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## **A Qualitative and Quantitative Analysis of Public Health Expenditure in Bihar**

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### **Abstract**

Forecasting public health expenditure by the Government of India is an important aspect to assess the government's effective programs towards disease control and policy implications. The trendency in the public healthcare due by central government, predicted that the public health expenditure will get doubled in the next five years. Expenditures will rise from 267100 crores rupees in the year 2018 to 485000 crores rupees in the year 2022 (Ministry of Health & Welfare, 2017). However, this increase in the public health expenditure from the year 2018 to 2022 is expected to be 45%. The growth rate of the public health expenditure is constant but, this public health expenditure constitutes a very small portion of the total GDP of the country. With the ever-increasing population, the growth rate is not sufficient to meet the rate of increasing population.

**Keywords:-**Qualitative, Quantitative Analysis , Health Expenditure, Bihar, ChildHealth, Malaria, FilariA,KalaAzar

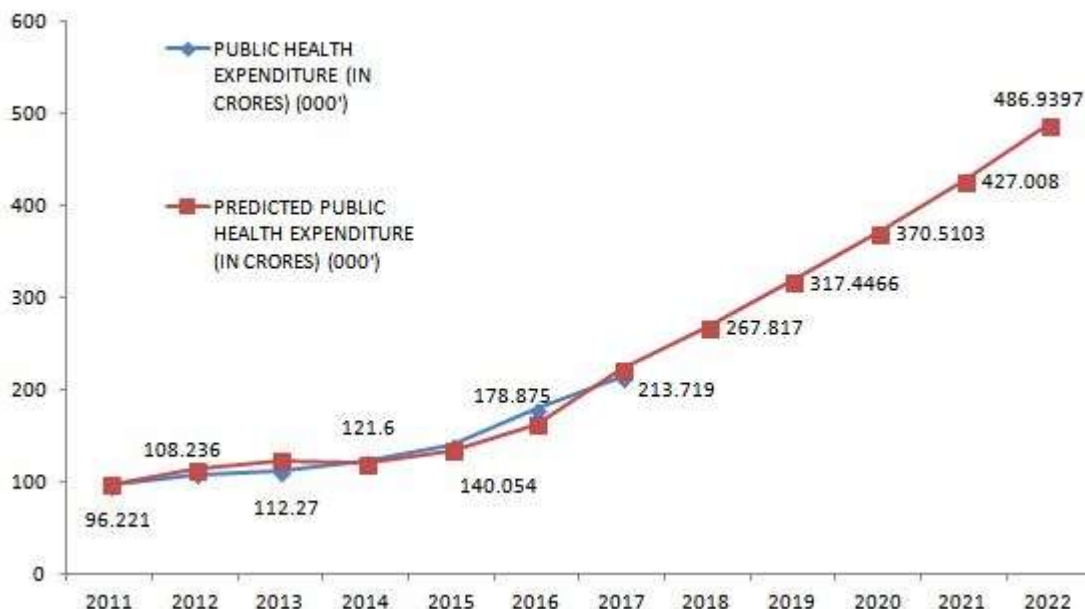
### **Introduction**

Health policy is an essential pillar of human welfare. High degree of externality, the State has to play the significant role in health and healthcare provision. Allproof shows that public spending on health protection in Bihar is low and out of pocket spending by people is more than five times the government spending. Low level of public spending money on health is a known fact that reliable data on actual public expenditure on the health and its trend over time is not easily accessible. States with good basic health outcome indicators such as Infant Mortality Rates also show higher per capita expenditures. We say in other words, the states with poor health indicators continue to spend very low levels of per capita expenditures. Inequality between states in health outcomes have not reduced, and a major cause is the continuing inequality in public health expenditure. Central Sponsored Schemes and prgramshave been unable to ensure minimum standards of per capita health expenditure, nor are the transfers progressive or redistributive.

### **Allocation of theFunds to the States**

The increasing the public healthcare expenditure also eludes to rise in affliction, especially vector based diseases like Malaria. Budget for the public health expenditureIS allocated to the

state government on the basis of the state income and the health index. States with higher urban population or rural or tribal population are most likely to have higher funds allocated for the public health expenditure . For exp. healthcare expenditures allocation on high for states, Maharashtra, Madhya Pradesh, Odhisa, Andhra Pradesh, Rajasthan, and Chhattisgarh. These states also report as the highest density of malaria and mortality cases.



Forecasting public healthcare expenditure by Government of India

**Factors Impacting the Public Health Expenditure**

The major factor that impacts the determination of the public healthcare expenditure is the GDP of the country. The growth in GDP is directly proportional to the amount of appropriated to public health .The increase in population leads to greater demand for healthcare facilities and increases the total medical cost per capita. The infectious diseases cause the cost burden on the population due to the high out of cost expenses .

Every 5 year plan, major sickness that expose the most financial distress on the society are identified and the public health expenditure is determined accordingly for control & eradication.



### **Factors Impacting the Public Health Expenditure**

However, a multiplicity of governments, agencies, healthcare schemes, and departments impact the efficient allocation of public healthcare expenditure. Complex infrastructure of public health expenditures in India also contributes to challenging the public health expenditure. Autonomous agencies of state governments can implementing state initiated healthcare programmes causes the central government to lose track of the efficiency of the initiatives. Moreover, fiscal centralization of the central power to state and local governments lead to poor accuracy of spending on healthcare ;;. Lastly, data digitisation, one big issue faced by the central and the state government in the allocation of public healthcare expenditure. Lack of documentation & digital connectivities hinder the government to efficiently allocate healthcare funds.

### **Public Health Expenditure Allocation in India**

Public healthcare expenditure is the total amount allocated for developing the health status and services of the country. In India, public health expenditure is not adequate as it constitutes a very low percentage of the GDP. This contributes to slow growth in achieving the goals set for the eradication and management of diseases in India.

**Health Infrastructure of Bihar**

<b>Health Institution</b>	<b>Required</b>	<b>In Position</b>	<b>Shortfall</b>
Sub-centre	14959	8858	6101
Primary Health Centre	2489	1641	848
Community Health Centre	622	70	552
Multipurpose Worker(Female)/ANM	10499	9127	1372
Health Worker (Male)/MPW(M)	8858	1074	7784
Health Assistants(Female)/LHV	1641	479	1162
Health Assistants(Male)	1641	634	1007
Doctor at PHCs	1641	1565	76
Surgeons	70	28	42
Obstetricians& Gynaecologists	70	21	49
Physicians	70	38	32
Paediatricians	71	18	53
Total specialists at CHCs	281	105	176
Radiographers	71	15	55
Pharmacist	1711	439	1272
Laboratory Technicians	1711	135	1576
Nurse Midwife	2131	1425	706

(Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI)

The other Health Institution in the State are detailed as under:

<b>Health Institution</b>	<b>Number</b>
Medical College	8
District Hospitals	24
Referral Hospitals	71
City Family Welfare Centre	13
Rural Dispensaries	361
Ayurvedic Hospitals	12
Ayurvedic Dispensaries	312
Unani Hospitals	4
Unani Dispensaries	143
Homeopathic Hospitals	11
Homeopathic Dispensary	179



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### **Maternal Health, including JSY**

- Number of JSY beneficiaries in the state increased sharply from 0.90 lakh in 06-07 to 8.38 lakh in 07-08 and 10.51 lakh in 08-09.
- Training on Life Saving Anaesthesia Skills (LSAS): 6 medical colleges have been identified, 14 master trainers and 74 MBBS doctors have been trained in LSAS against a target of 76.
- Training in comprehensive Emergency Obstetric Care (EmOC): Patna medical college has been strengthened as a training site, 8 master trainers and 40 MBBS doctors have been trained in EmOC against a target of 76.
- Skilled Birth Attendant training (SBA): 20 districts have been identified, 150 district level master trainers and 592 SNs/ANMs have been trained as SBA, against a target of 2895.
- Outsourcing of blood banks in public private partnership model has been initiated in 4 districts and MoU has been signed in 17 districts.
- Emergency referral service has been initiated in Patna municipal and suburban area.

### **Child Health**

- IMNCI is ongoing in 23 (out of 38) districts of the state.
- 6 SNCUs are functional in the state and are to be replicated in 23 districts in year 2009-10.
- IMNCI trained ANMs are running sub centre clinics on Thursday in few districts, which is to be extended to all districts during 2009-10. State is considering the option of decentralised hiring of doctors through Rogi Kalyan Samitis (RKSs) at facilities, for running the clinics once a month.

### **Other Initiatives**

- Outsourcing of Additional PHCs: 46 APHCs handed over to 12 NGOs covering 10 districts.
- 7 GNM and 22 ANM schools have been made functional in current year.
- State has developed an online system to monitor service delivery and logistics availability at PHC.

### **Maternal Health, Including JSY**

While number of institutional deliveries under JSY has increased to 10.51 lakhs in 08-09, Bihar is yet to adequately gear up facilities to meet the load:

- State has operationalised 533 PHCs as 24x7 so far against the target of 821 PHCs by 2010.
- While monthly NRHM report submitted by the state reports all the planned (76) FRUs as functional there are only 3 FRUs that fulfil all the three critical criteria of functionality (as reported during a recent review). A large number of FRUs do not provide the stipulated range of services due to lack of access to blood storage facilities and lack of specialist staff.
- A rapid assessment of functionality of FRUs and 24x7 PHCs was carried out in the state through



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GoI/DevelopmentPartnersupport. ThereisnoindicationthatDistrictCMOs&DistrictProgram Managers are utilising facility survey findings for comprehensive planning of operationalisation of FRU and PHCs, including linking the same with EmOC and LSAS trainings, placing anaesthetic drugs, SBA drugs, operationalising OTs, and establishing Blood Banks/ Blood Storage facilities atFRUs.

- Thereisirrationalselectionandplacementoftrainedstaff;asaresulttheexistingstaffisnotused appropriately. Further, LSAS and EmOC trained doctors are yet to be posted atFRUs.
- SBA Training was initiated but stopped due to the floods. Now there is a need to immediately beginthetrainingwithplanforscaling-upandmonitoringthequalityofthetraining.SIHFWwas instructed by the State Health Society (SHS) for monitoring but the quality of the training is not yet maintained, post training supervision is very weak, and basic protocols in labour room during delivery are notfollowed.
- State and District Level Quality Cell are yet to be created for monitoring the skilled based training.Evaluationofthetraineesneedstobedoneatthesiteofposting/serviceprovision.
- Referral transport services need to be strengthened and systematically rolledout.

### **ChildHealth**

- Neonatal mortality rate (NMR – infant deaths within 4 weeks of life per 1000 live births) at 31 (SRS 2007) accounts for 53% of the IMR, while early NMR (infant deaths within one week of life per 1000 live births) at 27 (SRS 2007) accounts for 87% of the NMR. An evaluation of JSY in the state in December 2008 highlighted that only 11% of the beneficiaries surveyed stayed for at least two days in the health facility after delivery. With the huge off take in JSY in the state (10.51 lakh beneficiaries in 2008-09), this is clearly a missed opportunity to address early neonatalmortality.

### **Malaria**

The surveillance has been very poor in the state and needs to be strengthened by filling up the vacant posts at the grass root level. The improved surveillance may result in identification of more malariacases.

Thestateshouldaimatpreparingdistrictmicroactionplanforidentifyingproblematicareasand implementing VBDs control activities in effectivemanner.

### **Filaria**

ComplianceofdrugforeliminationoflymphaticFilariasisneedtobeimprovedthroughadequate IEC/BCCactivitiesduringMDA.Thestateshouldsubmittheparticularizedonmfsurvey, updated list of hydrocele and lymphodemacases and no. of hydrocele operations conducted and the plan forfuture.





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### Kala Azar

Focused intervention ( Spraying) and regular monitoring is required to achieve the elimination goal of kala-azar by 2010.

Timely submission of Reports and Expenditure statement/ UCs for which the district authorities need to instructed appropriately.

### Conclusion

It is fairly obvious that these low and in several cases declining levels of spending on health and related items would have an impact on conditions of health among the citizenry, especially given that most of the population is poor and cannot afford to spend too much on health even if they are forced to spend more and more for private care. One major fallout of inadequate public spending that was highlighted in the first section is the high proportion of total health spending in India that is incurred by households, which is in sharp contrast to the picture in most other countries. Also, this pattern has worsened over time. The growing proportion of household consumption expenditure that is devoted to health, also noted in the first section, is at least partly if not substantially the result of inadequate or reduced public provision.

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