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Health Status and Availability of Health Service in Jharkhand

ORIGINAL ARTICLE

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Abstract

Health is considered as an essential resource for everyday life. It is better to promote social and personal resources as well as physical capabilities. Good health is an essential ingredient, which contributes to people's wellbeing and country's economic growth. The good health is not only free of diseases, but also is stress less mind, fit body, and social well-being. As per WHO report 80% of diseases are caused by lack of sanitation, poor hygiene, unclean drinking water and dirty water use for cooking and washing, etc. To measure the health status, we take few parameters like life expectancy, fertility rate, birth rate, communicable and non-communicable diseases, etc. The health status in Jharkhand has got positive betterment compared to the previous years. But still in few health status indicators the state needs to improve. However, the limitation of required adequate infrastructure restricts the situation. So, the required adequate health infrastructures and health human resources will exist as challenges for the Government of Jharkhand.

Key Words

Health Status, Health Services, Health Infrastructure, Morbidity, Common Disease, Human Resources of Health.

Introduction

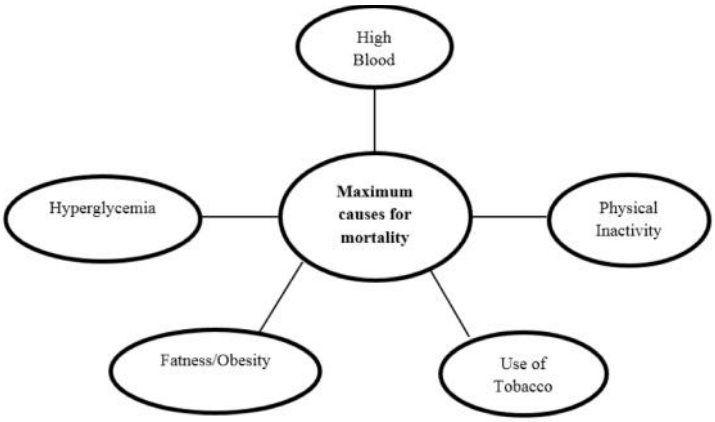
The standard of health is a basic right for all human beings. Realizing the importance of health, the WHO declared it universally in 1948 that health is also a part of human rights and named it "*Right to Health*" adequate with the standard of living. In 1966, the Right to Health again recognized as human right at International Covenant of Economics, Social and Cultural Rights. The good health is not only free of diseases, but also is stress less mind, fit body and social well-being. A beautiful quotation in view of Buddha "*Health is the greatest wealth, faithfulness the best relationship*."

According to WHO women in any age group have higher life expectancy than men. At the age of 20, the life expectancy of women is 7.6% higher than men but by the age of 80, it increases to 14%. But during the years of extra life expectancy of women, it is not necessary to always be healthy. Despite higher life expectancy than men, women are unhealthier and sicklier in her entire life cycle. WHO also explains about the main five causes for mortality in the World. Maximum mortality reason of the world is high blood pressure, hyperglycemia, physical inactivity, fatness or weightiness and use of tobacco. They increase the risks of stroke, heart disease,

cancer, kidney disease and other health problems. High blood pressure and hyperglycemia increases the chances of heart attack, stroke, kidney failure, etc. Weightiness have been increasing in all over the world in recent decades, it is a major risk for heart diseases and cancer. W.H.O calculates around 7 million populations of the world dead every year due to tobacco smoking.

High Blood Pressure

Fig. 1: Maximum reason for mortality in the world



According to World Health Organization (WHO) 80% of diseases are caused by lack of sanitation, poor hygiene, unclean drinking water and dirty water use for cooking and washing, etc. But due to lack of awareness about these things, people especially in rural and poor people encounter the diseases. Due to sickness, it directly affects to people's ability to work such as decreasing working capacity, low productivity, etc. Hence, the people need to practice healthy lifestyle, maintain hygiene.

Fig. 2: 80% cause of diseases

Objectives of the Study

1. To study the health status in Jharkhand.
2. To know if the availability of health institutison in Jharkhand is sufficient.

Methodology

The study is based on the secondary data. The secondary data is collected from different published sources including W.H.O. report, different reports of Ministry of Health and Family Welfare, Jharkhand Economic Survey, National Health Profile, etc. The study selected few variables to measure and analyze the health service in Jharkhand. Graphic and tabular methods are used wherever necessary.

Review of Literature

A study made by Hughes et al. (2000) evaluate the relation between the quality of household environment and health in Andhra Pradesh, he talks about the access to water, sanitation and clean cooking fuels that is affected on health. He deals with all the things to the improvement of population health; consideration of cross-sectional interventions was outcome of World Bank.

Smith et al. (1999) analyse the different concept of the quality of life, prospect of patients and health status. When it comes to quality of life of any person, then the patients place more emphasis on mental health than to physical health. The study fixed that quality of life and health status are distinct concepts, and that the two terms should not be used interchangeably. Many prominent health status instruments, including health perception indexes, may be inappropriate for measuring quality of life. Evaluations of the effectiveness of medical treatment may differ depending on whether quality of life or health status is the study outcome.

Paul J. Anderson et al. (2017) study about the health status and health behavior among citizens and the study revealed that a high level of self-reported healthy behaviors among participants in the physical activity culture generated by the American Birkebeiner. Citizen endurance athletes may offer a beacon of hope amidst the rising tide of health conditions related to sedentary lifestyles and obesity in the United States and internationally.

Das et al. (2010) study among tribal people on an unjustifiably high number of child deaths, especially in the age group of 1-5 and in those states and there is a dense accumulation of Tribal. The study also observes that the difference in mortality between Tribal child and the rest reappears only after the age of one.

Leena et al. (2009) the results of this study showed that in Karnataka a large part of the aged group of people suffering from health issues with knowing of neglect by their family members. The study observed that there is a require for aged counseling centers and more adjustable rule for social security schemes to intensify benefits.

William et al. (2008) observed with using data from National Family Health Servey-3, evaluate income-related health inequality in India. The study explained that the deprived sections of the population are under pressure with sickliness have different requirements and therefore, organizing and interference requirement to accept their requisition.

Oliver T. Mytton et al. (2018) observed the health benefits (incident ischemic heart disease, stroke, dementia, and lung cancer) of the NHS Health Check Programme in England. The studies conclude that that the current NHS Health Check Programme is contributing to improvements in health and reducing health inequalities. Feasible Changes in the organization of the programme could result in more than a 3-fold increase in health benefits.

Singhet al. (2016) inquiries into health, healthcare and nutrition in Jharkhand and presents a snapshot of the current trends and patterns in key population health indicators. Also, the brief will highlight few policy issues and key strategies based on IHD's own work in the state. The study concluded that higher prevalence of poor nutritional outcomes in households with multiple Deprivations including lack of toilet, and piped water system. Adults in households that had scored high on the health and sanitation behavioral practice index had approximately 80% higher odds of having positive nutritional outcomes.

Kumar et al. (2016) study about assessing the oral health status and treatment needs of Santhals residing in Dhanbad, Jharkhand. He concluded that a majority of Santhal tribal used twigs to routinely clean their teeth. Poor oral hygiene and periodontal status was seen among the tribes.

Health Status in India

From independence till date, the Government of India has always tried to improve health. For this, the Government has taken some initiatives and prescribed many schemes. But, still the health situation in India is not so good or in other words it is very poor. The essential requirement for good health is safe drinking water, sanitation, nutrition, clean environment, etc. this is also very poor in India. A large number of population in India is not aware about these essential requirements of good health; hence this is the biggest problem for poor health situation in India.

Government of India made different department for health, family welfare and food security; and run many programme for betterment of health status. The central Government implemented this programme with the help of state Governments. Every year central and state Government allocate budget for health sector. But the budget is insufficient to improve health status of middle and poor people. The Government needs adequate activities to improve health services especially in rural areas.[2] In the Government's 'Rural Health Mission' aims to provide accessibility, affordability and quality health care to rural or village people with the help of Primary Health Centers, Community Health Centers and Sub Centers. But, with the passage of time we find variation in the health service in India and mislead from the mission. The PHCs and CHCs are underutilization and incompleteness in the availability of services.[2] In the last report of UNDP released on 2021, India ranks low in Human Development Index the value is 0.633, which put India in the medium human development category. The position of India is 132th out 0f 191 countries and territories. The following table shows the demographic indicators and health infrastructure in India:

Table 1: Demographic indicators and health infrastructure in India

Indicators	Total
Demographic Indicators	
Growth Rate	8.7
Population Growth Rate	8.9
Life Expectancy of Male	69.37
Life Expectancy of Female	72.66
Crude Birth Rate	16.1
Crude Death Rate	7.2
Infant Mortality Rate	35.3
Under-five Mortality Rate	46.7
Maternal Mortality Ratio (per 100,000 live births)	167
Total Fertility Rate	1.93
Sex Ratio (per 1000)	900
Health Infrastructure Indicators	
Sub Centers	1,57,819
Primary Health Centers	30,579
Community Health Centers	5,951
District Hospitals	764
Government Hospitals	60,621
Government Hospitals Beds	8,49,206
Government Licensed Blood Banks	1,211
Medical Collages	307
Nutritional Rehabilitation Centres	1,089
Sub-division Hospitals	1,224

*(**Source:** National Health Profile 2021 & 2022)*

There are many PHCs, CHCs and SCs situated in India, but it is still insufficient to cover required patients especially in rural areas. Also, it faces absence of essential infrastructure, lack of equipment, poor quality of health service, shortage of professionals, etc. In the report of National Heath Profile 2018, in India an average one hospital is available for 55,591 people and one bed is providing for 1,844 people. WHO recommend that the doctor-population ratio should be 1:1000. But in India the doctor-population ratio is so high; according to the Economic Survey report 2022-23, one allopathic Government doctor attends 834 populations which are far behind of the WHO recommendation.

Improving the health status of the population is a big challenge for India. Over time the health status is changing, and nowadays, due to too much pollution, hygiene problem and lack of sanitation, many new dangerous viruses and diseases are found. Hence, for betterment of health status firstly, needs to improve access, quality, and utilization of health service. Tuberculosis became one of the major problems for India, after TB, Malaria is also a problem for India, Smallpox and Guinea Worm disease is on the edge of exterminate, polio and Leprosy is declining and close to exclude.

In the WHO report, India declared polio free country and the Government of India tried to made India Guinea Worm free nation up to 2020. So far, the cases of Guinea Worm disease in India have reduced drastically. But Tuberculosis has becomes too worrying now for India.

Demographic Profile of Health in Jharkhand

Jharkhand is rich in minerals like coal, iron, copper, bauxite, manganese and many more but poor in social sectors like health and education sectors etc. The performance of health is very poor in Jharkhand; there is high infant mortality, under nutrition, fertility, maternal mortality rate, and low immunity in mother and child, institutional delivery, poor access of health, high cost of health treatment, etc. 26% of total tribal population of India reside in Jharkhand and due to lack of awareness, lack of access of health service, high cost of treatment, their health status is very poor.

Table 2: Demographic indicators and health infrastructure in Jharkhand

Indicators	**Jharkhand**	
Demographic Indicators		
	2005-06	**2020-21**
Crude Birth Rate	26.8 per 1,000 live births	18.8 per 1,000 live births
Crude Death Rate	NA	6.3 per 1,000 live births
Life Expectancy at Birth	NA	67.2 years
Infant Mortality Rate	49 per 1,000 live births	28 per 1,000 live births
Under-Five Mortality Rate	54 per 1,000 live births	42 per 1000 live births
Maternal Mortality Rate	312 per 1,00,000 live births	245 per 1,00,000 live births
Total Fertility Rate	3.31	2.17
Institutional Delivery	95.4%	96%

*(**Source:** Different Reports of Jharkhand Economic Survey)*

It is clear from the above table that, Jharkhand has still better condition from the low-income countries. The state has improved in demographic indicators from previous, but it still needs to improve for better health status.

The crude birth rate has declined in Jharkhand and in urban it declined faster than the rural area of Jharkhand. In rural areas it has declined from 28.8 to 23.5 and in urban areas the crude birth rate has declined from 21 to 16 per 1,000 at present. According to the WHO 2020 reports, globally average life expectancy at birth is 72 years, which is around 5 years more than Jharkhand. In few years the trend of Infant Mortality Rate is declining in Jharkhand and the best part is, it is below than the national average. The fertility rate has declined in few years in the state but it is still higher than the national average and in urban area it has lower than the rural area of Jharkhand.[3] the fertility rate of the rural area is 2.8 while the urban area is 1.78 at present.

Morbidity in Jharkhand

The word Morbidity means to have any type of disease or symptoms of illness within a population. It is also referred to the pace of any illness on the population in any specific region.

The factor is depending on two indicators, first is in-patient and the second is out-patient. In general, in-patient would mean if patient needed to be hospitalized for at least 24 hours, during this time the patient must be under the observation of nurse or doctor and out-patient would mean that the patient, who don't need hospitalization and they get themselves treated in daycare by visiting doctors in clinic or hospital.

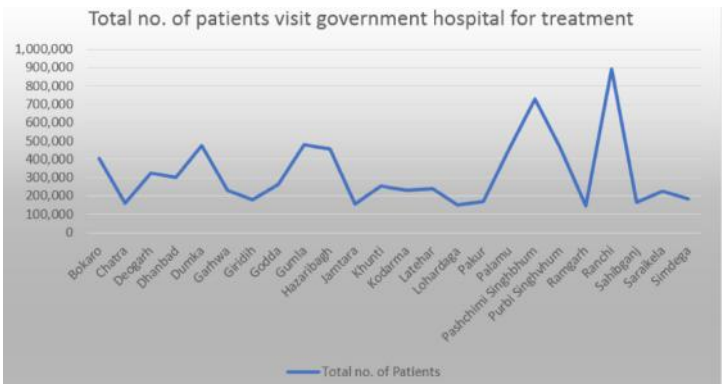
Table 3: Total no. of in-patient and out-patient visit Government hospital in Jharkhand

District	No. of in-patient	No. of out-patient	Total
Bokaro	5,718	4,00,686	4,06,404
Chatra	3,927	1,57,113	1,61,040
Deogarh	17,781	3,08,709	3,26,490
Dhanbad	3,029	2,96,954	2,99,983
Dumka	14,697	4,61,766	4,76,463
Garhwa	10,950	2,21,272	2,32,222
Giridih	7,711	1,72,202	1,79,913
Godda	8,398	2,55,291	2,63,689
Gumla	17,899	4,60,816	4,78,715
Hazaribagh	57,354	3,98,878	4,56,232
Jamtara	3,538	1,54,203	1,57,741
Khunti	14,989	2,39,344	2,54,333
Kodarma	26,236	2,06,882	2,33,118
Latehar	5,832	2,32,686	2,38,518
Lohardaga	4,747	1,45,990	1,50,737
Pakur	5,374	1,65,342	1,70,716
Palamu	34,584	4,22,154	4,56,738
Pashchimi Singhbhum	2,83,334	4,46,962	7,30,296
Purbi Singhvhum	20,311	4,43,998	4,64,309
Ramgarh	10,021	1,38,494	1,48,515
Ranchi	67,856	8,23,955	8,91,811
Sahibganj	12,512	1,51,468	1,63,980
Saraikela	21,443	2,05,895	2,27,338
Simdega	5,885	1,79,906	1,85,791

*(**Source:** Jharkhand Economic Survey 2022-23)*

It is clear from the above table that in Ranchi, maximum patients are vising Government hospital for treatment, then Pashchimi Singhbhum comes, then in Gumla and Dumka, maximum patients are vising Government hospital for treatment, and in Ramgarh and Lohardaga, least patients are vising Government hospital for treatment.

Fig.3: Total no. of patients visit Government hospital in Jharkhand



As per WHO chronic respiratory diseases (CRDs) are diseases related to the lungs, affecting the airways and other parts of the organ. The most common of these are the chronic obstructive pulmonary disease (COPD), asthma, occupational lung diseases and pulmonary hypertension. The major cause or the risk factors contributing these diseases are smoking, air pollution, industrial chemicals use, dust, and conditions related to the frequent lower respiratory infections during childhood. CRDs are not curable, but, the medical science have developed various treatment that help clear air passages to the lungs and improve shortness of breath which can help to control the symptoms and increase the quality of life for people with the disease.

Jharkhand is one of the backward states of India as the state has high infant mortality, low immunization among children, low institution delivery, high mortality due to infection, etc. Tuberculosis and leprosy are dangerous diseases, in Jharkhand, a greater number of people gets affected by these diseases. Leprosy primarily affects in peripheral nerves, skin, eye and respiratory system. The disease is curable and prevents most disabilities on early diagnosis and treatment. Tuberculosis is infectious disease primarily affected in lungs and other tissues, in an initial stage it is curable but if treatment not started at the right time, it can be fatal.

Many factors affect the health status of Jharkhand, such as poverty, high morbidity, poor infrastructure, accessibility of health care center, lack of awareness about any disease, etc.

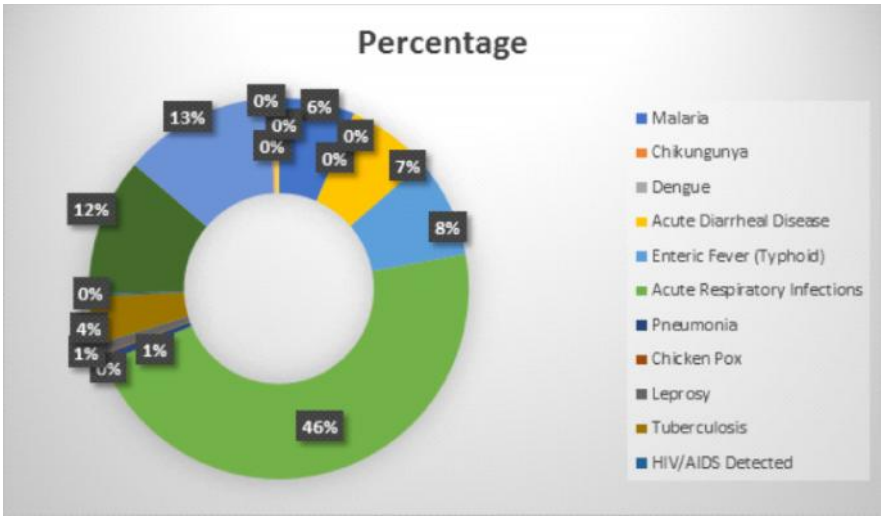
Table 4: Cases of common diseases in Jharkhand

Diseases	Cases	Percentage
Communicable Disease		
Malaria	36,520	6.493
Chikungunya	10	0.002
Dengue	166	0.030
Acute Diarrheal Disease	39,903	7.095
Enteric Fever (Typhoid)	47,734	8.487
Acute Respiratory Infections	2,61,427	46.483
Pneumonia	3,836	0.682
Chicken Pox	689	0.123
Leprosy	5,063	0.900
Tuberculosis	22,865	4.066
HIV/AIDS Detected	1,171	0.208
Non-Communicable Disease		
Diabetes	65,857	11.710
Blood Pressure	72,703	12.927
Cardiovascular Disease	1,039	0.185
Stroke	726	0.129
Common Cancer	2,702	0.480

*(**Source:** Jharkhand Economic Survey 2022-23)*

It is clear from the above table that, maximum population is suffering from Acute Diarrheal Disease, then maximum population is suffering from Blood Pressure and Diabetes, and least of the population is suffering from Chikungunya and Dengue in Jharkhand.

Fig 4: Percentage of common diseases in Jharkhand



Availability of Health Service in Jharkhand

A usual fundamental of the better livelihood is easy access to healthcare facility. However few times there can be a critical situation for a person who is not able to access healthcare service, therefore an ample portion of economic development is deficient in the absence of effective healthcare facilities. Therefore, at present Jharkhand face so many challenges to avail an effective healthcare facility for the population, including financing of the health service. The state also contributes well to the production of health workers; however, it is one of the states which have high inequality in health workers across cadres and regions.

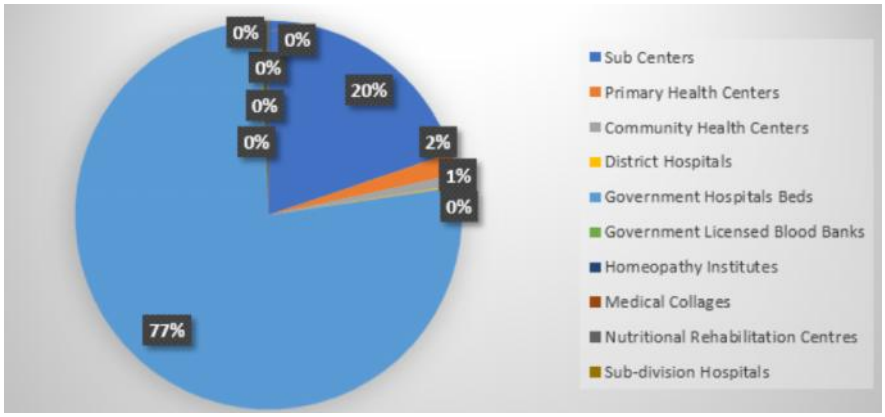
Table 5: Health institution in Jharkhand

Health Infrastructure Indicators	
Sub Centers	3,848
Primary Health Centers	351
Community Health Centers	177
District Hospitals	23
Government Hospitals Beds	14,891
Government Licensed Blood Banks	33
Homeopathy Institutes	5
Medical Collages	7
Nutritional Rehabilitation Centres	95
Sub-division Hospitals	13

*(**Source:** Availability and Accessibility to Health Care Services in Jharkhand 2021 and National Health Profile 2021)*

It is clear from the above table that, the availability of health institutions is not sufficient to provide service to all the patient of Jharkhand. Also, the state has slowly progressed in strengthening its bed-strength to serve Government hospitals. It's still far below than the national average.

Fig. 5: Health institution in Jharkhand



The availability of human resources is very important to an effective health service. It is important not only to have adequate health institutions but also have sufficient human resource like doctor, nurse, supporting staff etc. But there is a huge shortage of human resources in health centre in the state.

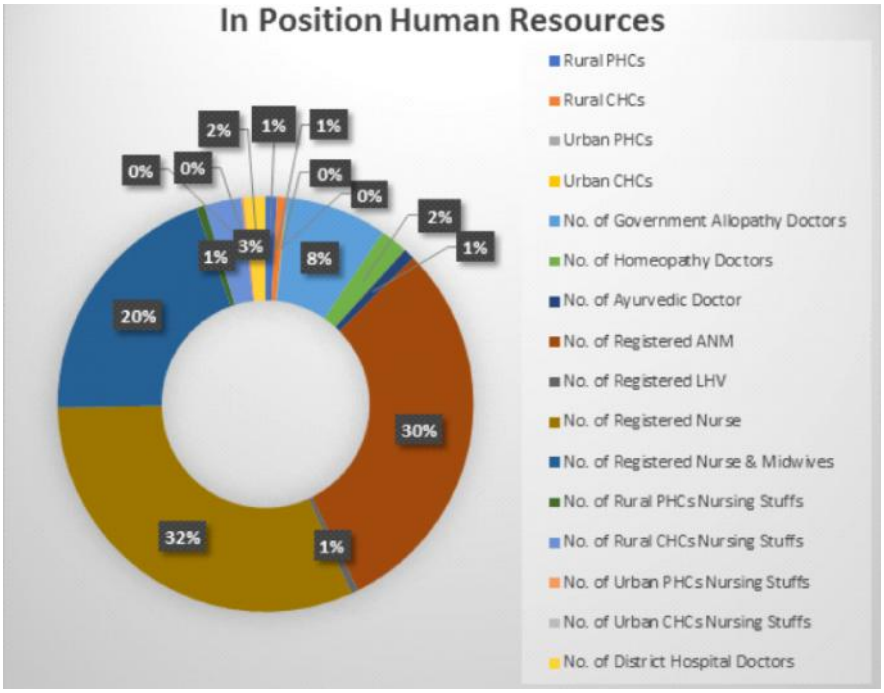
Table 6: Human Resource for health in Jharkhand

Human Resource for Health	In Position Human Resources
Rural PHCs	222
Rural CHCs	179
Urban PHCs	23
Urban CHCs	4
No. of Government Allopathy Doctors	1,966
No. of Homeopathy Doctors	538
No. of Ayurvedic Doctor	219
No. of Registered ANM	7,539
No. of Registered LHV	142
No. of Registered Nurse	7,896
No. of Registered Nurse & Midwives	4,977
No. of Rural PHCs Nursing Stuffs	162
No. of Rural CHCs Nursing Stuffs	726
No. of Urban PHCs Nursing Stuffs	46
No. of Urban CHCs Nursing Stuffs	4
No. of District Hospital Doctors	416

*(**Source:** Availability and Accessibility to Health Care Services in Jharkhand 2021and National Health Profile 2021)*

It is clear from the above table that there is not sufficient human resource to provide health facilities to patients. Hence, Government of Jharkhand should need to appoint more human resource in healthcare centres.

Fig. 6: Human Resource for health in Jharkhand



Conclusion

Health is considered as an essential resource for everyday life. It is better to promote social and personal resources as well as physical capabilities. Good health is an essential ingredient, which contributes to people's wellbeing and country's economic growth. The health status in the state Jharkhand has got positive betterment compared to the previous years. But still in few health status indicators the state is needs to improve. To provide effective health service it is necessary to have sufficient health institution and human resource. However, the limitation of required adequate infrastructure restricts the situation. So, the required adequate health infrastructures and health human resources will exist as challenges for the Government of Jharkhand.

Government institutions as the Primary Health Centre, Community Health Centre and Sub-Centre have better reach by the rural population, which can also be considered as best accessed by the economically weaker sections, with minimum cost but is known with inferior quality providers. To meet the requirement and consideration of the increasing demand for rural health centers, there is also an essential need to improve the quality of services offered by these institutions. In many of the rural health institutions, services of the core staff are limited with lesser numbers, as doctors and other specialists sometime choose to avoid working there. Required measures are needed to be taken for these core staffs by providing them proper facilities, improved treatment scope to serve better, incentives, prioritizing rural services for promotion and admissions for specialized courses.

Comparing to the World Health the country's demand to doctor-population ratio must be improved drastically. The nation being a developing country still needs Global recognition as key contributor to each citizen's well-being. Adequate infrastructure, facilities, skilled staff, remunerations, cleaning, and doctors are need of the hour for the nation. The distribution of the same to each state level and district level to get a better coverage and facility across the country to meet the demand should be the priority. The Centre and State Government budget should be improved on the health sector to match the requirements. Jharkhand is a backward state in India; the state is poorer in many ways including health and education. The state is rich in minerals but failed to utilize it in proper way. In comparison to India the health status indicators of Jharkhand are still less than the national average. Tuberculosis, diarrhea, malaria, is biggest concerning disease in Jharkhand.

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