, India and bigger States/UTs, 2012-16

India & bigger States/UTs	Expectation of life at age									
	0	1	5	10	20	30	40	50	60	70
India*	67.4	69.1	65.5	60.8	51.2	42.0	33.1	24.7	17.3	11.0
Andhra Pradesh	68.0	69.4	65.5	60.6	51.0	41.8	33.2	25.0	17.7	11.6
Assam	64.4	66.5	63.4	58.6	49.1	40.0	31.2	23.0	16.1	10.6
Bihar	68.9	70.4	67.0	62.3	52.7	43.3	34.0	25.2	17.2	10.2
Chhattisgarh	63.6	65.5	61.8	57.1	47.8	38.8	30.1	21.7	14.5	8.0
NCT of Delhi	72.7	73.2	69.3	64.5	54.8	45.5	36.2	27.4	19.4	12.5
Gujarat	67.4	69.4	65.9	61.1	51.5	42.3	33.4	24.9	17.7	11.2
Haryana	67.2	69.1	65.4	60.5	51.0	41.8	33.1	24.9	17.7	11.6
Himachal Pradesh	69.4	71.1	67.4	62.5	52.7	43.4	34.5	26.0	18.5	12.3
Jammu & Kashmir	71.6	73.4	69.6	64.8	55.2	45.7	36.5	27.9	20.1	13.4
Jharkhand	67.8	69.1	65.7	61.0	51.8	42.5	33.5	24.7	17.1	10.9
Karnataka	67.6	68.5	64.8	59.9	50.4	41.2	32.4	24.1	16.6	10.3
Kerala	72.2	72.0	68.0	63.1	53.4	44.0	34.8	26.0	18.1	11.4
Madhya Pradesh	63.7	66.4	63.2	58.5	49.2	40.3	31.5	23.2	15.9	10.0
Maharashtra	70.8	71.2	67.4	62.5	52.9	43.7	34.8	26.3	18.7	12.0
Odisha	66.2	68.2	65.0	60.4	51.1	42.0	33.0	24.8	17.3	11.2
Punjab	71.0	71.8	68.0	63.1	53.5	44.4	35.6	27.5	20.1	13.7
Rajasthan	66.1	68.5	64.8	60.0	50.5	41.3	32.5	24.0	17.0	10.8
Tamil Nadu	69.5	70.0	66.1	61.3	51.7	42.5	33.5	25.1	17.6	11.2
Uttar Pradesh	63.9	67.0	63.5	58.8	49.2	39.9	31.0	22.9	16.1	10.2
Uttarakhand	68.5	69.3	65.6	60.8	51.2	41.9	32.9	25.0	17.9	12.6
West Bengal	69.8	70.8	67.0	62.2	52.5	43.1	33.9	25.2	17.4	10.9

* :India includes all States/UT's

Note: Andhra Pradesh includes Telangana.

12. The expectancy of life at selected ages for females in Statement 7 indicates that the highest expectancy of life at birth 77.9 years in 2012-16 has been reported in Kerala and the lowest 65.6 in Uttar Pradesh. At age 70, the variation in expectancy of life has been from 16.7 years in Jammu & Kashmir to 9.8 years in Bihar in 2012-16. The expectancy of life at different ages by sex at the national level during 2012-16 is presented in Chart 3. The graph clearly indicates that the expectancy of life for the female is higher than male at all the selected ages in the period 2012-16.

Statement 7

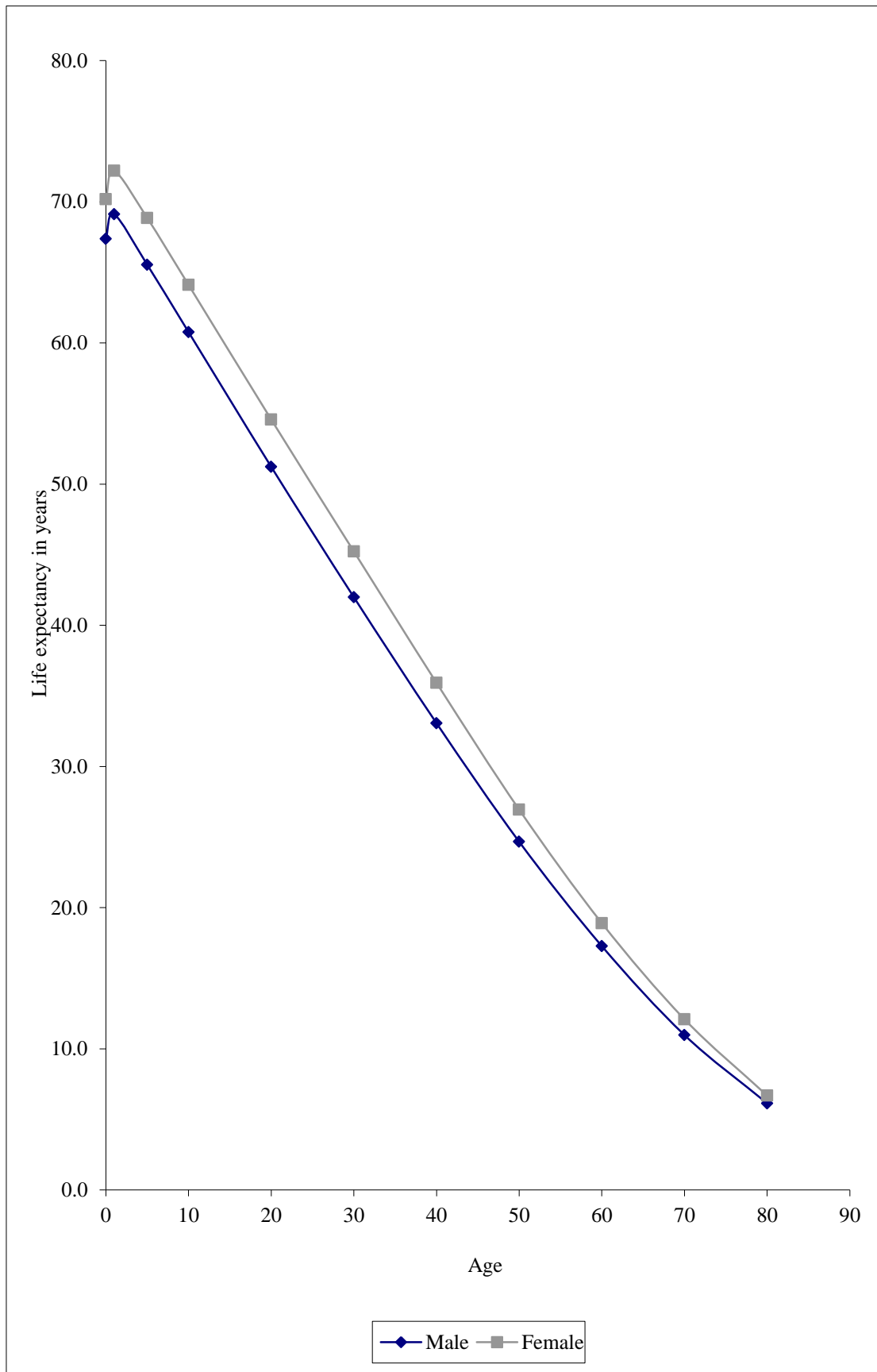
Expectation of life at selected ages, females, India and bigger States/UTs, 2012-16

India & bigger States/UTs	Expectation of life at age									
	0	1	5	10	20	30	40	50	60	70
India*	70.2	72.2	68.9	64.1	54.6	45.2	35.9	26.9	18.9	12.1
Andhra Pradesh	71.4	73.0	69.2	64.3	54.7	45.3	36.0	27.3	19.3	12.8
Assam	66.8	69.2	66.6	62.0	52.5	43.3	34.1	25.2	17.4	11.0
Bihar	68.5	70.3	67.1	62.3	52.7	43.3	34.1	24.8	16.7	9.8
Chhattisgarh	66.8	69.0	65.8	61.1	51.6	42.5	33.4	24.5	16.7	9.9
NCT of Delhi	75.9	76.4	72.7	67.8	58.3	48.8	39.2	29.9	21.3	13.9
Gujarat	71.8	74.0	70.5	65.7	56.2	46.8	37.4	28.2	20.3	13.1
Haryana	72.0	74.2	70.8	66.0	56.5	47.1	37.7	28.7	20.4	14.0
Himachal Pradesh	75.5	77.2	73.7	68.8	59.3	49.7	40.1	30.9	22.5	14.9
Jammu & Kashmir	76.2	78.3	74.5	69.6	60.0	50.4	41.1	32.1	24.0	16.7
Jharkhand	68.0	69.4	66.2	61.6	52.1	42.8	33.7	24.8	17.3	10.9
Karnataka	70.7	72.0	68.3	63.5	53.8	44.5	35.2	26.3	18.3	11.2
Kerala	77.9	78.0	74.0	69.1	59.3	49.6	40.0	30.7	22.0	14.2
Madhya Pradesh	67.2	70.2	67.3	62.8	53.5	44.4	35.1	26.1	18.0	11.2
Maharashtra	73.7	74.3	70.5	65.6	56.0	46.5	37.1	28.0	19.6	12.5
Odisha	69.1	71.2	68.1	63.4	54.1	44.9	35.8	26.9	19.0	12.7
Punjab	74.2	75.2	71.7	66.8	57.3	47.9	38.6	29.6	21.5	14.4
Rajasthan	70.7	74.0	70.8	66.1	56.6	47.0	37.6	28.5	20.5	13.4
Tamil Nadu	73.4	74.0	70.2	65.3	55.8	46.3	36.9	27.9	19.6	12.4
Uttar Pradesh	65.6	69.2	66.1	61.4	51.9	42.7	33.6	24.9	17.4	11.3
Uttrakhand	74.8	75.9	72.3	67.4	57.8	48.4	39.1	30.1	22.1	15.4
West Bengal	71.9	73.1	69.3	64.5	54.9	45.5	36.0	26.9	18.6	11.9

* : India includes all States/UT's

Note: Andhra Pradesh includes Telangana.

Chart 3: Expectancy of life at birth and conditional life expectancy at Selected ages by sex, India, 2012-16



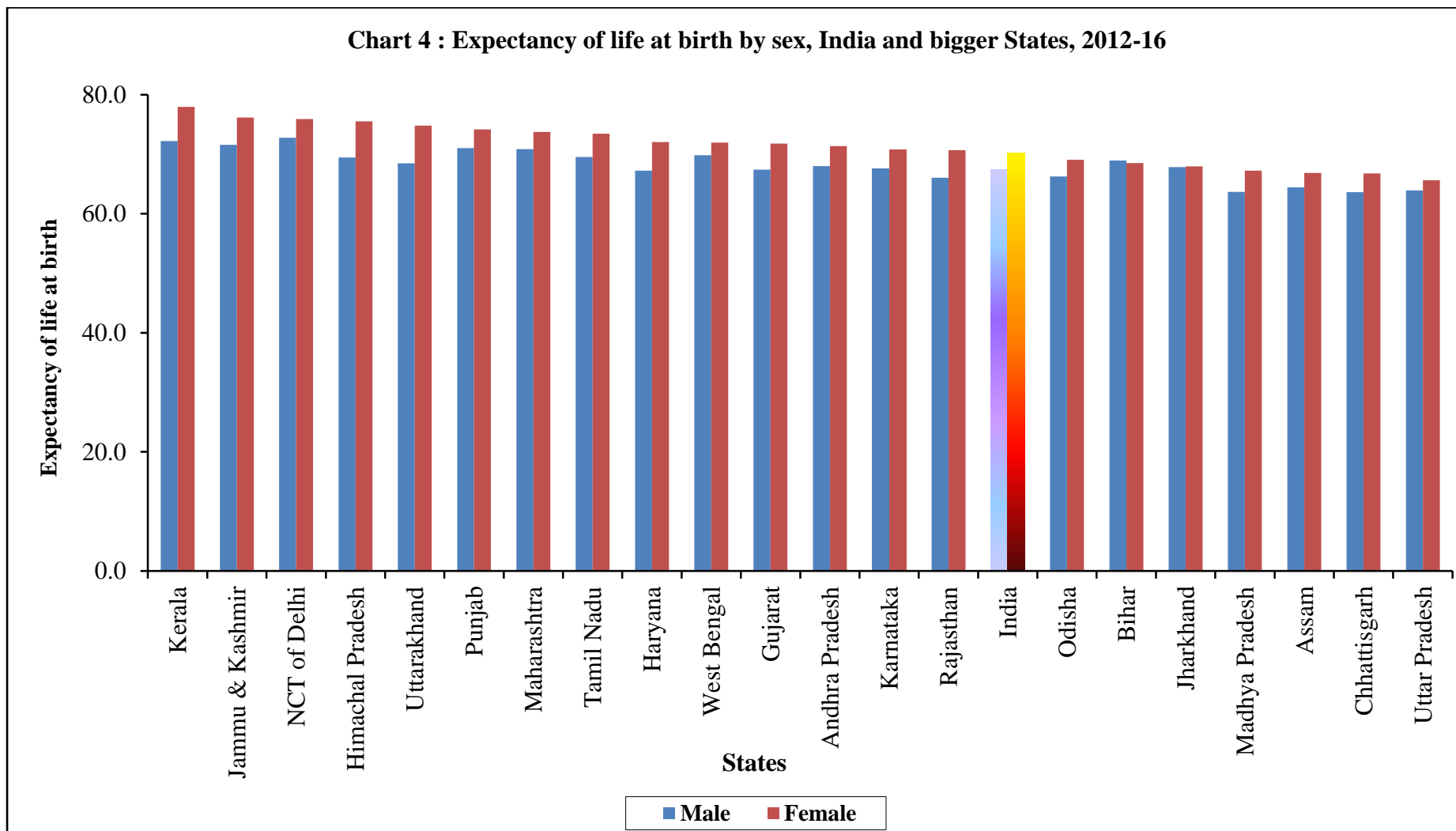
13. The expectancy of life at birth, infancy, childhood and retiring age (60 years) has been graphically presented in Chart 4 to 7 by sex for India and bigger States. To improve readability, all charts have been depicted in descending order of female expectancy of life. Chart 4 presents State level expectancy of life at birth for males and females during 2012-16. The female life expectancy at birth is higher than males in all the bigger States except Bihar. The female life expectancy at birth is highest in the State of Kerala followed by Jammu & Kashmir and Delhi whereas it is the lowest for Uttar Pradesh preceded by Chhattisgarh, Assam and Madhya Pradesh in that order.

14. Chart 5 gives graphical presentation of expectancy of life at infancy (age 1) during 2012-16 for India and bigger States separately for males and females. In general, the expectancy of life at age 1 is higher than that at birth. The expectancy of life for females after attaining the age of 1 is higher than that of males in all the bigger States except Bihar. The female life expectancy at infancy is the highest in the State of Jammu & Kashmir followed by Kerala and Himachal Pradesh whereas it is the lowest for Chhattisgarh preceded by Assam, Uttar Pradesh and Jharkhand in that order.

15. The State-wise expectancy of life at childhood (age 5) separately for males and females is presented in Chart 6. The female expectancy of life at childhood is higher than males for all bigger States. The female life expectancy at childhood is highest in the State of Jammu & Kashmir followed by Kerala and Himachal Pradesh whereas it is lowest for Chhattisgarh preceded by Uttar Pradesh and Jharkhand in that order. It has been observed that the first two positions in terms of female expectancy of life at birth, infancy and childhood have been occupied by Kerala and Jammu & Kashmir whereas Chhattisgarh and Uttar Pradesh are among the States having the last two positions in terms of female expectancy of life at birth, infancy and childhood. Assam also occupies the second last position for female life expectancy at birth and at infancy.

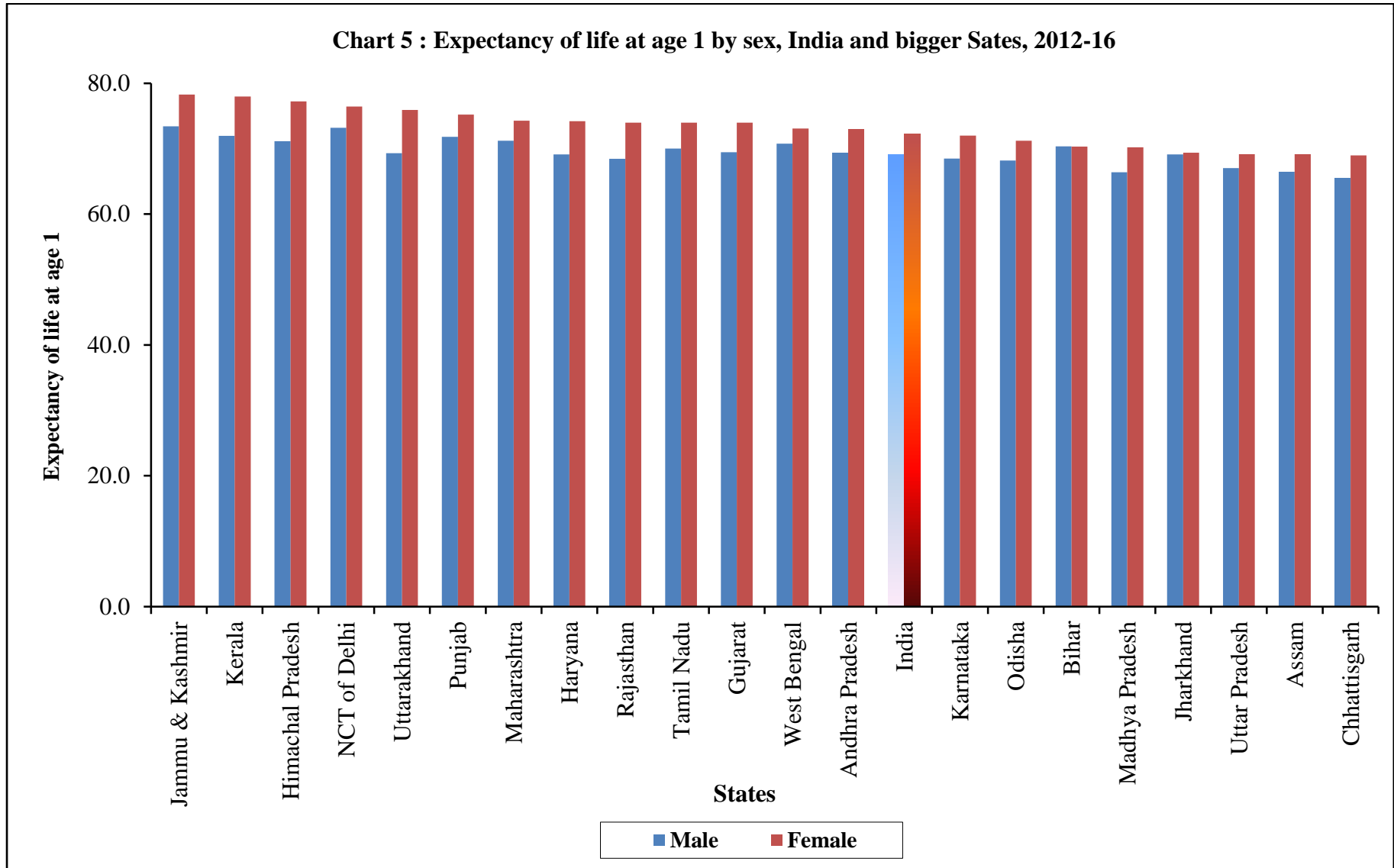
16. Chart 7 gives graphical presentation of expectancy of life at retiring age (age 60) during 2012-16 for India and bigger States separately for males and females. The female expectancy of life at age 60 is also higher than that of males in all the bigger States/UTs except Bihar. The female life expectancy at age 60 is highest in the State of Jammu & Kashmir followed by Himachal Pradesh and Uttarakhand whereas it is the lowest for Chhattisgarh and Bihar preceded by Jharkhand and Uttar Pradesh in that order. The inter-se position of States in terms of expectancy of life at age 60 differs than that at younger ages. At age 60, Jammu & Kashmir, Himachal Pradesh and Uttarakhand exceed Kerala, which occupies the first position in ranking the expectancy of life at birth. Even at age 60, the expectancy of life differs significantly by sex and from State to State.

Chart 4 : Expectancy of life at birth by sex, India and bigger States, 2012-16



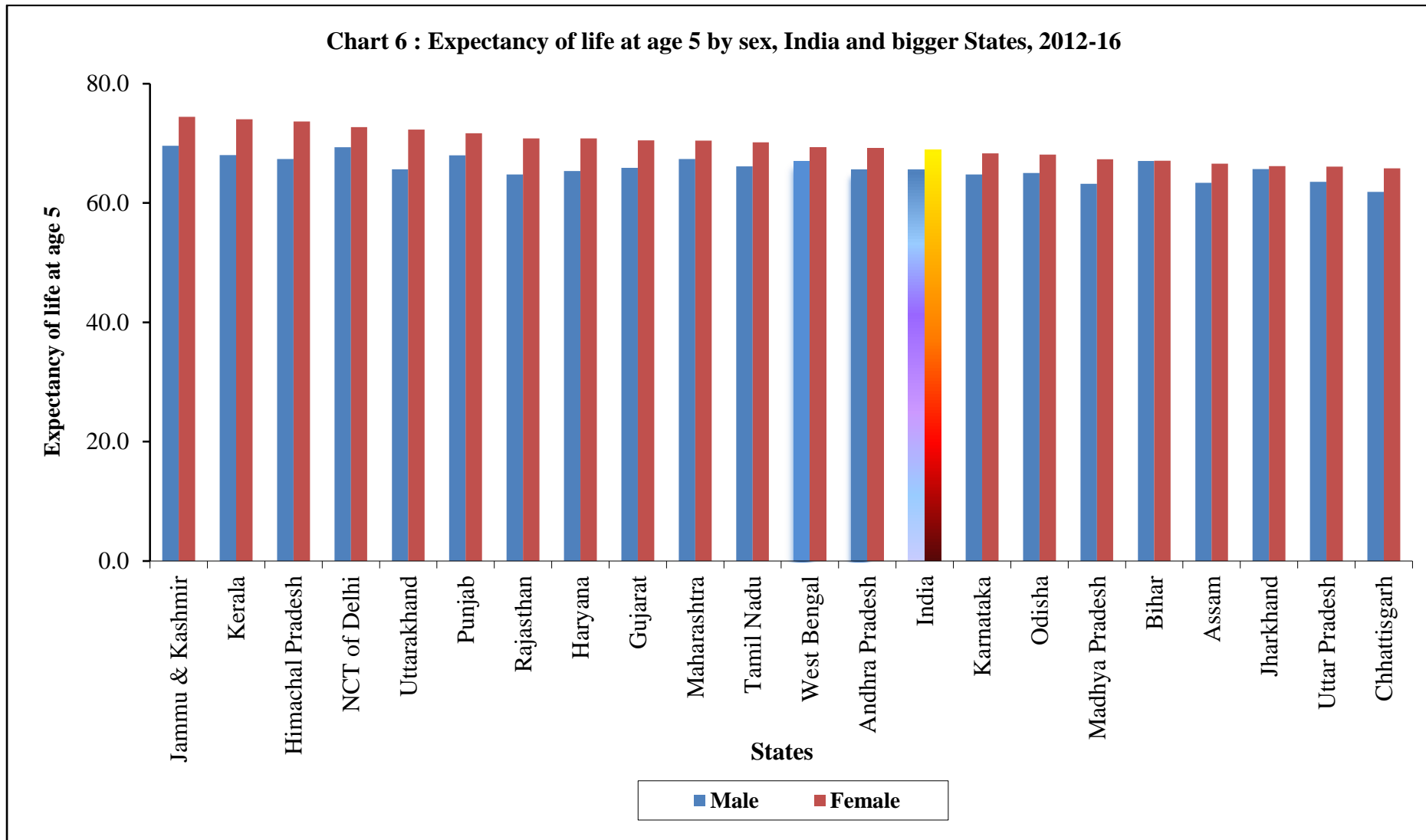
Note : Data arranged in descending order of female life expectancy.

Chart 5 : Expectancy of life at age 1 by sex, India and bigger Sates, 2012-16



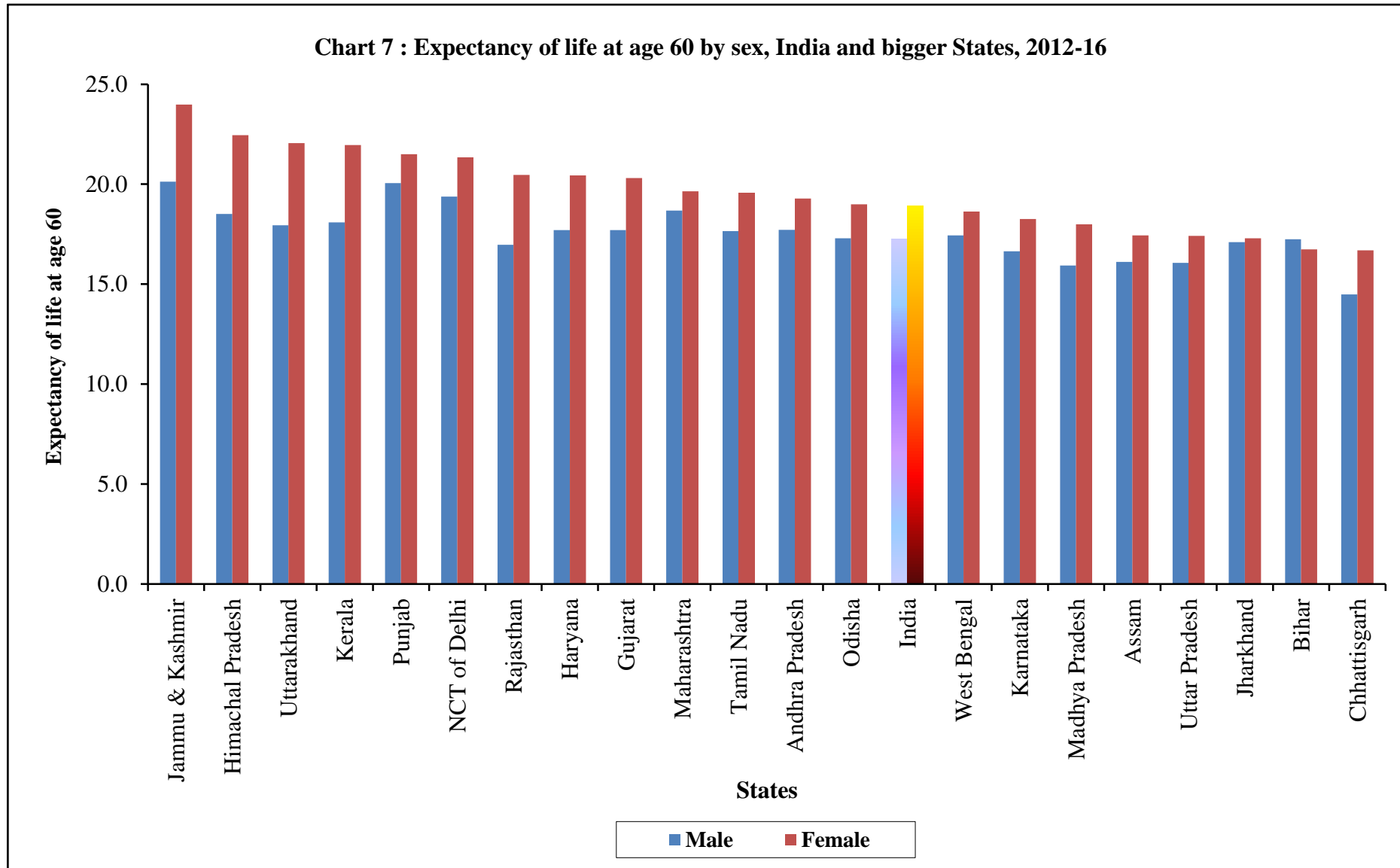
Note : Data arranged in descending order of female life expectancy.

Chart 6 : Expectancy of life at age 5 by sex, India and bigger States, 2012-16



Note : Data arranged in descending order of female life expectancy.

Chart 7 : Expectancy of life at age 60 by sex, India and bigger States, 2012-16



Note : Data arranged in descending order of female life expectancy.

17. The State-wise variation in difference between female to male estimated life expectancy at birth during 2012-16 is presented in Chart 8. Five out of twenty one States fall below all-India difference (2.8) between female and male life expectancy at birth, whereas the remaining sixteen States are above it. The female-male difference in life expectancy at birth is lowest in Bihar and highest in Uttarakhand.

18. The State-wise female-male gap in life expectancy at age 70 during 2012-16 is presented in Chart 9. Jammu & Kashmir has registered the highest favorable gap of 3.3 years, whereas in Bihar, male life expectancy is more than female life expectancy by 0.5 years.

Chart 8 : Difference in female to male expectancy of life at birth, State-wise, 2012-16

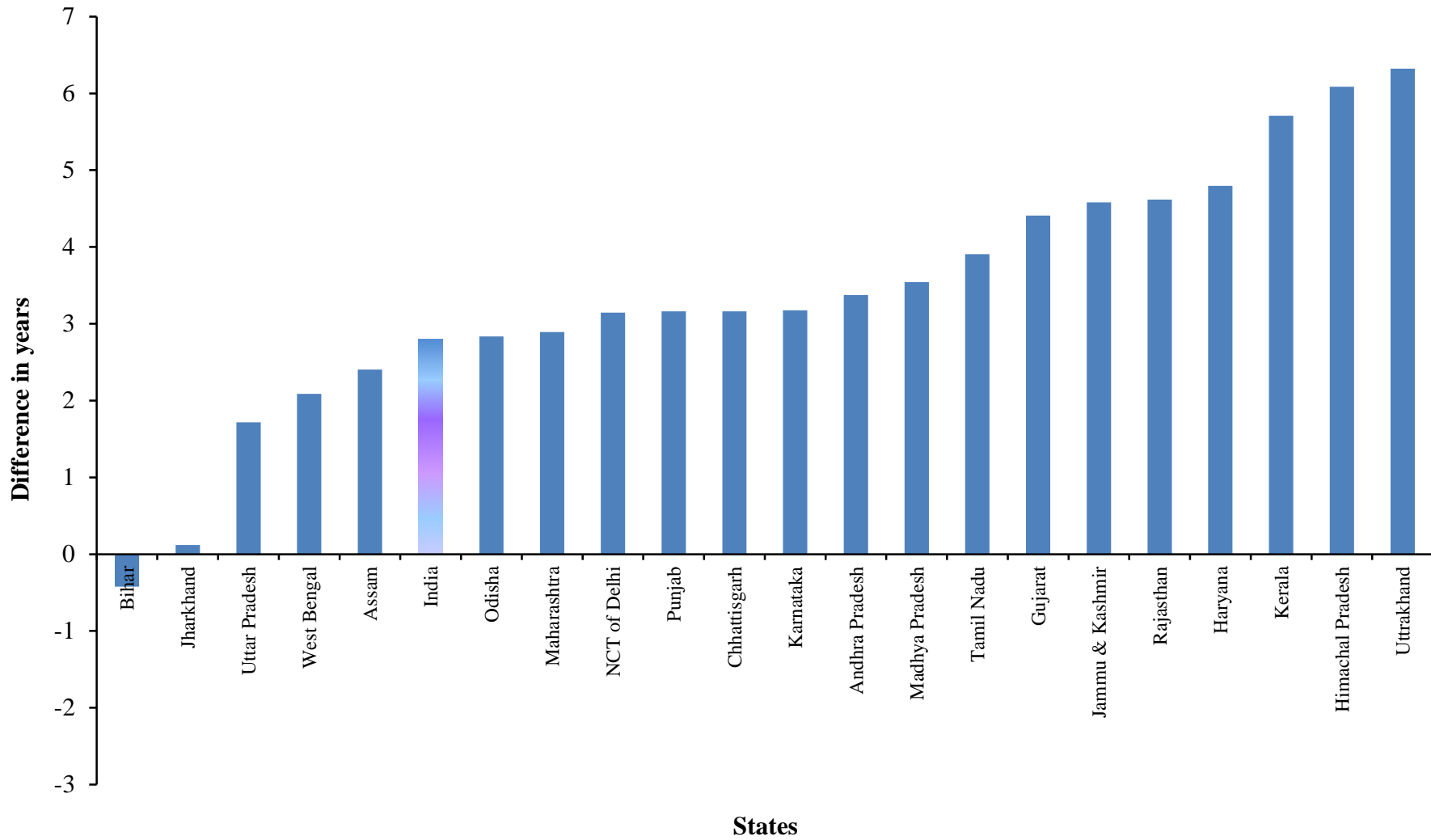


Chart 9 : Difference in female to male expectancy of life at age 70+, statewise, 2012-16

