

# Free Medicines and Free Diagnosis: A Step towards Social Security Measures by Rajasthan State in India

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#### Introduction

Urban sprawl is endemic throughout the world and there is widespread concern over its potential environmental and public health impacts. Many of the nations' cities are consuming land faster than their population is growing pushing the spectre of urban and suburban pollution farther into rural corridors. It should be noted that the advancement of global technology has provided many benefits including higher standard of living, an abundant food supply and state-of-the art technology. Unfortunately mankind is now bearing the unforeseen burden of advanced technology as if has introduced new pollutants and toxins into our environment. Scientists and medical practitioners agree that environmental pollutants are adversely affecting human health. Mention of all above factors indicate that health problems in developing countries are created mostly by the environment in which the people live and if there is anything certain in such conditions it is illness.

Provision for good health is a merit good as health is generally regarded as an asset. Certainly it is true that good health contributes greatly to the joy of living and should be preserved and cherished. In terms of protecting public health, the Chief Minister of Rajasthan Shri Ashok Gehlot – looking young but not neophyte, game changer and a social chameleon – took a major step on the occasion of birth anniversary of Mahatma Gandhi on October 2, 2011 towards providing social security to the citizens of his state in the form of supply of free medicines and free diagnosis to everyone.



Shri Ashok Gehlor

### Rajasthan: The Largest State

Rajasthan is the largest state in India having an area of 3,42,000 sq. kilometers and population of 6.86 crores (Census 2011). The area of the state comprises desert (about 60 per cent) forests, mountains (Aravalli, the oldest mountain) tribal belt, ravines and a long international border with Pakistan. Out of total 6.86 crore persons male consists of 3.56 crores and females consists of 3.30 crores. Population in the age group of 0-6 years is 1.05 crores (census 2011) out of which males are 0.56 crores and females are 0.49 crores. The overall sex ratio of the state is 926 while child sex ratio is only 883. However, the sex ratio in rural Rajasthan is 932 while in urban Rajasthan it is 911. The literary rate according to census 2011 is 67.06 percent. However there is much difference between urban (80.73%) and rural (62.34%) literary rate and between males (80.51%) and females (52.66%) literacy rate.

It is to be noted that 70 percent of urban population of Rajasthan is living in 46 cities of class I and class II categories. Due to geographical, social and economic constraints the spatial distribution of towns in the state is uneven. Service area of towns in Rajasthan is very large and these towns serve a very large hinterland for their basic need and market facilities. Rajasthan currently has 23.38 per cent population living in urban areas. According to a study of state commission on urbanisation, by 2030, 33 percent of population will be living in cities. This unchecked urban growth is linked to many problems including increased automobile emissions, deterioration of air and water quality, loss of rural lands and ultimately the loss of public health.

## **Contributing Factors in Falling Health**

Many toxins and pollutants are linked to birth defects, cancer, asthma, emphysema, allergies, neurological disorders and autoimmune syndromes. The incidence of many chronic diseases continues to rise significantly. Poor nutrition, unsafe drinking water, lack of hygiene and health care are indisputably major contributory factors in the increasingly falling health. Water pollution is the main cause of high incidence of typhoid, hepatitis, throat cancer, liver ailments, kidney failure, gallstones and other intestinal infections. Local water-bodies and rivers are often used as a dumping ground for untreated water. Even the drinking water sources are poisoned by pesticides, fertilizers, excess salts, agricultural runoffs and drainage water. Mostly the people of the urban areas have the good water supply, leaving majority of rural people to depend on contaminated wells or open canals. The highly polluted water contains phenols, nitrogen compounds, pesticides, organic matter and shulphates. It can be concluded that high levels of salts, toxic substances, pesticides in drinking water and in vegetables are largely responsible for this depressing state of health. The abnormally high levels of infant mortality and morbidity are



clear evidences of dangerously poor health conditions.



#### Informal Workers and Women are in Greater Health Risk

Informal workers account for a significant portion of participants in the economy of the state. In general workers in informal sector are subject to lower wages and fewer social benefits resulting in greater health risks for this population. 80 percent women in the state have been particularly hard hit by anaemia contributing to both maternal mortality and the ill health of new born. High female infant mortality in the rural areas is a cause for concern. Besides, early childbearing, low educational level and attitude about sexually transmitted diseases affect the health of women. The childbearing role of women focuses more on the welfare of the child than that of the mother.

Owing its unique nutritional and immunological characteristics human milk is most important food sources for infants. Breast milk can, however also be a pathway of maternal excretion of toxic elements such as lead and these toxins impact most severely the nervous, hematopoietic, endocrine, renal and reproductive systems of the body<sup>1,2</sup> but irregular breastfeeding is one of the major causes of children falling ill in the state and also the high infant mortality rate. Rajasthan is one of the states where the percentage of children breastfeed exclusively for six months is very low.<sup>3</sup> According to the recently issued Annual Health Survey 2010-11 of the central government the percentage of children breastfed exclusively for six months is as low as 24.7 per cent in Rajasthan.<sup>4</sup> In absence of breastfeed the infant is associated with increased incidence of premenopausal breast cancer, ovarian cancer, retained gestational weight gain, type-2 diabetes, myocardial infarction and the metabolic syndrome.<sup>5</sup>

Further, the World Health Organisation expresses that 65 per cent of the population is away from availability of medicine and 23 per cent patient do not go to hospitals as these cannot afford to do so. Those who are seriously ill and admitted in the hospital for treatment, about 40 per cent of them take the loans to meet out medical expenditures.

## Illness is Certain

Practically no one as an individual and certainly no family, ever totally escapes illness. While illness is practically certain, the time of its arrival is indefinite and unpredictable; so are its severity and its duration. Further, the people are very uncertain to get rid-off the illness as there is absence of budgeting for health, including the means for paying the cash of minor illness out of income and providing for the more serious illness through appropriate forms such as savings, reserves, investment and health insurance. There are always some families which are unable to care for costs of prolonged or serious illness involving heavy expenses. There is no reason why any such family should suffer or any patient remained uncared for, by reason of inability to pay. As modern community has grown much more sensitive to health needs, it becomes the responsibility of the government to provide good health to its citizens either at a concessional rate or if possible free of cost.

#### **Introduction of the Scheme**

In the beginning of this scheme 200 types of generic medicines have been put for free distribution which in the afterwards increased to 400 and now the number is 600 types of generic medicines. However, the number of medicines available differs on the nature of the hospital. If a hospital is attached to medical college, the numbers



of medicine available are 500 to 550, in district hospitals 325 to 400 and at community health centres 150 to 250. The phlegmatic, protégé and known for his riposte Shri Ashok Gehlot while launching the scheme with verve, vim and vigour promised the citizens of the state that only the medicines of high quality will be provided in a hassle-free manner and without leaving the patients high and dry. He also apprised of that the generic medicines would treat the ailments as effectively as the branded medicines do. WHO is also of the opinion that essential medicines are intended to be available within the context of functioning health system at all times in adequate amounts, in the appropriate doses forms, with assured quality and at a price the individual and community can afford

It was in the budget of 2011-12 the chief minister Shri Ashok Gehlot in the capacity of Finance Minister announced the "Chief Minister Free Medicine Scheme". To implement the scheme Rajasthan Medical Services Corporation is formed to purchase the generic medicines and surgical and diagnostic items for distribution in all the government hospitals including government medical colleges, primary health centres, community health centres and sub health centres situated in 33 districts of the state.

Numbers of government hospitals in Rajasthan were 127 (including 25 hospitals related to medical colleges) during 2010-11. During the same period numbers of dispensaries were 198 and community health centres were 379. Besides these, the number of Mother and Child Welfare Centres was 118 and Primary Health Centres were 1554 (rural 1517 and urban 37). The number of sub health centres was 11500 at the end of 2010-11. The medical colleges and related hospitals are at the district level only. The number of sub health centres differs according to the area and population of the districts. These all are involved in the prevention of diseases and diagnosis of specific diseases and ailments in specific patients and restoring the health. The number of public health services available varies from hospital to hospital.

Depending upon the size of hospital the medical staff is available in varying degrees of complexity to provide medical care. The sanctioned strength of the senior specialist was 324, while junior specialists were 2493 at the end of 2010-11. Similarly, senior medical officers were 895, while medical officers and dentists were 4902 during the same period. The number of nurses was about 32000 and total medical staff was 49219 at the end of 2010-11.

In its care of patients, the hospitals divide its services into in-patient and out-patient care. In-patient care is that rendered to patients who occupy beds in the hospital and out-patients care does not require their being placed in bed. Whereas out-door patients will get the medicines in hospital-time, the indoor-patients will get this facility round the clock. For distribution of medicines to patients, about 15000 medicines distribution counters have been opened in all the hospital and dispensaries. It is to be noted that where the patients are coming in large numbers and where there are specialisation branches for treatments, medicine distribution counters are opened near every specialisation centre. To every patient medicine will be provided for three days but in case of chronic illness the medicines can be provided for one month also.

The quality of the generic medicines are tested by Drug Testing Laboratories and only quality medicines are made available to patients that too in a proper dose and at proper time and appropriate to their clinical needs. Even the WHO conference on Rational use of Drugs 1985 concluded that patients receive medicines appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time and the lowest cost to them and their community. Since 2nd October 2011 till today the number of persons benefited from free medicines and free diagnosis are about to 13 crores and 1 crores respectively.

# **Generic Medicines - Quality and Price**

The qualities of the generic medicines are tested by Drug Testing Laboratories and only quality medicines are made available to persons. It is to be noted that there are much differences in prices between generic and branded drugs, inspite of the fact that these drugs are of the same quality. Below is the comparison of prices of generic and branded drugs that makes amply clear the price differences between generic and branded drugs.



Price Comparison of Generic and Branded Drugs

Trice Comparison of Generic and Branded Brugs						
S.	Name of Drug	Pack Size	RMSC Tender Price	<b>Equivalent Popular</b>	Pack	MRP
No.	Name of Drug	rack Size	(In Rs.)	Brand	Size	(In Rs)
Analgesic, Antipyretic & Anti inflammatory drugs						
1.	Diclofenac Sodium Tablets	10 Tab	Rs. 1.24/10 tablets	Voveran (Novartis)	10 Tab	31.73
	IP 50 mg	strip		Dicloran (Lekar)	Strip	23.43
Anti Neoplastic & Immuno suppressant Drug + Palliative Care						
2.	Paclitaxel Injection IP 100	16.7 ml	Rs. 338.66	Mitotax (Dr. Reddy)	16.7	4022.00
	mg	vial ml		Innotaxel (Innova)	ml Vial	4500.00
Cardio Vascular Drugs						
3.	Atorvastatin Tablets IP 10 mg	10 Tab Blister	Rs. 2.98	Atrova (Zydus)	10 Tab Blister	103.74
4.	Clopidogrel Tablets IP 75 mg	14 Tab strip	Rs. 8.54	Plavix (Sanofi Av.)	14 Tab strip	1615.68
Harmones & Endocrine Drugs						
5.	Glimepiride Tablets IP 2 mg	10 Tab strip	Rs. 1.95	Amaryl (Aventis)	10 Tab strip	117.40
Psychotropic Drugs						
6.	Diazepam Tablets IP 5 mg	10 Tab strip	Rs. 1.30	Valium (Abbott)	10 Tab strip	30.22

#### Free Diagnosis

From 7<sup>th</sup> April 2013, on the occasion of World Health Day the free medical diagnosis started in the beginning at hospitals attached to medical colleges, hospitals at district levels and at satellite hospitals. The Number of checkups included is 57. These include the test of pathology, urine analysis, stool analysis, microbiology and biochemistry including ECG, X-Ray and Ultra Sonography. From 1 July 2013 these diagnosis are available at all community Health Centres and from 15<sup>th</sup> August 2013 free diagnosis is spread to the extent of Primary Health Centres.

From 2<sup>nd</sup> October 2013 the number of free medical tests available at community health centres increased from 28 to 37 which included five tests in pathology and four tests in biochemistry. At district level hospitals the number of tests increased from 44 to 56; eight tests in pathology and four tests in bio-chemistry. However, the 13 tests are increased at medical college hospitals level. Previously the number of tests available at medical college hospitals was 57 but now the number is 70; seven tests in pathology, two tests in biology and four tests in microbiology. Dialysis is also free under free medicines and free diagnosis programme from 2<sup>nd</sup> October 2013 at all government hospitals. Under the scheme of dialysis Hemodialysis and Peritoneal dialysis facilities are included. The free dialysis scheme is a soothing balm for hundreds of patients who are facing financial burden due to recurring cost of dialysis. Before, 2<sup>nd</sup> October 2013, the government of Rajasthan was also providing free dialysis facilities to Below Poverty Level persons, under mother child care plan and people living with HIV. Also some other categories persons were getting this facility at discount rates. Included in this category were prisoners, senior citizens and handicapped. The total percentages of this type of dialysis was to the extent of 30 per cent of the total patients but now all the patients are provided this facility free of cost.

## **Additional Facilities**

In cases of serious illness of some categories of persons, there are several other government provisions for treatment of illness. In case of members of Below Poverty Line family, an amount of Rs. 1 Lakh is available for treatment of cancer, kidney and cardiac patients in private hospitals. Rs. 7 Lakhs are available for the transplant of bone-marrow to a thelesimiya major patient, if the income of the family does not exceed Rs. 2.50 Lakhs. Similarly, if a member of Above Poverty Line family suffers from serious illness and in need of the grant, he will be provided funds from Chief Minister's Health Fund to the extent of Rs. 1 Lakh provided family's income does exceed Rs. 1 Lakh.

In the event of total deafness, the state government makes available Rs. 5.54 Lakhs per person for cocklier implant without any income condition. In the tribal area to look after the patients suffering from tuberculosis health workers are appointed in 5000 villages. They will serve the patients till they get rid-off tuberculosis.

#### **Mother and Child Care**

Generally carrying mothers' deliver the child at residences with the help of either a local untrained nurse or with women of the family under unhygienic conditions. This involves the health risks of infection and many other



harmful effects including maternal mortality. To save the health and life of carrying mothers and new born children a scheme of "Mother and Child Care" was introduced from 12<sup>th</sup> September 2011. Under this scheme the mother and child both gets the treatment in the hospital for 30 days. Even the meals are served free of charge. When come back to house, the mothers are given a cheque worth Rs. 1000. Further there are free transfer facilities from residence to hospital and vice versa for carrying mothers and child. For this purpose "Mother Express 104 Ambulance Service" is started since October 2, 2012. At present the number of mother express is 400 and 200 new mother express will be included in this carvan in the near future.

In Rajasthan a girl-child is not preferred and if birth of a girl child takes place, it is not properly taken care of. To stop this tendency of not preferring the girl child, government of Rajasthan has given incentives at three stages since April 1, 2013. At the time of birth of a girl-child a payment of Rs. 2100, after completion of one year additional payment of Rs. 2100 and at the completion of 5 years and admission in school another payment of Rs. 3100 is given to the family in which birth of a girl child takes place. This incentive for girl-child is going to improve the sex ratio as well as the death rate and birth rate also. The Sample Registration System, Registrar General of India 2013 released data for the September 2012 shows that Rajasthan is among the major states with lowest death rates and highest birth rates. A decent place to live in, the state's death rate now is 6.6 per cent. Rajasthan is also continuously witnessing a dip in birth rate every year. In 2011, the birth rate in the state was 26.2 which came down to 25.9 in 2012 with a decline of 0.3 points. The state has also shown a considerable decline in the infant mortality rate particularly in rural areas over the past three years. In 2010 the IMR in the state was 55 while in 2012 it came down to 49. IMR in the rural areas decline from 61 to 54. The credit for declining the death and birth rate and IMR goes to the free medicine and free diagnosis programme and specially the Mother and Child Care Scheme and Mother Express Ambulance 104. However, the birth rate in rural areas is much higher in comparison to urban areas because of unmet need of contraceptives in rural areas. The district level household and facility survey III shows that unmet need is 17.9. The Indian representative for United Nations Population Fund, Frederika Meijer also pointed out that unintended pregnancies would drop by twothird and that would save lives of thousands of women and newborns if unmet need of contraceptives is fulfilled.6

There is also 108 Ambulance Service that helps to transfer the person from any place to hospitals in emergency. Any person when dials 108 the ambulance from the nearest place will reach to him who is in need of the help and will carry to the place of medical facilities. This is also available 24×7 on a phone call and free of cost. On the pattern of AIIMS: Delhi (All India Institute of Medical Sciences) the another AIIMS has established in Jodhpur (Rajasthan) in 2013 for providing excellent medical services to the citizens of the state. Its outdoor patients department has started its services.

## Free Medicines for Live Stock

Rajasthan is very rich in live stock. According to live stock census 2007 the total live stock in the state is about 6 crores, which includes cattle (1.21 crores) buffaloes (1.11 crores), sheep (1.12 crores), goats (2.15 crores), horses and ponies, mules, donkeys, camels and pigs. The percentage of the goats in the total live stock is highest (27.79) and cattle stands at second place (11.44). Animal husbandry facilities are available at a very large scale in the state. The number of veterinary hospitals and dispensaries are 1833 and 285 respectively at the end of 2010-11. The numbers of sub-centres are 1580. This indicates the significance of live stock. Live stock in many parts of Rajasthan is exclusively source of income for rural persons.

Looking to the importance of live stock and emboldened by the success of free medicines and free diagnosis (for people) the Chief Minister Shri Gehlot introduced the free medicine scheme for live stock from 15<sup>th</sup> August 2012 (Independence Day of India). Rajasthan Veterinary Service Corporation is created for successful implementation of this scheme on the pattern of Rajasthan Medical Services Corporation. During a period of one year since this scheme launched 1.67 crores live stock is benefitted.

In the beginning 43 kinds of important medicines made available free. This number is now increased to 110. Thirteen types of surgical and dressing material is made available to hospitals lest those who are in animal husbandry business may get timely help. Provision is made for one mobile unit at each Tehsil level to provide door-to-door medical facility to live stock. Besides, free medicines for live stock, a provision of a grant of Rs. 125 crores is made for *Gaushallas* (cow tending care) to take care of astray cows and another Rs. 25 crores is made available for treatment of sick cows. It will be hard to find a scheme of free medicines for animals anywhere in the World but this scheme is introduced in the State of Rajasthan.

### **Generic Medicines are Key to Success**

"Generic medicines are key to success of free medicines scheme" is the remark of the officials of the Rajasthan Medical Services Corporation in Toronto, Canada who were there for a week's training programme. Dr. Samit Sharma, the Director of Rajasthan Medical Services Corporation and amongst the members of a team of a senior



IAS officers from India to Toronto emphasized that the success of free medicine scheme has become possible only because of the drugs are procured and prescribed by their generic names. Dr. Samit Sharma also cited the example of price of generic medicine for cardiac patients in Rajasthan is only Rs. 9.00 for one month course and branded medicine for the same purpose available in Canada for Rs. 700 (Canadian Dollar 11.22). He further emphasized that the strength and quality of the generic medicine available in India is the same as that available in Canada in the brand name of Atorvastatin for cardiac patients.

#### Conclusion

Lord Buddha said that health is the greatest gift and faithfulness, the best relationship. Shri Ashok Gehlot as the Head of the present Government of Rajasthan is following the path as shown by Lord Buddha. Free medicines and free diagnosis are the two pillars of the human health. Good health works in the direction of human beings converted into human capital. The economists of US origin are of the opinion that "there are no free lunches" (even when one eats at friend's house without payment) but against this concepts the Rajasthan state has serve the free dinners in terms of good health.

The American Medical Association has defined public health as "the art and science of maintaining, protecting and improving the health of the people through organised community efforts. It includes those arrangements whereby the community provides medical services for special groups of persons and is concerned with prevention or control of disease, with person requiring hospitalisation to protect the community and with the medically indigent.<sup>7</sup>

This indicates that the strength of any nation is directly related to its health. The nation's health is the sum of the health of the people of various communities. The health of a community depends on the network of medical facilities available to its citizens. Community health is a composite of the health of many individuals. Each person is responsible for his own personal medical care. However when a person is unable to provide this care for himself, the responsibility should properly passes to his family, the community and to state and only when all these fail to the central government.

All these efforts of free medicines and free diagnosis in the state of Rajasthan are in the direction of providing the good health to the citizens of the state. Even the persons from nearby states are taking the advantages of this scheme. This is a unique scheme which will improve the health status of the citizens. The other states in the country and other nations may learn a lesson to introduce such a good scheme for their citizens.

When such schemes of free medicines and free diagnosis are implemented by a state government of Rajasthan in India, why not Obamacare be taken care of by the US Congress! Rajasthan government has also introduced free medicine schemes for live stock from 15<sup>th</sup> August 2012 – a unique scheme and it will be hard to find such scheme anywhere in the world! One obvious reason why Obamacare is not accepted is the rent-seeking behaviour of the American Medical Association founded about 166 years back. Cabot, H. mentioned that doctors do discriminate and he cites that more opulent members of the community pay "from 5 to 35 times the average fee."8 North and Miller9 mentioned that obviously the leadership of the AMA must have a set of coercive devices to get individual doctors to toe the line as price discriminators. These devices include, among others, control over post graduate medical training and admission to speciality examinations as well as control over hospital-use rights. A doctor who cuts price to higher income patients soon finds himself outside the door of his County Medical Association. It should now be more obvious that the AMA opposes all plans which do not allow price discriminations. North and Miller further mentioned that "certain attempts by the AMA to destroy group health plans have been brought to trial and defeated. For example the district medical society in Washington D.C. along with AMA, was prosecuted under the Sherman Antitrust Act in 1943 when it attempted to put Washington Group Health out of business." In fact pharma group derives its power and financial clout from political connections. They always get what they want as the former vice president of Pfizer says "these companies run the US government, they pull the strings – and this is certainly not limited to the US." Above is the observation of film maker Dylan Mohan Gray when he spoke with Rema Nagarajan of the Times of India about his documentary film Fire in the Blood. Gray further expressed – when asked about the India's role in this situation - "that since changing its patent law in 1970, India's become known as the 'pharmacy of the world', supplying high-quality, lower-cost medication to every corner of the planet. The country is under intense pressure by western governments on behalf of big pharma to cut off the supplies of affordable drugs for 1.3 billion Indians – and billions throughout the world." When asked "with greater global awareness, is the battle for fair medication" worn? "No" replied Gray - "the groundwork is being laid for future disasters on a far greater scale than that depicted in the film. (Documentary film portraying Africa's fight for HIV medicines, the controversial role of government and Pharma Groups and why India is central to this picture.) Western governments are working ruthlessly to shut off affordable medicines emanating from India and other key countries, to expand the market shares and profits of their pharma conglomerates even at the cost of tens of millions of lives."11



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