



HEALTH SCENARIO IN INDIA: SPECIAL REFERENCETO UTTAR -PRADESH

DR. Madhu Tandon

Associate Professor- Department of Economics D.A.V. Degree College, Lucknow (U.P.), India

Received- 02.11. 2018, Revised- 10.11. 2018, Accepted - 15.11.2018 E-mail: madhutand@yahoo.com

Abstract: *A nation is prosperous in real sense when its population is healthy. Health may be viewed in varied aspects. India is emerging as a rising economy in the world's map. Its growth rate is remaining higher in comparison to other developing country. One of the challenges remain is that whether India has become successful to provide better health to its large population. It is time to check health parameter as a main component of human development.*

The present work is an attempt to measure the extent of the success of the Government's policies and commitment in the field of health sector. Health status is multidimensional in nature, so it is very difficult to measure it precisely. The present paper is an attempt to capture suitable parameters, involving the appropriate indicator to measure the health scenario in India as well as in Uttar-Pradesh.

Key Words: sense when, population, healthy, emerging, economy, comparison, developing, country.

A detailed analysis of health scenario in India and in Uttar-Pradesh has been done. My observations are based on The National Family Health Surveys; I use R software to analysis the data.

The work shows the overall improvement in health status in India as well as in Uttar-Pradesh. The study finds well-being of its citizens is certainly influenced by the willpower and commitment of Government's policies, still a lot must be done.

India is becoming a superpower in the world's economy with a growth rate of about 8 percent over a decade. The year 1991 is seen as turning point in India's economic history. The series of reforms proves that India is on the path of fast growing and globally competitive economy. In real sense, a nation is become prosperous with its healthy citizens. Health is not a mere absence of any disease, but it is associated with overall wellbeing of any society and ability to realize its potential. It is a great interest to view whether with the development pace in India, health status of its population also changed, whether the large population of India, really benefitted in terms of health parameters.

A good health policy aims health care to poor, in reduction of inequalities, reduction in mortality and efficient and accessible health system. Indian planning has attempted to capture this welfare approach to pay attention towards vulnerable groups

and women empowerment. The present paper aims to verify the above aims with the help of human development, key component -health. As this is a very broad concept, so we have limited our study to only Uttar Pradesh with comparison to national level data, with the help of National Family Health Survey Data.

India NFHS Trends 2015-2016: Special Reference To Uttar Pradesh Data Preparation- Data was obtained from National Family Health Survey, India (NFHS) from the surveys NFHS-4(2015-2016) and NFHS-3 (2005-2006). The survey provides state and national information for India on fertility, infant and child mortality, the practice of family planning, maternal and child health, reproductive health, nutrition, anaemia, utilization and quality of health and family planning services. Each successive round of the NFHS has had two specific goals: a) to provide essential data on health and family welfare needed by the Ministry of Health and Family Welfare and other agencies for policy and programme purposes, and b) to provide information on important emerging health and family welfare issues. Since complete data set wasn't openly available, "Fact-Sheets for Key Indicators based on Final Data" for both the surveys was chosen as the raw data. Our study compares 25 selected key indicators from both surveys for Uttar Pradesh and India. The selection

of indicators was based on availability of data in both surveys and was kept to minimum indicators which could be used to establish trends in our study. The data was manually recorded from the fact sheets in a 'comma separated values' file format. https) so that it could be accessed by R Studio without any risk of accidental alteration. The combined data from the surveys was converted to tidy data format for efficient, clear and repeatable calculations and modelling (<https://cran.r-project.org/web/packages/tidyr/.../tidy-data.html>). R's ggplot2 package was used to create the graphs for rich visualization.

The study took 25 key indicators to know the trend of health status at National level and at Uttar Pradesh level.

Anaemia- First, we have checked anaemic condition of its citizen, as healthy body have proper blood to do their routine work. If a person is anaemic, it means that person will fatigue soon while doing their daily chores, their productivity will be less in comparison to other person, who has sound in health.

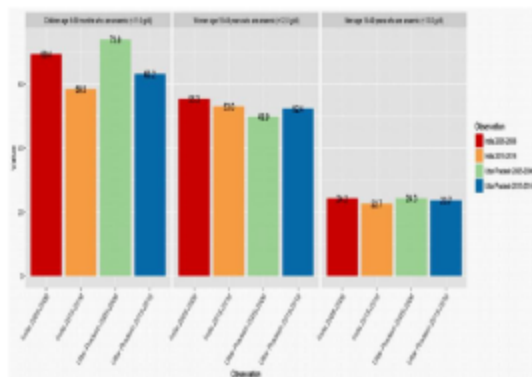


Figure: 1.1

1. Children aged 6-59 months who are anaemic (<11.0 g/dl),
2. Women aged 15-49 years who are anaemic (<12.0 g/dl),
3. Men aged 15-49 years who are anaemic (<13.0 g/dl)

We may see the anaemic condition at all India level in children age group of 6-59 months was pitiable. It was quite high as 69.4 percent in 2005-06 and during 2015-16 it comes down to 58.4 percent, In Uttar Pradesh also the anaemic condition of children was worst as 73.9 percent children of age group of 6-59 months were anaemic. In ten years, there

is substantial improvement, it comes down 63.2 percent. It means at National level as well as state level about 11 percent children get rid of anaemic condition.

Women age group of 15-49 was 55.3 percent anaemic in 2004-05 and it comes down to only 53 percent at all India level, while at Uttar Pradesh level less women were anaemic in comparison to all India level the percentage was 49.9 percent, and it has increased to 52.4 percent. So, it is quite serious matter. It means at National level a little improvement (2.3 percent) in anaemic condition of women but at state level 2.5 percent more women got anaemic whose haemoglobin level is less than 12g/dl for 10 years. Men's position of age group 15-49 years is quite better in comparison to children and women. 24.2 percent men were anaemic in 2005-06 and this percentage came down 22.7 percent at all India level while at state level 24.3 percent men were anaemic and this percentage came down to 23.7 percent. It means at National level as well as State level marginal improvement in anaemic condition of men ranging .06 percent to 1.5 percent during both the surveys. It is hour of need to improve the anaemic status of children and women especially at national as well as state level both. The present government schemes are inadequate. More efforts are needed in this regard. Child Mortality, Family Planning, Birth conditions

4. 'Infant Mortality Rate',
5. 'Any Modern Method of Family Planning',
6. 'Mothers who had antenatal check-up in the first trimester',
7. 'Institutional births',
8. 'Children aged 12-23 months fully immunized',
9. 'Children under age 6 months exclusively breastfed'

We tried to check the health status of citizens through such parameter as IMR, U5MR, mothers who had visited hospital for check-up in the first trimester, Institutional births, children under age 6 months exclusively breastfed, children age 12-23 months fully immunised, families adopted modern method of family planning.

Figure shows in 2005-06 Infant Mortality Rate was 57 per 1000 lives at All India Level, which came down to 41 per 1000 lives, whereas in Uttar

Pradesh IMR was high in comparison to national level and it was as 73 per 1000 lives. It also came down to 64 per 1000 lives. Still, it is high. Government must look after this issue as in developed countries, IMR is quite low. Particularly UP government should increase neo-natal care related facilities. Under 5 mortality rates at National level was 74 in 2005-06, and it came down to 50 in 2015-16. So, Government should make more efforts for improvement.

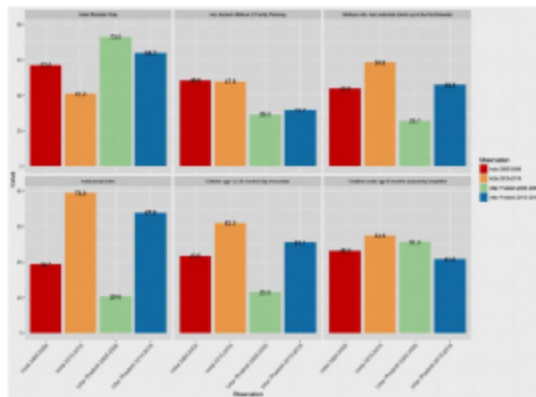


Figure: 1.2

Institutional births percentage in the last 5 years are given in figure, which shows there were 38.7 percentage institutional births taken place in 2005-06, whereas it has increased substantially, and this percentage rose to 78.9 percentage in 2015-16 at National level, this shift shows the advanced and literate sense of the society. In Uttar Pradesh also Institutional births rose to 20.6 percentages in 2005-06 to 67.8 percentages. National as well as State level Percentage improvement in Institutional births shows the people are now aware of the fact that births in homes are not safe for the mother and child and births in Hospitals (Government and Private both) are hygienically more safe. They are recognising the importance of mother's and child's security. So, in this way, Government's policies are becoming successful. Anganwadi's sisters are playing a significant role to change the attitude of people regarding institutional births.

Mothers' percentage who had in the first antenatal check-up trimester are also gone up from 43.9 percentage in 2005-06 to 58.6 percentage in 2015-16 at All India Level and this percentage has also shown upward tendency at Uttar Pradesh level and it showed almost double increase, whereas it was

25.7 percentage in 2005-06 and gone up to 45.9 percentage in 2015-16. Again, here government's welfare state role proved that it has sincerely concerned with mother's health and running schemes are giving benefit results to mother and child both.

Children under age 6 months exclusively breast-fed also shows an increase of 8.5 percentage, as 46.4 percentage children were exclusively breastfed in 2005-06, and this percentage rose up to 54.9 percentage, whereas at Uttar Pradesh this percentage comes down almost 9.7 percentage. So, this needs more attention as mothers fed is best for child and studies shows it keeps the child away from many diseases.

Children age under 12-23 months fully immunised (BCG, Measles, and 3 doses each of Polio and DPT) percentage also gone up significantly from 43.5 percentage to 62 percentage at National level and at state level this rise is more than double, and this percentage rose from 23 to 51 in 2015-16. So, in this regard Government's efforts are successful to immunise children.

Status of any modern method of family planning (Currently married women age 15-49 years) is more or less same in both the surveys as at National level it slightly come down (0.7) percentage and at state level it shows 2.74 percentage rise. It means regarding Family Planning; government efforts are more needed.

Child Health

- 10.'Children under 5 years who are stunted (height-for-age)',
- 11.'Children under 5 years who are wasted (weight-for-height)',
- 12.'Children under 5 years who are severely wasted (weight-for-height)',
- 13.'Children under 5 years who are underweight (weight-for-age)'

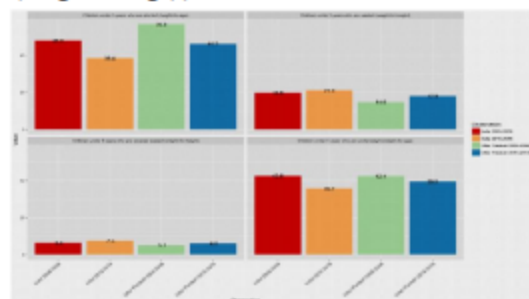


Figure shows children under 5 years who are stunted (low height for age) was 48 percentage in 2005-06 and this percentage reduced to 38 percent in 2015-16 and at state level this percentage also reduced about 10 percentage .this is good sign .The above Nutritional STATUS ESTIMATS ARE BASED ON THE 2006 International Reference Population Children under 5 years who are wasted (weight for height) and severely wasted in both the categories and at the national level as well as state level increased in percentage in both the surveys. But the children who are underweight, reduced in percentage in both the surveys at National level as well as state level, at least this is satisfactory phenomena.

BMI

14.'Women whose Body Mass Index (BMI) is below normal (BMI < 18.5 kg/m²),

15.'Men whose Body Mass Index (BMI) is below normal (BMI < 18.5 kg/m²),

16.'Women who are overweight or obese (BMI = 25.0 kg/m²),

17.'Men who are overweight or obese (BMI = 25.0 kg/m²)

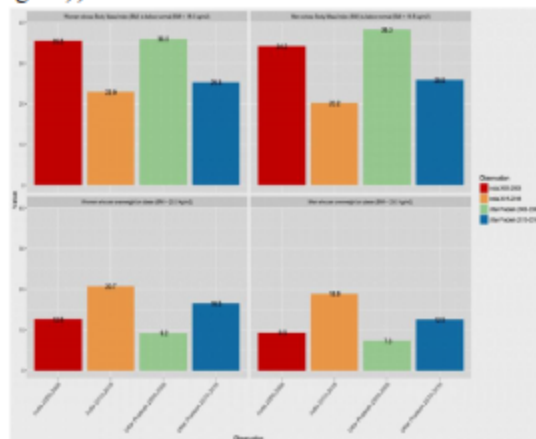


Figure: 1.4

Men and women who are underweight and overweight are shown in figure. This may be judged through Body Mass Index. Women whose BMI (less than 18.5) was 35.5 percent in 2005-06. It is nice to see the data that this percentage came down to 22.9 percent. At state level this percentage also came down about 10 percent. That shows the percentage of underweight women reduced substantially in later survey, so health status improved in terms of underweight women percentage.

Men whose BMI (less than 18) was 34.2 at national level and it came down about 14 percent at national level and at state level 12.2 percentage .so men' status, who were underweight, are more benefitted in comparison to women during both the surveys.

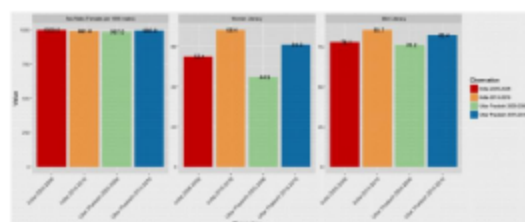
At the same time. the percentage of overweight men and women also raised substantially. For women, who are obese, this percentage raised at national level as well as state level about 8 percentage and for men at National level ,it is about doubled and state level about 5 percent men were got more obsessed. It is alarming that obesity leads many health complications. Rising risks for cardiovascular diseases and diabetes of the total disease burden in India in 1990, a tenth was caused by a group of risks including unhealthy diet, high blood pressure, high blood sugar, high cholesterol, and overweight, which mainly contribute to ischemic heart disease, stroke, and diabetes. The contribution of this group of risks increased massively to a quarter of the total disease burden in India in 2016. The combination of these risks was highest in Punjab, Tamil Nadu, Kerala, Andhra Pradesh, and Maharashtra in 2016, but importantly, the contribution of these risks has increased in every state of the country since 1990. The other significant contributor to cardiovascular diseases and diabetes, as well as to cancers and some other diseases, is tobacco use, which was responsible for 6% of the total disease burden in India in 2016. All these risks are generally higher in males than in females. The sweeping increase of the burden due to this combination of risks in every part of the country indicates emphatically that major efforts need to be put in place to control their impact in every state before the situation gets totally out of control (ICMR).

Sex Ratio and Literacy

18.'Sex Ratio (Females per 1000 males)',

19.'Women Literacy',

20.'Men Literacy'



Sex ratio (females per 1000 males) came down at national level but at state level it has improved, during both the surveys. It is significant to notice after this survey new BJP led Government's Policy "Beti Bachao Beti Padhao" has improved the overall sex ratio all over the country. It is very necessary to improve the status of girl child and empower the women.

Women literacy rate at national level and state level also raised about 13 percent to 16 percent respectively. Whereas men literacy rate rose from 7.6 percent at all India level to 6.2 percent at state level during the surveys. It shows women's literacy has increased more in comparison to men during both the surveys.

Household Conditions-

- 21.'Households with Electricity',
- 22.'Households with Improved Drinking Water Source',
- 23.'Households with Improved Sanitation Facility',
- 24.'Households with Clean Fuel for Cooking',
- 25.'Households with any member covered by a health scheme')

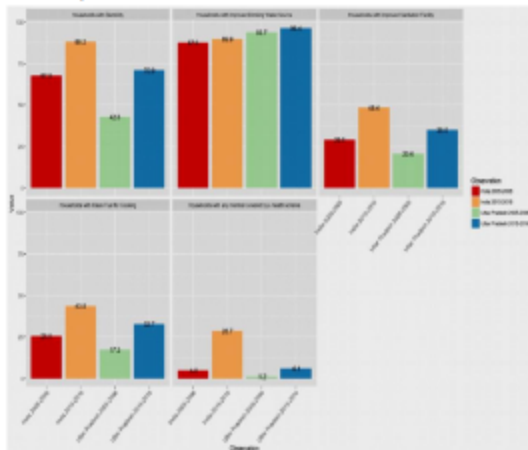


Figure: 1.6

Wellbeing of any society also depends on the basic facilities that the society prevails. We have taken such parameters which are indirect associated with the health status of any society. If we look at the household with electricity in India, the 20.3 percentage more household got benefitted during both the surveys at National level and 28.1 percentage more household started to get benefitted from electricity supply in their household at state

level since 2005-06 to 2015-16.

Households with drinking water facility (piped water in to dwelling/yard, public tab/tube well, community R.O. water purifier plants) percentage also raised about 2percentage at national level as well as state level. So, this area needs more attention. Government must focus the clean drinking water facility should be available to its population.

Households with improved sanitation facility(flush to piped sewer system, flush to pit latrine, flush to specific tank) percentage gone up remarkably about 19 percent at national level and about 14 percent at state level during both the surveys.

Households with clean fuel for cooking (Electricity, LPG, Gas Biogas) facility percentage has gone up about 18 percent at All India Level and about 15 percent at Uttar Pradesh level. This remarkable achievement is nodoubt appreciable. As per a WHO report, smoke inhaled by women from unclean fuel is equivalent to burning 400 cigarettes in an hour. TheGovernment is also proving Ujjwala scheme to targeted group.PrandhanmantriUjjwalaYojna aims to safeguard the health of women and children by 2016 in Ballia Uttar Pradesh and subsequently the scheme was launched in other parts of the country, by proving them with a clean cooking fuel-LPG so that they don't have to compromise their health in smoky kitchens or wander in unsafe areas collecting firewood. On 1st February 2018, presenting the budget this year, Finance minister raised the target of beneficiaries under the Ujjwala scheme to 8 Crore. (The Hindu). No doubt, this is a welcome step of the Government. So, this government may be called prowomen government.

If we look the health scenario by the component of Households with by health scheme or health Insurance, then it is surprising to notice the fact that families percentage that covered by any health scheme/insurance at national level rose from 4.8 percent in 2005-06 to 28.7 percent in 2015-16,it means about 24 percent more households are covered by any health scheme. Whereas at state level this increase is only marginal, and it is about 4.9 percentages. Therefore,at State level, Government should enhance more health schemes to its



population. The citizens should get more health coverage by different health scheme or insurance that will support in their emergency times.

Other Results- Niti Aayog's released, "Healthy States, Progressive India: Report on the Ranks of States and Union Territories" on 10th February 2018. According to the report, States like Uttar Pradesh, Rajasthan, and Bihar have found themselves at the bottom among large states of the Health Index. The report shows that Uttar Pradesh is at the bottom among the larger states. However, there is some good news for the state, which has shown a lot of improvement in the recent past. The report is the first attempt to establish an annual systemic tool to measure and understand the heterogeneity and complexity of the nation's performance in health.

The top five states in the Health Index are Kerala, Punjab, Tamil Nadu, Gujarat, and Himachal Pradesh. These are followed by Maharashtra, Jammu Kashmir, Andhra Pradesh, Karnataka, West Bengal, Telangana, Chhattisgarh, and Haryana. The report titled "Healthy States, Progressive India: Report on the Ranks of States and Union Territories" was released by Niti Aayog CEO Amitabh Kant. According to Kant, Health Index can serve as a tool to leverage cooperative and competitive federalism and help in accelerating the pace of achieving health outcomes. (Report on the Ranks of State and Union Territories). The reference year for the report was 2015-16. Among larger states, the Index score for overall performance ranged widely between 33.69 in Uttar Pradesh to 76.55 in Kerala. Similarly, among the Smaller States, the Index score for overall performance varied between 37.38 in Nagaland to 73.70 in Mizoram, and among UTs this varied between 34.64 in Dadra and Nagar Haveli to 65.79 in Lakshadweep.

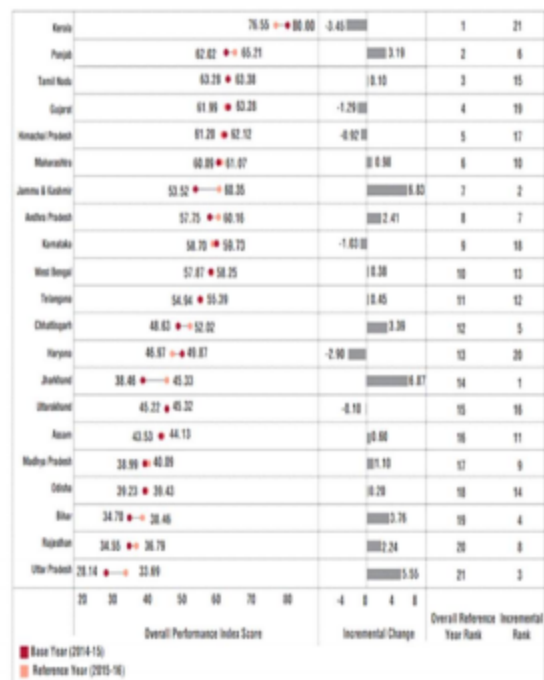
The report notes, "It is a challenge for States at high levels of the Index score even to maintain their performance levels." For example, it says that Kerala is on top of the Index as far as the overall performance is considered. However, it is at the bottom in terms of incremental progress "mainly as it had already achieved a low level of Neonatal Mortality Rate (NMR) and Under-five Mortality Rate (U5MR) and replacement level fertility, leaving limited

space for any further improvements.

Along larger states, Jharkhand, Jammu & Kashmir, and Uttar Pradesh are the top three ranking States in terms of annual incremental performance, while Kerala, Punjab, and Tamil Nadu ranked on top in terms of overall performance.

Among Smaller States, Mizoram ranked first followed by Manipur on overall performance, while Manipur followed by Goa were the top ranked states in terms of annual incremental performance (Report on Health Index by Niti Aayog). Among UTs, Lakshadweep showed both the highest annual incremental performance as well as the best overall performance.

Larger States: Incremental scores and ranks, with overall performance from base year to relevance year and ranks.



Source: Report "Healthy States, Progressive India".

Figure: 1.7

Inequalities among States- According to Indian Council of Medical Research (ICMR), Health status improving, but major inequalities between states Life expectancy at birth improved in India from 59.7 years in 1990 to 70.3 years in 2016 for females, and from 58.3 years to 66.9 years for males. There were, however, continuing inequalities between states, with a range of 66.8 years in Uttar Pradesh to



78.7 years in Kerala for females, and from 63.6 years in Assam to 73.8 years in Kerala for males in 2016 adjusting for the changes in the population age structure during this period. The under-5 mortality rate has reduced substantially from 1990 in all states, but there was a four-fold difference in this rate between the highest in Assam and Uttar Pradesh as compared with the lowest in Kerala in 2016, highlighting the vast health inequalities between the states.

Report also shows that, Communicable disease groups to the total disease burden has increased all over India since 1990, including cardiovascular diseases, diabetes, chronic respiratory diseases, mental health and neurological disorders, cancers, musculoskeletal disorders, and chronic kidney disease. Among the leading non-communicable diseases, the largest disease burden or DALY rate increase from 1990 to 2016 was observed for diabetes, at 80%, and ischemic heart disease, at 34%. In 2016. The contribution of most of the major non burden in India were non-communicable, with ischemic heart disease and chronic obstructive pulmonary disease as the top two causes and stroke as the fifth leading cause. The range of disease burden or DALY rate among the states in 2016 was 9-fold for ischemic heart disease, 4-fold for chronic obstructive pulmonary disease, and 6 fold for stroke, and 4 fold for diabetes across India. While ischemic heart disease and diabetes generally had higher DALY rates in states that are at a more advanced epidemiological transition stage toward non-communicable diseases, the DALY rates of chronic obstructive pulmonary disease were generally higher in the EAG states that are at a relatively less advanced epidemiological transition stage. On the other hand, the DALY rates of stroke varied across the states without any consistent pattern in relation to the stage of epidemiological transition. This variety of trends of the different major non-communicable diseases indicates that policy and health system interventions to tackle their increasing burden must be informed by the specific trends in each state {ICMR Reportt.2016}.

Conclusion- India is a home of cultural, and social diversity with its 132.42 crores population

(2016) (World Bank and Unites State Census Bureau). India is a union of 29 states and seven union territories - many of which have populations larger than many countries - vary widely in terms of their ecology, economy, and demography, all which impact health outcomes. Accurate, comparable data on what is driving health loss is crucial for policymakers as they strive to make the best decisions possible for improving health. While the central government policies have significant influence on health initiatives across the country, health is a state subject in the Indian federal structure, with most of the public spending on health from the state budgets. A robust disaggregated understanding of the disease burden and risk factors trends in each state of India is therefore essential for effective health system and policy action to improve population health at the state level. The Sample Registration Survey of India reports state-level estimates of key indicators such as neonatal, infant, and under-5 mortality rates annually. The major national surveys in India, the National Family Health Survey, District Level Household Survey, and the Annual Health Survey have provided valuable periodic data on key health indicators, which are mostly related to child and reproductive health. The National AIDS Control Organization of India produces state-level estimates of HIV. In addition, many studies from many parts of India provide a variety of data on the distribution of many diseases and risk factors. However, a comprehensive composite assessment of all major diseases and risk factors together across all states of India, providing estimates over an extended period, which is needed for an informed health system and policy development in each state, has not been available so far (ICMR).

Findings- 1. Life expectancy one of the simplest measures for understanding overall health outcomes is life expectancy at birth. If a country is generally expanding its longevity, it usually means that people are dying prematurely at lower rates. Around the world, people are living longer on average and populations are growing older. In 1990, life expectancy at birth in India was 58.3 years for males and 59.7 years for females. By 2016, life expectancy at birth increased to 66.9 years for males and 70.3



years for females. India has made substantial progress in improving the life expectancy at birth. However, life expectancy varied widely between the states of India. In 2016, the range was from 66.8 years in Uttar Pradesh to 78.7 years in Kerala for females, and 63.6 years in Assam to 73.8 years in Kerala for males. While life expectancy is a useful simple measure of a country or state's health status, it does not reflect the variations and nuances in health loss throughout a person's lifespan, the understanding of which is necessary to minimise health loss at the population level (ICMR)

2. The results of the comparison of National Family Health surveys (2005-06) and (2015-16) shows:
National level as well as state level about 11 percent children get rid of anaemic condition.
National level a little improvement (2.3 percent) in anaemic condition of women but at state level 2.5 percent more women got anaemic whose haemoglobin level is less than 12g/dl during 10 years.
National level as well as State level marginal improvement in anaemic condition of men ranging .06 percent to 1.5 percent during both the surveys.
IMR is still quite high and Under 5 mortality rate at National level was 74 in 2005-06, and it came down to 50 in 2015-16. So Government should make more efforts for improvement.
Government' policies are becoming successful. Anganwadi's sisters are playing a significant role to change the attitude of people regarding institutional births.
#Government's welfare state role proved that it has sincerely concerned with mother's health and running schemes are giving benefit results to mother and child both.
Government's efforts are successful to immunise children.
#Children who are underweight, reduced in percentage in both the surveys at National level as well as state level, at least this is satisfactory phenomena.
#The percentage of underweight women reduced

substantially in later survey, so health status improved in terms of underweight women percentage. At the same time. The percentage of overweight men and women also raised substantially. For women, who are obese, this percentage raised at national level as well as state level about 8 percentage and for men at National level ,it is about doubled and state level about 5 percent men were got more obsessed. It is alarming that obesity leads many health complications.

It shows women' literacy has increased more in comparison to men during both the surveys. The work shows the overall improvement in health status in India as well as in Uttar-Pradesh. The study finds well-being of its citizens is certainly influenced by the willpower and commitment of Government's policies, still a lot must be done.

REFERENCES

1. India: Health of the Nation's States Disease Burden Trends in the States of India 1990-2016 Public Health Foundation of India. Indian Council of Medical Research (ICMR) October 2017.
2. <http://timesofindia.indiatimes.com>
3. Ministry of Health & Family Welfare , Govt of India National Health Policy 2017, New Delhi
4. Report of NitiAyog "Healthy India". Feb, States, Progressive 2018 .
5. Refining State level comparisons in India, Pranjul Bhandari, Planning Commission, Government of India. Working paper series 2012.
6. What Uttar Pradesh tells us about health infrastructure? Shamika Devi & Mudit Kapoor, Sep19, 2017. www.livemint.com.
7. World Banks and United States Census Bureau.
8. www.planningcommission.nic.in.
9. www.niti.gov.in.
