# A STUDY ON AGEING POPULATION AND THEIR HEALTHCARE EXPENDITURE 

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#### Abstract

ABSTARCT Ageing population has been identified as a critical element of demographic change and is a key driver for healthcare expenditure. About $10 \%$ of the world's population belongs to the age group of 60 and above and it is estimated to increase in the upcoming years. In case of India, the elderly are prone more to chronic diseases than severe diseases and for the past decades there has been an increase in non-communicable diseases than communicable diseases and most of the elderly death is due to cardiovascular diseases.

This study has highlighted the problems faced by the elderly both economically and socially. The analysis is based on primary data and the comparison of health status between male and female is also considered. The variables used in this study are income, preventive measures awareness about recent policies and schemes and accessibility of healthcare facilities. The statistical tools, SPSS and the multiple regression method have been used to analyze the data collected.

The study revealed that the elderly people are taking up preventive measures and are conscious about their health but the awareness among the elderly about the policies and schemes which were introduced by the government in order to improve the conditions of the elderly is very low. It was also found that the healthcare facilities is accessible to most of the elderly and the when it comes to monthly healthcare expenditure, it is almost equal between male and female.


Key words:- Expenditure, population, communication, social factors, data, comparision, Health status.

## INTRODUCTION

Ageing population are the people who have crossed the standard working age. The main cause of ageing population in developed countries is because of demographic transition. To know the demographic factors that result the people ageing, demographers frequentlydiscuss aboutsteady populations. This population model shoulders that age-specify fertility and mortality rates to be persistent over time, and this effects in a population with an age dispersal that calms and finallydevelops to be constant as well. Conversely, this hypothetical model proposes that any alteration in age construction and population ageing in particular can only be triggered due to changes in fertility and mortality rates. The effect of variations in fertility rates on population ageing less spontaneous than that of mortality rates.

## Demographic Transition

Population ageing islinked to demographic transition and is a process that leads to society from demographic ruleconsidered to high rates of fertility and mortality to one another with lower fertility and mortality rates. In sequence of this changeover, the age factor is exposed to dissimilarinspirations.

In the typical sequence, the transition begins with triumphs in avoiding infectious and parasitic diseases that helpnewborns and young children the most. The stagnant fertility rates result in enhancement in the life span at birth, thus creating large birth partners and growing children comparative to adults. Other things remaining constant, the early weakening in mortality creates more of a younger population.

## Ageing: Meaning

Rising middle aged population because of decrease in fertility rates and increasing life expectancy is called ageing. A country where most of its population is moving towards the older age is called ageing country. According to international standard, a country which has more than $10 \%$ of people who are aged sixty and above and $7 \%$ of more than sixty five and above is considered to be an ageing country. Population ageing is widespread across the world and it is one of the major factors which influence healthcare expenditure and when it comes to medical care the aged population spends more compared to the young and it would be right to accept that aggregate health care raises with increase in the percentage of aged population in the country.

About $10 \%$ of the world's population is above the age of 60 and it is estimated that by 2050 the percentage might increase to $20 \%$ but increased longevity is also one of the clear indicators for economic development. However the ageing population is associated with significant costs and this makes it necessary for the policy makers to address the issues which rise due to ageing population.

## Review Of Literature

1) Jose J Martin (2010): This study review of literature explains the factors of healtheare expenditurebetween 1998 to 2007. Out of 20 articles, 4 considered income as the major factor for healthcare expenditure and 11 out of 20 articles calculate the income elasticity of demand and out of which only 2 have got values greater than 1, therefore considering healthcare expenditure as a luxury good. Hence there is absence of uniformity in the variables and econometric regression of healthcare in OECD countries. Therefore there is no solid pragmaticindication of healthcare expenditure.
2) Thoman E Getson(1992): the expenditure of the elderly mainly depends on their age and the type of care they receive and therefore it becomes difficult to compute even the approximate expenditure. The medical expenses of the aged might be taken care by the family members, non-governmental organizations, by the government or even by the elderly themselves. Thus the data obtained from personal spending through 'consumer survey' based on the age of the "head of the household" is insufficient. Therefore the use of top down allocation of total budget of health system depending on the age is the next best alternative. It is not possible to collect the data on "number of visits" or "patient days" because the extent of services provided differs with the age.
3) Center For Policy On Ageing (2007): no studies directly addressed the key emphasis of the review mainly post hoc analysis of the cost and benefits to social care, mental and physical health services irrespective of age even though this international article provides useful analysis of age differences in health, mental health services and social care and cost of providing these services to the elderly.
4) Son Hong Nghiem And Luke Brain Connely (2017): though this study has its own limitations by using econometric techniques such as ordinary least square regression to analyze time series data, this a challenging as the healthcare expenditure and GDP are related to each other
5) NurnaddiaNorzin (2015): this study tells us that aged population is the main reason for health expenditure but the effects are comparatively integral. But this might not always be true because the people who belong to the age group of 18-24 also are noteworthy as they are responsible for two-third of the healthcare expenditure.

## Scope of the Study

The main focus of the study is to know the healthcare expenditure of the elderly population and the source of income for their healthcare expenditure. The primary aim of this study is to know the problems and challenges associated with the healthcare expenditure of the elderly and how they prevent themselves from diseases and disorders since ageing is a vulnerable factor to diseases and disorders.

## Objectives of the Study

- To study the accessibility to healthcare facilities for the aged population
- To determine the average healthcare expenditure among the aged population
- To know the awareness among people about the recent governmental schemes and medical insurance policies
- To know the preventive measures taken up by the elderly population.
- To analyze the overall socio economic status of the elderly


## Statement of the Problem

The rapid increase in aged population for the past 3 decades and the numerous problems associated with ageing and their healthcare expenditure.

## Data and Methodology

The study is based on primary data.
The primary data consists of 100 samples ( 50 male and 50 female) covering aspects of healthcare expenditure of the elderly along with the views about public and private hospitals and the biggest challenge they face as the aged population.

Secondary data was collected from various published reports and articles.The sources from where statistical data was collected are:

- Population census report 2011
- Office of Registrar General, India


## Limitations of the Study

- Most of the statistics projected is from the population census report 2011. Therefore the data is not recent.
- The primary data collected is constrained only to Bangalore.
- No comparative study conducted (between districts)
- Sample size is restricted only to 100 ( 50 male and 50 female)


## OVERVIEW OF THE STUDY

## Aged Population: A Contribution to the Society

The aged population contributes to the society in many ways-rights from the family to the local community or even to the society when considered in a broader sense. But the degree of human and social resource and chances of the aged mainly depends on health. The ability to do things they desire will expand when they experience an extended life span along with good health. But if the extended life
span is spent in mental and physical incapability and then the situation of the aged might turn out to be negative and will adversely impact the society.

Although we are under the assumption that increased life span is accompanied by extended period of good health and the fact that the current elderly population is in better health conditions than their parents is discouraging.

But poor health need not always be a discouraging and limiting feature for aged population because most of the health problems are a result of the chronic disease. Since most of the chronic diseases are non-communicable they can be prevented or hindered by appealing in health behaviors and taking up suitable preventive measures. In the advance years, physical activity and good nutrition has resulted in welfares in health and well-being. Other health problems other than chronic diseases can be cured if detected well in advance.

Even the people experiencing decline in health capabilities can still live their desired life if they are living in a supportive environment. Long term care and support can guarantee dignified lives and opportunities for their personal growth. But unhealthy behaviors are still present among the elderly and health systems are also not united with the desires of the elderly. Therefore in many parts of the world the elderly tend to leave their home, caregivers are often untrained and at least 1 out of 10 is subjected to some form of exploitation. Therefore the ageing population demands for a public health response. However, the debate on public health response, as to what I should compromise is still on.

## Ageing: WHO Report

The World Health Organization analyzed in 23 low and middle income countries and estimated that between 2006 and 2015 the total expenditure on the three non-communicable diseases (heart disease, stroke and diabetes) would be US $\$ 83$ billion. Therefore the key to reduce the health and social costs would be the reduction of severe disability and health conditions. The health and economic burden of incapability can be reduced by the environmental features which can decide whether an older person can remain autonomous in spite of the physical inabilities.

The costs are low for the family and society unless and until the older people remain mobile and take care of themselves because many health problems of the aged people were due to their living conditions and their early life experiences. Therefore ensuring good child health can be beneficial when the same grow old. In the meantime, the generation who grew up in poverty and ill health especially in the developing and developed countries will be entering into older age in coming decades resulting in higher health burden on the aged population.

Ageing is considered along with the other broad social trends that will affect the older population. The economies are globalizing, people are migrating towards cities and technology is rapidly evolving. The changes that are taking place in the family and the demographic changes indicate the number of older people will reduce along with the family size. People in the present generation have few children and therefore lead to less old people in the future. As the support from the family for the elderly is declining the society will require better information and tools to ensure the ell-being of the growing older citizens in the world.

The absolute number of people growing old is a challenge for the nations' infrastructure particularly the health sector. India's current elderly population of 60 million is expected to increase up to 227 million by 2050. This increase in the elderly population was estimated by the demographers and has given rise to questions like how the average life expectancy can convincingly increase and the possible length of the life span. But some experts assume the life span to increase to an upper limit. Facts on life expectances between 1840 to 2007 show increase in 3 months of life per year. Therefore the country with highest life expectancy keeps changing over times.

The early traditional societies experienced high risk of death and only a minorshare of people reached old age. In the modern societies, most of the people crossed the middle age but the death rate of the elderly was very high. In the $20^{\text {th }}$ century the successes against the infectious and parasitic diseases are anachievement for public health projects which vaccinated millions of people against small pox, polio and major childhood killers like measles. Better living ethics like more nutritious food style, clean drinking water prevented serious infectious and death rates among the children and more children inclined to reach their adulthood.

The evolution from high to low mortality and fertility and swing from communicable to noncommunicable diseases has happened only in the recent years. According to the World Health Organization most of the countries have been sluggish to produce and use proof to advance an operative health response to new disease pattern and the ageing population.

## Sage: Study Conducted by WHO

In the light of this, the organization conducted a multi country longitudinal study designed to concurrently generate data, promote consciousness about the health issues to the aged people and update them about the public policies. The WHO study on global aging and adult health contains nationality representative partners of respondents ages 50 and above over six countries namely China, Mexico, Russia, India, Ghana and South Africa. The partners of the respondents aged 18 to 49 will also be shadowed over time in each country. The first trend of the global ageing and adult health data collection (2007-2010) has been completed with future scheduled in the coming years.

In addition to myriad demographic and socio economic features, the study has collected data on risk factors, health exams and biomarkers such blood spots from finger pricks are valued and the impartial measures that improve the accuracy of self-reported health in the survey.

Therefore the researchers derive a complex measure from responses to 16 questions about health and physical inabilities. The score ranges from 0 (worst health) to 100 (best health) and shows that the scores tend to decline as the age increases and in all countries the scores are higher for the males than the females. Though women live longer than men their health status is poor.

In most of the developing counties as there is a rise in the elderly population the number of disabled are also increasing. Therefore the health sector needs to collect the appropriate data to be aware of health risks faced by the older people and prevent it in advance. The data show shows that the risks like physical inactivity, hypertension or obesity are all due to he rise in age but the percentage varies from country to country. Hence this study is mainly to overcome these risk factors and avoid future disability.

## Provisions in 2018 Budget for Senior Citizens

Section 80D provides for the tax deduction from the total taxable income for the payment of medical insurance premium paid by an individual or a HUF. This tax deduction is available over and above the deduction of Rs1, 50,000 under section 80C.

The deduction under section 80D is permissible for making a payment to affect or keep in force an insurance policy which:-

- In case of an individual-is for the health of the assesse or on the health of the wife or husband, dependent children of the assesse.
OR
- In case of the HUF is for any member of the family.

The deduction that can be claimed under section 80D at the time of the filing of income tax is the sum of the following

- In case of payment of medical insurance premium is paid by the assesse for himself, spouse and dependent children-Rs500. In case, the person insured is a senior citizen the deduction allowed should be Rs30, 000. In case the payment of medical insurance is a senior citizen the deduction allowed should be rs30000
- In case the payment of medical insurance premium is paid by the assesse for parents, whether dependent or not-Rs25000. In case the parents of the assesse are senior citizens the deduction allowed under section 80D should be Rs30000. The deduction for senior citizens has been increased from rs30000 to Rs60000 from FY2018-2019 onwards.

As health insurance cover for the elderly comes at a relatively higher price, it is necessary to encourage senior citizens to get themselves, medically insured and accordingly, the quantum of tax deduction allowed under section 80D in case the person insured as a senior citizen is Rs30000 as stated above.

## SPECIAL DEDUCTION FOR SUPER SENIOR CITIZENS

Super senior citizens are those citizens who are above the age of 80 years. Practically, these are very few insurers who provide medical insurance to people who are above the age of 80 years. And therefore the super senior citizens are unable to get medical insurance and also not able to claim the benefit of section 80D.

To ensure that the super senior citizens are also able to risk the benefit of this section, an amendment was introduced in section 80D in finance act 2015 which allowed deduction under section 80D to senior citizens for all the medical expenses incurred by them.

## DATA AND INTERPRETATION

## Analysis Of Data

OBJECTIVE 1: To study the accessibility to healthcare facilities for the aged population.
Table No 4.1 (a)

| GENDER * ACCESSTOHEALTHCAREFACILITIES <br> Crosstabulation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count | ACCESSTOHEALTHCAREFA <br> CILITIES |  |  |  |
|  |  | 0 | 1 | Total |
| GENDER | female | 38 | 12 | 50 |
|  | male | 42 | 8 | 50 |
|  | Total |  | 80 | 20 | 100 |

INTERPRETATION: Out of the total sample size of 100

- 42 males and 38 females have access to healthcare facilities
- 8 males and 12 females are not accessible to healthcare facilities.


## Graph No 4.1 (a)Accessibility of healthcare facilities



INTERPRETATION:The graph shows the number of males and females who are accessible to healthcare facilities and the number of males and females who are not accessible to healthcare facilities.

Graph no 4.1 (b) Total Percentage of accessibility to healthcare facilities


INTERPRETATION: Out of the total sample size of 100

- $80 \%$ of the elderly population are accessible to emergency healthcare centers, small clinics, and doctor's office etc.
- $20 \%$ of the elderly population are not accessible to these healthcare facilities.

OBJECTIVE 2: To determine the monthly healthcare expenditure among the aged population
Table No 4.2 (a) Monthly expenditure on health

| GENDER <br> Crosstabulation |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Count |  | MONTHLYEXPENDITUREONHEALTH |  |  |  |  |  |  |
|  |  | MONTHLYEXPENDITUREON <br> HEALTH |  |  |  |  |  |  |
|  |  | 0 | 1 | Total |  |  |  |  |
| GENDER | female | 31 | 19 |  |  |  |  |  |
|  | male | 20 | 30 | 50 |  |  |  |  |
|  | Total |  |  |  |  |  | 51 | 49 | 100 |

INTERPRETATION: The dummy variable (0) ranges from $0-5000$ and the dummy variable 1 ranges from 5000 - above 10000 . Therefore this table indicates that 20 male and 31 female spend rs0 - rs5000 for their health expenditure per month and 30 male and 19 female spend 5000 - above 10000 for their monthly health expenditure.

Graph No:4.2 (a) Monthly expenditure on health


INTERPRETATION: The above graph shows that the monthly healthcare expenditure of both male and female is almost equal

## Graph No: 4.2(b) Percentage of Monthly expenditure on health



INTERPRETATION: Out of the total sample size 100 elderly population

- $51 \%$ of their monthly health expenditure is Rs0 - 5000
- $49 \%$ spend Rs5000 - 10000 per month for their health expenditure.

OBJECTIVE 3: To know the awareness among people about the recent governmental schemes and medical insurance policies

- Pradhan Mantri Bharatiya Jan Aushadhi Yojana Kendra

Table no 4.1 (a) Awareness of PMBJAYK

| GENDER * PMBJAYK Crosstabulation |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- |
| Count |  |  |  |  |
|  |  | PMBJAYK |  |  |
| Total |  |  |  |  |
|  |  | 0 | 1 | 50 |
| GENDER | female | 11 | 39 | 50 |
|  | male | 22 | 28 | 50 |
| Total |  | 33 | 67 | 100 |

INTERPRETATION: Out of a sample size of 100,

- 22 male and 11 females are aware of this scheme
- 28 male and 39 female are unaware of this scheme.

Graph No: 4.3 (a) Awareness about PMBJAYK


INTERPRETATION: The above graph shows the number of people aware of this scheme and the number of people unaware of this scheme.

Graph No: 4.3 (b) Percentage of people aware about PMBJAYK


INTERPRETATION: Out of the total sample size $100,33 \%$ of the elderly population are aware of this scheme and the remaining $67 \%$ of the elderly population are unaware of this scheme.

- RashtriyaSwasthiyaBima Yojana


## Table no . 3 (b) Awareness of RSBY

| GENDER * RSBY Crosstabulation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count |  |  |  |  |
|  |  | RSBY |  |  |
|  |  | 0 | 1 |  |
|  |  | Total |  |  |


| GENDER | female | 8 | 42 | 50 |
| :---: | :--- | :--- | :--- | :--- |
|  | male | 22 | 28 | 50 |
| Total |  | 30 | 70 | 100 |

INTERPRETATION: Out of the total sample size of 100

- 22 male and 8 female are aware of this insurance scheme
- 28 male and 42 female are unaware of this scheme.

Graph No: 4.3 (c) Awareness of RSBY


INTERPRETATION: The above graph projects the number of people aware of this insurance scheme and the number of people unaware of this scheme

Graph No: 4.3 (d)Awareness of RSBY


INTERPRETATION: Out of the total sample size $100,30 \%$ of the elderly population are aware of this scheme and the remaining $70 \%$ of the elderly population are unaware of this scheme.

OBJECTIVE 4: To know the preventive measures taken up by the elderly population.
Table No: 4.4 (a) Preventions Taken by the Elderly Population

| GENDER Crosstabulation |  |  | PREVENTIONSTAKEN |  |
| :---: | :---: | :---: | :---: | :---: |
| Count |  |  |  | Total |
|  |  | PREVENTIONS TAKEN |  |  |
|  |  | 1 | 0 |  |
| GENDER | female | 13 | 37 | 50 |
|  | male | 4 | 46 | 50 |
| Total |  | 17 | 83 | 100 |

INTERPRETATION: Out of the total sample size of 100

- 4 male and 13 female do not take up any prevention
- 46 male and 37 female take up preventions.

Graph No: 4.4 (a) Preventions Taken by the Elderly Population


INTERPRETATION: The above graphs the number of people taking up healthcare prevention and the number of people who not taking up any healthcare prevention.

## Graph no 4.4 (b) Percentage Preventions Taken by the Elderly Population



INTERPRETATION: Out of the total sample size 100

- $17 \%$ of the elderly population are not taking up any prevention
$83 \%$ of the elderly population are taking up preventions like regular checkup, Maintain hygiene, Healthy diet, Exercises and work out.

Objective 5: To analyze the overall socio economic status of the elderly
Table 4.5 Values of multipleregression

| Multiple regression <br> results |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Variables | Coefficient | Std. Err. | t | $\mathbf{P > \| t \|}$ |
| cons | 431.397 | 1907.619 | 2.26 | 0.026 |
| age | -28.92107 | 25.09265 | $1.15^{*}$ | 0.002 |
| gender | -44.5499 | 321.3905 | -1.4 | 0.166 |
| Source of income | -10.9032 | 312.9008 | - | $0.33^{*}$ |


| PMBJAYK | 18.1005 | 325.944 | $1.33^{*}$ | 0.001 |
| :--- | :---: | :---: | :---: | :--- |
| RSBY | -22.2757 | 311.5727 | -0.71 | 0.482 |


| - Source | SS | MS | Number of obs = 97 |
| :---: | :---: | :---: | :---: |
| Model | 51139317.1 | $\begin{aligned} & \hline 3409 \\ & 288 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Prob> F = } \\ & 0.009 \end{aligned}$ |
| Residual | 111610992 | $\begin{aligned} & \hline 1377 \\ & 913 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { R-squared }= \\ & 0.6842 \end{aligned}$ |
|  |  |  | Adj R-squared = $0.6672$ |
| Total | 162750309 | $\begin{aligned} & 1695 \\ & 316 \end{aligned}$ | $\begin{aligned} & \text { Root MSE = } \\ & 1173.8 \end{aligned}$ |


| Breusch-Pagan / Cook-Weisberg test for heteroskedasticity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Ho: Constant variance |  |  |  |  |
| Variables: fitted <br> monthlyexpenditureonhealth values of |  |  |  |  |
| chi2(1) $=1.79$ |  |  |  |  |
| Prob> chi2 $=0.1810$ |  |  |  |  |
| Medical insurance | -54.7515 | 291.9287 | $1.87^{*}$ | 0.005 |

Note: *indicated 5\% level of significance and **indicated $1 \%$ level of significance

## INTERPRETATION

- Age $(-28.92<0)$ : This shows that as the age increases the socio economic status of the elderly population decreases and it is significant at 0.05 levels.
- Savings for healthcare expenditure $(-29.45<0)$ : when the aged population saves for their healthcare expenditure they have better chance to access good quality healthcare. But in this case the co-efficient is negative and it is significant at 0.05 level
- Health checkup expenditure ( $12.08>0$ ): this indicates that the aged population are health conscious and prioritizing on their health and it is significant at 0.05 level.
- Special concessions from private hospitals ( $-54.73<0$ ): this indicates that the aged population is spending more money out of their pockets and there is no reduction in the financial burden of the elderly.
- Preventive measures $(-11.02<0)$ : this shows that the elderly population are not conscious about health before they are prone to any disease or disorder and it is significant at 0.05 level
- Expenditure on preventive measures ( $15.83>0$ ): the elderly population are not taking up any preventive measures but the expenditure on preventive measures has projected a positive value which means that
they are spending more on their preventive measures without taking up any preventive measure. This gives an ambiguous projection about preventive measures and its expenditure. This might be a defect of the statistical tool that was used to analyze the data and it is significant at 0.05 level
- Access to healthcare facilities ( $-11.45<0$ ): this indicated that the healthcare facilities and services which are made available are not accessible to the elderly population which results in adverse effects on health especially in the case of emergencies and it is significant at 0.05 level
- Cost to access healthcare facilities ( $47.24>0$ ): This means that though the healthcare facilities are not very accessible the cost to access these facilities is less.
- Awareness about online websites (76.420): this shows that the elderly populations are aware about the online websites which will help them access better hospitals and doctors. This will result in better health conditions of the elderly.
- Awareness about SEHAT $(-77.51<0)$ : this indicates that most of the elderly population are not aware of this website.
- PMBJAYK ( $18.10>0$ ): many elderly are aware and benefitted by this scheme and it is significant at 0.05 level
- RSBY $(-22.27<0)$ : this indicates that not many are aware of this scheme
- Medical insurance cover ( $-54.75<0$ ): not many elderly have taken up medical insurance cover and it is significant at 0.05 level

The adjusted $\mathrm{R}^{2}$ is $67 \%$ which indicates that $67 \%$ of the variation of Yi is explained by Xi , where $\mathrm{i}=1,2$, 3... 13 .

Prob $>\mathrm{F}=0.009$ : this indicates that the result is significant.

## SUMMARY OF FINDINGS, RECENT POLICIES AND CONCLUSION

## Summary Of Findings

- The healthcare facilities like emergency centers, small clinics, doctor's office etc. are accessible to $80 \%$ of the people in a sample of 100 which is a good proportion.
- $51 \%$ of the samples spend less than Rs 5000 whereas $49 \%$ of the samples spend Rs5, $000-\mathrm{Rs} 10,000$ for their health expenditure every month.
- $33 \%$ of the sample are aware and $67 \%$ of the sample are not aware of PMBJAYK which was implemented by the central government
- Only $30 \%$ of the sample is aware of this RSBY scheme and the remaining 70\% are not aware of this scheme
- $83 \%$ of the samples are taking up preventive measures but the rest $17 \%$ are not taking up any preventive measures like regular checkup, maintain hygiene, healthy diet, exercises and work out. This shows that most of the elderly people are conscious about their health.


## Future Predictions

- It is estimated that the elderly population will reach approximately 1.6 billion between 2025-2050 but the total population will increase by $34 \%$.
- Currently in the word, older population represents $7 \%$ or more of the total population except for a few countries in Asia, Africa, Latin America and the Caribbean.
- It is projected that 33 countries will have less than $7 \%$ of the older population out of the total population by 2050 which is a considerable reduction when compared to 115 such countries in 2015. Meanwhile 94 countries will have older population more than $21 \%$ and 39 countries with more than $28 \%$ in the total population.
- The miniaturization of medical devices and the powerful wearable will continue to transform both prevention and cure in healthcare because of which we have access to large amounts of real time data serving as the foundation for AI (artificial intelligence) and ML (machine learning) in order to create solutions for the problems in the health sector and by adopting these methods it is expected that 2020 around healthcare and $40 \%$ of the science organizations will achieve substantial productivity.
- India's healthcare industry has been considerably growing and currently it has become one of the largest sectors and its growth is predicted that by 2020 the healthcare sector in India will become a $\$ 280$ billion industry.


## Suggestions

Though the policies have aimed at encouraging healthcare expenses and health institutions, yet a healthier and more productive society is required to support economic growth and development. Therefore in addition to this the government has to minimize the gap of unequal distribution of healthcare among the elderly by considering the spread of chronic diseases and assuring the quality and performance of the healthcare supply. Similarly, the state funding should be increased for healthcare facility, public health and health insurance schemes. The government should ensure that state interference in health is a satisfactory proportion of GDP as India and has large proportion of elderly population both in rural and urban. Thus the growth of effective partnerships between different longitudinal levels of health provisions from village to city is vital.

## Conclusion

India has quite a large proportion of aged population and has clearly resulted in higher healthcare expenditure both as a country and among the elderly. This has created a patient pool in the healthcare market and the growth of chronic disease among the elderly has resulted in increased the pressure on the government to handle this sick population. Meanwhile the people at present who are living in poverty and ill health will grow old in few decades and increase the health burden to some more extent. The government's obligation to report the contemporary issues in the healthcare sector is superficial through honest response. The government has already allotted investment to progress public health and rural health services, sitedimportance on regulating healthcare costs, implemented initiatives to progress hospital management to promote quality of patient care and develop plans to build better health infrastructure. Yet, the gap between the need for healthcare services and the abilities of current healthcare insurance and delivery system is enormous.

## REPORTS

- Global health report - WHO, 2011
- Population ageing in India: facts, issues and options - Institute for the Study of Labor. 2016
- Elderly in India - Profile and Programmes: Ministry Of Statistics and Programme Implementation, Central Statistics Office, 2016.
- World Report on Ageing And Health - WHO, 2015


## ARTICLES

- The Effects of Ageing and Population Growth on Healthcare Costs - Daniel M Mendelson and William B Schwartz, 1993
- Review of literature on the determinants of healthcare expenditure - Jose J Martin, 2010


## WEB LINKS

- https://www.ageing.ox.ac.uk/download/15 www.economicsonline.co.uk/Global economics/The ageing population.html

1. http://www.jetir.org/papers/JETIR1805348.pdf
2. www.jetir.org/papers/JETIR1805245.pdf
3. www.ijcrt.org/papers/IJCRT1813010.pdf
4. www.ijcrt.org/viewfull.php?\&p id=IJCRT1813018
5. http://www.iicrt.org/papers/IJCRT1892499.pdf
6. http://www.ijcrt.org/papers/JJCRT1892501.pdf
