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RGICS BRIEF

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Uttar Pradesh: A Brief on Dismal Situation of Public Health System in the State

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This is the second brief in a series of 'Documenting Status of Uttar Pradesh'. The following brief is an attempt to analyse causes and consequences of poor public health care system in Uttar Pradesh.

1. Introduction:

A recent report by the Ministry of Health and Family Welfare on nutrition shows that every second child in Uttar Pradesh has stunted growth. Around 74% children in the age group 6-59 months and 50% women in reproductive age group (15-49 years) have anemia. In 2014, Uttar Pradesh accounted more than 48% of death due to Typhoid, highest number of death due to Acute Diarrheal Disease and Acute Respiratory Infections in India. These morbidities are potential contributors of high mortality among children, adolescents and women. Various health outcome reports in last few decades have indicated at the poor performance of the health care institutions in Uttar Pradesh. High shortage of public health institutions, understaffed existing health institutions and lack of basic medical and non-medical facilities in public health institutions led to the failure of the health system. A combination of a poorly managed system and lack of political will of successive state governments to improve it, has led to Uttar Pradesh being one among poor performing states in the health sector. This document is an attempt to highlight major causes and consequences of poor public health system in the State.

2. Health Outcomes in Uttar Pradesh: High Morbidity and Mortality:

2.1 Low Life Expectation at Birth

Expectation of life at birth (in years) 2009-13			
State	Total	Male	Female
India	67.5	65.8	69.3
Uttar Pradesh	63.8	62.5	65.2

Source: SRS Based Abridged Life Tables, 2009-13 - Registrar General & Census Commissioner, India

In last few decades, with improved health system, India has made remarkable progress in enhancing expectation of life at birth for its citizen. It has increased from 63 years in 1999-2003 to around 68 in 2009-2013. However, there is a wide disparity with regards to life expectation across the country. Among the major states of India, Uttar Pradesh, Assam, Madhya Pradesh and Odisha account for the lowest life expectation at birth. In Uttar Pradesh a new born child is expected to live four years less than a child born in the neighboring state of Bihar and five years less in comparison to a child born in Haryana and seven years to one born in Himachal Pradesh.

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Poor public health system of Uttar Pradesh is one of the main factors behind such low life expectation at birth. It contributes the largest share of almost all communicable and non-communicable cases in a year; and due to the absence of an efficient health care system, it also contributes the largest share of deaths due to these diseases. Uttar Pradesh has highest prevalence of deadly diseases such as Typhoid, Acute Respiratory Infection, Cancer and Acute Diarrhoeal Diseases. In 2014, Uttar Pradesh accounted for 48% of the total deaths due to Typhoid, 17% of death due to Cancer and 18% death due to Tuberculosis (NHP-2015). Persisting high morbidity amongst people leading to high rates of mortality reveals ineffectiveness of health care system in the State. The poor, women and children are the most affected by an inefficient and ineffective health care system.

2.2 Poor Maternal Health Care Leading to High Maternal Mortality

Few decades ago, poor maternal care along with communicable diseases used to be the top most reason for deaths in India. In the absence of institutional care, pregnancy was like a deadly disease causing deaths of millions of women in the reproductive age. The ‘India Health Report-Nutrition, 2015’, released by the union minister of health and family welfare acknowledges that in the last two and half decades, India has made remarkable progress in minimizing dangers of prenatal and postnatal complications. Systematic investment in public health system and focused planning helped in making delivery relatively safer for millions of women in this country. Despite these achievements, states with poor health systems continue to have high level of maternal mortality and morbidity. Assam and Uttar Pradesh are two such states where maternal care has not yet assured safe delivery and better postnatal health for women. After Assam, Uttar Pradesh has the second highest Maternal Mortality Rate (MMR) in the country.

Selected Maternal Health Indicators in Uttar Pradesh	
Indicators	UP-2013
Maternal Mortality Rate (MMR)	285
% of women who received three or more ANC	37.8
% of women who received at least one TT vaccine	84.1
% of pregnant women who got BP checked	35.5
% of pregnant women who consumed minimum 100 IFA	9.7
% of Institutional Delivery	56.7
% of home delivery	42.1
% safe delivery at home	28.9
Delivery attended by skilled health person	63.3

Source: NHP-2015

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The extremely high maternal mortality in Uttar Pradesh can be attributed to the poor coverage of maternal health care services in Uttar Pradesh. Data reveals that more than 62% of pregnant women in the state are unable to access minimum ante-natal care (ANC). The inaccessibility of institutional care for delivery in the state is evident from the fact that around 42% pregnant women deliver at home. It contributes significantly to maternal mortality and morbidity. Quality institutional care for pregnancy and delivery is important for timely identification of pre-natal and postnatal complications, which may otherwise lead to life-long health complications for the mother or worse still demise of mother and newborn. Home delivery is risky for both women and child; therefore, it is discouraged to conduct home delivery. In the case of Uttar Pradesh, according to NRHM estimate more than 15 lakh women deliver babies at home in a year. Out of these home deliveries in the state more than two third (61.1%) are unsafe. It means these deliveries conducted at home were not attended by any skilled health person and hence cause maternal and child mortality and morbidity.

2.3 Highly Vulnerable Childhood

Children in early stages such as neo-natal (0-29 days), infant (up to one year) and children up to 5 years need special care and protection. Technological advancement such as invention of vaccines for common diseases and extension of institutional care in last few years has helped in decreasing child mortality at every stage. Child mortality is defined as number of death of children in a particular age group in a given year per 1000 live birth that year. Here again, Uttar Pradesh lags much behind in comparison to its neighboring states. According to latest data released by Sample Registration System for Year 2013, Uttar Pradesh has the fourth highest Under-5 Mortality Rate (U5MR) in India. According to the data annually 64 children per 1000 live birth in Uttar Pradesh die before the age of five year. Similarly, 50 children per 1000 live birth do not complete one year and 35 children per 1000 live birth die within a month after their birth in the state (see table below). Top three states having worst U5MR are Assam (73), Madhya Pradesh (69) and Odisha (66). Health care system in urban areas is better when compared to the rural areas of the country; therefore, health outcomes of urban India are comparatively better than rural parts. In Uttar Pradesh, though U5MR in urban is less compared to rural areas, but it is very high when compared to national average. It has the highest urban U5MR in the country (44) followed by Madhya Pradesh (40) and Odisha (39).

Selected Child Health Care Indicators		
	UP	India
Infant Mortality Rate	50	40
Neo Natal Mortality Rate (NNMR)	35	28
Under-5 year Mortality Rate (U-5MR)	64	49
% of child fully immunized	52.7	53.5

Source: NHP-2015

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2.4 Malnourished Children and Women

Medical Certification of Causes of Death (MCCD) Report, 2013 released by the Office of Registrar General, India, found under nutrition as one of major causes of death in India. It accounts for 3.7% of total medically certified deaths in India. Moreover, under nutrition and nutritional deficiencies cause a range of other associated health issues especially among women and children such as anemia, stunting, underweight and wasting. According to the ‘India Health Report: Nutrition, 2015’, released by the Union Ministry of Health and Family Welfare, malnutrition among women and children in Uttar Pradesh has drastically affected their wellbeing. According to the report, more than half of children (50.4%) in the age group of 0-5 years have recorded stunted growth. This is very high in comparison to the national average of 38.7% making UP the state, which has the highest stunting growth rate in India. The report reveals that, between 2006 and 2014, various states of India made remarkable progress in reducing stunting growth rate among children below 5 years. However, Uttar Pradesh along with Bihar, Jharkhand and Jammu Kashmir recorded very slow decline in this period.

Selected Nutritional Indicators		
Indicators	UP	India
% of children in age group 6-59 months with anemia	73.9	69.5
Girls in age group 15-18 year with low BMI	36.7	44.7
% of stunted children under age 5 years	50.4	38.7
% of wasted children under age 5 years	10	15.1
Low birth weight under age 3 years	22.5	18.6
% of children 12-23 months old who are fully immunized	47.0	65.3
% of women in age group 15-49 year with anemia	49.9	55.3

Source: India Health Report: Nutrition, 2015

High prevalence of under nutrition has resulted increased incidents of anemia and underweight among women and children in the state. The India Nutrition Report, 2015 concludes that the extremely poor women’s nutrition in India is translating into a major risk factor for poor child development. It further says, “With high prevalence of low maternal height, low body mass index and anemia, India’s women are at great peril of having small babies and of remaining malnourished themselves (IHR-Nutrition, 2015).” The vulnerability of women and children highlighted by the report is evident from the fact that after Jharkhand, Bihar and Madhya Pradesh, UP has highest rate of underweight children (34.5%). Uttar Pradesh is one among top three states having highest rate of children with low birth weight. A large number of women and children in the state are not only suffering from malnutrition, but they are also deprived of better maternal and child health care. Data reveals that almost every second child born in Uttar Pradesh is unable to avail services of immunization. 53% of children in Uttar

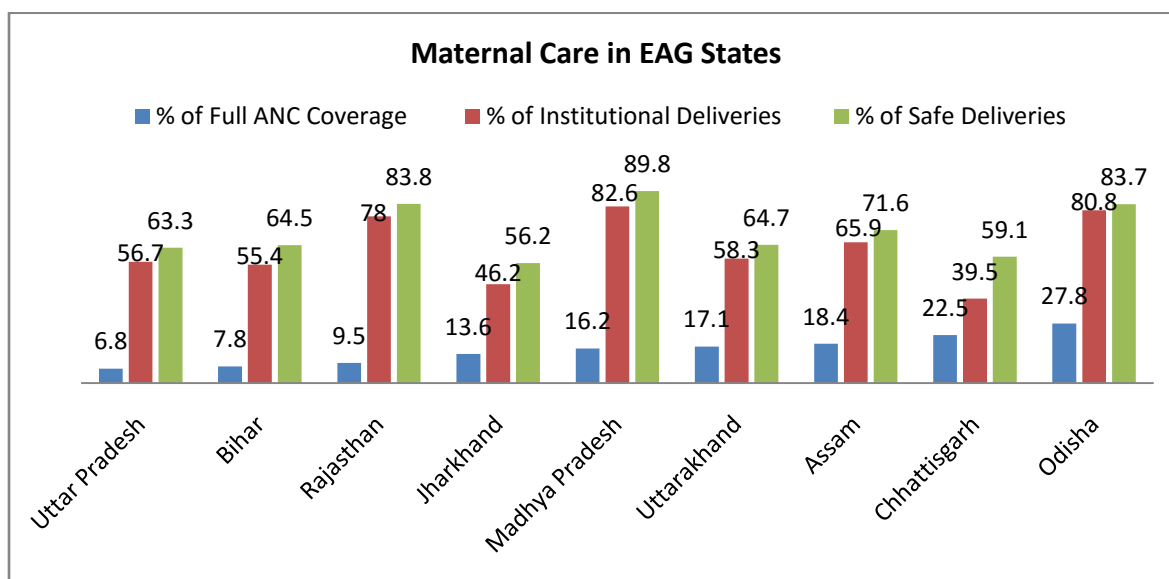
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Pradesh have not been immunized fully as per the guidelines. The coverage of immunization of children in Uttar Pradesh is lowest in the country if two North-Eastern states Nagaland and Meghalaya are excluded.

3. Locating Maternal and Child Health Care of Uttar Pradesh in EAG States:

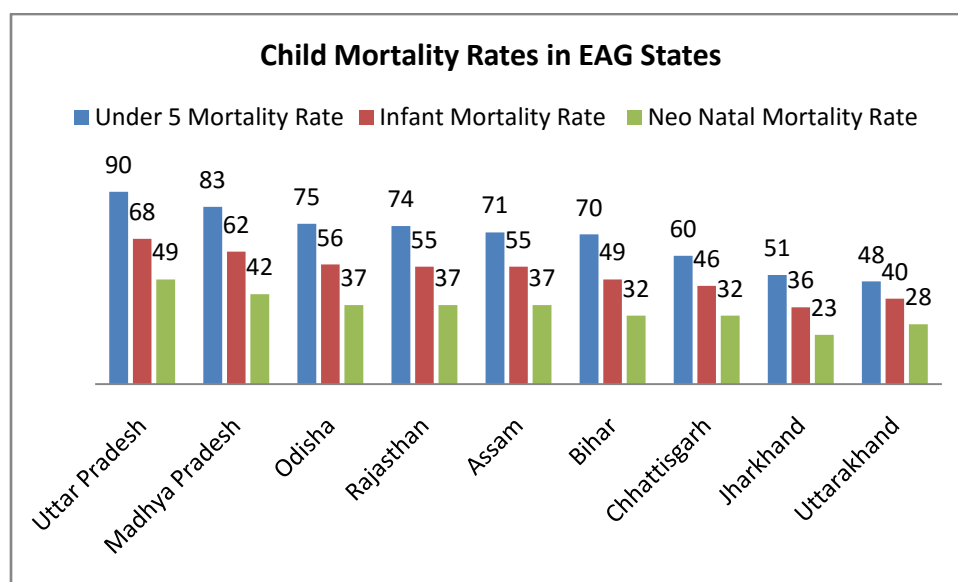
The term previously used for socio-economically backward states BIMARU was replaced by the term Empowered Action Group (EAG). The EAG states comprises of Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Uttarakhand, Rajasthan and Odisha. These eight states along with Assam account for nearly half of India's population; but because of poor public health infrastructure these states have the largest share of maternal and child mortality and morbidity. According to the Annual Health Survey report, 2012-13, this region constitutes 71% of Infant deaths, 72% of child mortality and 62% of maternal death recorded in any point of time in India.

To monitor major health indicators pertaining to women and children, the Office of Registrar General of India (ORGI) has conducted the Annual Health Survey (AHS) in 2011, 2012, 2013 and 2014. Reports of these surveys released by the ORGI revealed that the Uttar Pradesh is the worst performing among EAG states. The comparison of data also reveals that in last four years (2011 to 2014) various EAG states have improved services related to maternal and child health care. However, progress in Uttar Pradesh on this account has been slow and insignificant during these years.



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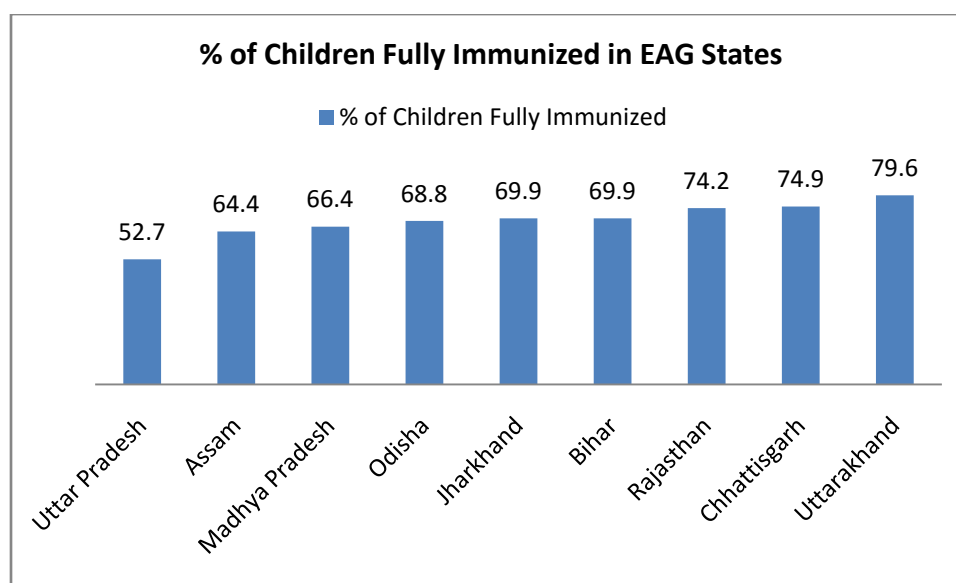
Health care during pregnancy, ANC care (Ante Natal Care) and institutional & safe deliveries are crucial for the wellbeing of mother and children. Full ANC (Ante Natal Care) comprises of 3 or more Ante Natal Checkups, at least one tetanus injection and consumption of Iron Folic Acid (IFA) for 100 or more days. Uttar Pradesh is one among worst performing states on these indicators (See graph above). The full ANC coverage in the state is lowest compared to all other EAG states. According to the data, only 6.8% pregnant women have availed full ANC services in the State. Similarly, the coverage of health care system in the state for safe and institutional deliveries is inadequate as only 63.3% deliveries were conducted safely. The survey identified 42 hotspot districts in all these nine states where fertility related health outcomes of women are persistently weak. 28 out of 42 (67%) identified hotspot districts are in Uttar Pradesh alone.



Source: AHS-2012-13

The status of child health care is also dismal in Uttar Pradesh. According to AHS-2012-13, Uttar Pradesh has the highest child mortality in every stage from Neonatal Mortality Rate (NNMR) to Under 5 Mortality Rate (See Graph above). The comparison of NNMR recorded in the last report of survey with baseline data found that 45 districts reported marginal increase in NNMR and 22 District remain same in surveyed states. Out of these 22 districts where marginal increase was recorded are from Uttar Pradesh. Similarly, 12 out of 22 districts where no change was recorded are from Uttar Pradesh. These trends indicate that despite alarming child mortality in the state, adequate and swift action is not being taken to improve the situation.

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Source: AHS-2012-13

Child mortality and morbidity has close association with universal coverage of immunization. The data presented in above graph reveals that the aim of universal immunization coverage in Uttar Pradesh is far from being achieved. About half of the population of children in Uttar Pradesh does not receive vaccines required to prevent common diseases.

4. Reasons behind Health Care Deprivation of People in Uttar Pradesh

Various health policy documents in the past have indicated that universal health coverage would improve wellbeing of citizens. In fact, the draft National Health Policy-2015, released by the Ministry of Health and Family Welfare has also flagged universal health coverage to people of India as guiding principle. The World Health Organization (WHO) has defined the term Universal Health Coverage (UHC). According to the WHO, “main objective of UHC is for the quality of health services to be good enough to improve the health of those receiving services¹.” Achieving this objective of UHC is not something that can be done overnight; it needs focused and relentless efforts of governments and society. In order to move in the direction of UHC in any country, World Health Organization identified various areas/factors for further improvement. According to WHO these factors are as follows²:

¹ <http://www.who.int/mediacentre/factsheets/fs395/en/>

² http://www.who.int/features/qa/universal_health_coverage/en/

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- A strong, efficient, well-run health system that meets priority health needs through people-centered integrated care (including services for HIV, tuberculosis, malaria, non-communicable diseases, maternal and child health) by:
 - informing and encouraging people to stay healthy and prevent illness;
 - detecting health conditions early;
 - having the capacity to treat disease; and
 - helping patients with rehabilitation.
- Affordability – a system for financing health services so people do not suffer financial hardship when using them. This can be achieved in a variety of ways.
- Access to essential medicines and technologies to diagnose and treat medical problems.
- Adequate number of staff of well-trained, motivated health workers to provide the services to meet patients' needs based on the best available evidence.

Over the years, India has made some progress towards UHC through various people-oriented policies and programmes such as National Rural Health Mission, Rashtriya Swasthya Bima Yojana and Janani Suraksha Yojana. Despite, implementation of these nationwide schemes inspired with the principle of UHC, there exist huge disparities in health care outcomes across the country. Some states have made remarkable progress in providing better health care services; but some others still have poor health care system. It further translates into concentration of more morbidity and mortality in states where health infrastructure has not yet improved enough. One of the main reasons behind these disparities in India lies in the lack of political will of local state governments. Health care is largely a state responsibility in India, therefore, priorities of respective state government decides fate of UHC goal reiterated through various policies of Indian government and World Health Organization. Data presented in first part of this document reveals that Uttar Pradesh is one among the worst performing states due to which people in the state are at higher mortality/morbidity risk compared to other states in the country. Data also suggests that the situation of health care for people in the state is not improving in the desired way, which needs to be investigated within the framework of Universal Health Coverage. It seems that the slow progress of the state towards achieving goal of UHC has resulted in persisting low performance of the state. This section of the document briefly highlights status of health care system in Uttar Pradesh around parameters of Universal Health Care.

4.1 Huge Shortfall of Public Health Institutions

The Indian Public Health Standards (IPHS) introduced by the ambitious National Rural Health Mission is the guiding document for public health care infrastructure planning and up-gradation in the States and UTs. It consists of a set of uniform standards envisaged to improve the quality of health care delivery in the country.

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Norms for Rural Health Care Facilities		
Rural Health Institution	Services Offered	Population Norms
Sub Centre (SC)	First contact point between the primary health care system and the community	Plain Area- 5000 Difficult/Hilly/Desert Area- 3000
Primary Health Centre (PHC)	PHC is the first contact point between village community and the medical officer	Plain Area- 30,000 Difficult/Hilly/Desert Area- 20,000
Community Health Centre (CHC)	30 bed hospital equipped with medical instruments and specialists doctors	Plain Area- 1,20,000 Difficult/Hilly/Desert Area- 80,000

Source: RHS, 2015

The IPHS has set minimum standards of public health care institutions such as Sub Centre, Primary Health Centre and Community Health Centers. According to the current standards, to provide basic minimum health to people, State and UTs must establish one Sub Centre (SC) for a population of 5000 people in plains and for 3000 in tribal and hill areas. The Sub Centre is the peripheral and first contact point between the primary health care system and the community. A Primary Health Centre (PHC) needs to be constituted for 30000 populations in plain and 20000 population in tribal and hilly area. PHC is the first contact point between village community and the medical officer. A Community Health Centre (CHC) is required to be constituted for a population of one lakh and is to be manned by four medical specialists i.e. surgeon, physician, gynecologist and pediatrician supported by 21 paramedical and other staff. This three tier public health infrastructure has been working as health care service delivery mechanism especially in rural areas. This network has also been extensively used by various national and state level special health schemes. For the people of Uttar Pradesh this public health network is crucial as most of its population (78%) lives in rural area.

Public Health Institutions in Uttar Pradesh				
Health Institutions	Required	In position	Shortfall	% of Shortfall
Sub-centre (SC)	31037	20521	10516	33.88
Primary Health Centre (PHC)	5172	3497	1675	32.38
Community Health Centre (CHC)	1293	773	520	40.21

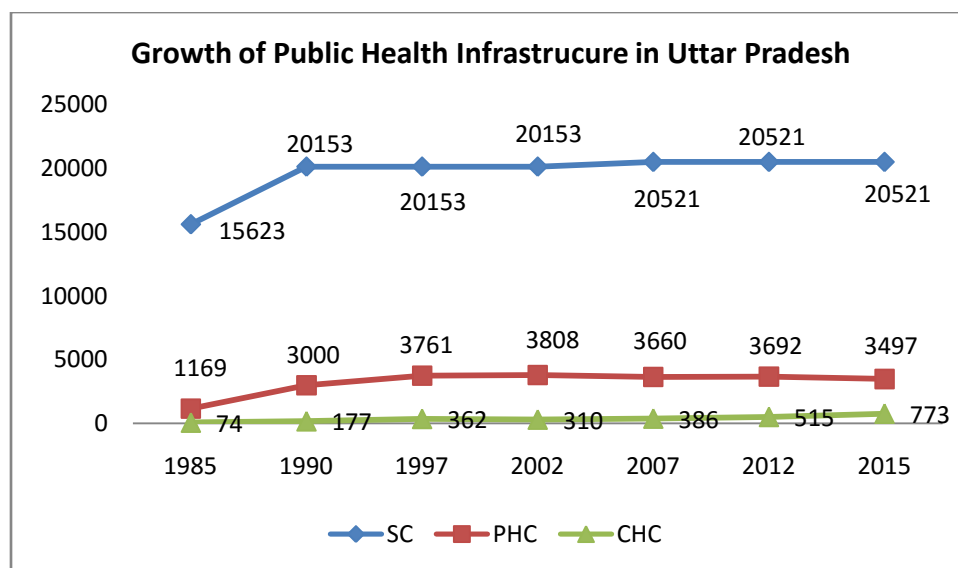
Source: RHS 2015

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Despite high dependency on this three-tier public health infrastructure, India has shortage of health institutions at every level. In the case of Uttar Pradesh, the shortage is unprecedentedly high (see Table above). According to the Rural Health Statistics-2015 report, Uttar Pradesh is short of 33% Sub Centres and Primary Health Centres. **It means one third of rural population in Uttar Pradesh has been deprived of primary health care infrastructure.** The Community Health Centres (CHCs) provides higher level of curative health care; however, data shows that the State is short of 40% required CHCs to cater health care needs of people. Based on these figures it can be argued that the public health system is not easily available to more than one-third population of Uttar Pradesh. This huge shortage further affects effective implementation of centrally sponsored health programmes such as Janani Suraksha Yojana (maternal health scheme), Universal Immunization (child health scheme), National Rural Health Mission, AIDS control programme, Rashtriya Swasthya Bima Yojana and scheme related to other communicable and non-communicable diseases. All these schemes requires effective network of public health institutions such as SC, PHC and CHC for their implementation.

4.2 No Expansion of Public Health Institutions in Last 15 Years

The current shortfall of public health institutions in Uttar Pradesh is the result of ignorance of successive state governments. Data presented in following graph shows that the number of Sub-Centers have not increased effectively in last two and half decades. The number of SCs in the state has recorded marginal increase from 20153 in 1990 to 20521 in 2015. During this period, only 368 new SCs were established. This is insignificant growth in number of SC as the population of the State since then has increased by more than 51%.



Source: RHS-2015

PHCs plays important role in addressing primary level issues of preventive and curative health care. In Uttar Pradesh, PHCs have seen significant increase from 1985 to 2002. However, it has been declining since then.

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The number of PHCs in the State has decreased from 3808 in 2002 to 3497 in 2015. During this 15 years period the population of the state has increased around 25-30% but the number of PHCs have declined by 8.17%. The numbers of CHCs in the State have been increasing, but the increase is not sufficient to deliver quality health care service to people. Despite this steady increase in number of CHCs, Uttar Pradesh has shortfall of more than 40 percent CHCs. The above graph shows that the expansion of the network of public health institutions was neglected by the successive state governments in past. Governments have failed to increase public health institutions at par with population growth in the State. This failure has resulted into overcrowded existing health institutions on one hand and depriving millions of people of basic health care on the other. Vajpai (2014) argues that the poor health care institutions in rural India such as SCs, PHCs and CHCs resulting in people from rural areas having to increasingly depend on secondary and tertiary health care institutions in bigger cities and towns for their curative needs thereby stretching the infrastructure at these hospitals to limits. Higher dependency on secondary and tertiary level hospitals in towns and cities further affects physical accessibility and affordability of health care. It increases distance of health care institutions and cost of the care availed. Unavailability of affordable health care in the local deprives poor and disadvantaged such as women and children of health care. The 71st survey report of NSSO- Health in India found that a large population in rural areas is unable to avail medical treatment because of various reasons. Out of these 28.6% people cited various reasons related to unavailability of quality health care in neighborhood.

Various studies have found that the unavailability of health care institutions in neighborhood increases risk of mortality (Anand, 2014; Rammohan et al, 2013; O'Meara 2009; Vajpai, 2014). Rammohan et al (2013) based on their analysis of DLHS-3 data found that the poor coverage of quality Emergency Obstetric Care facilities in India is one among major cause behind high neo-natal mortality rate in India. The study concludes, "the probability of neonatal death is lower if the household lives closer to the DH, which is the only health facility with emergency obstetric care." The revised guidelines of Indian Public Health Standards (IPHS) released in 2012 envisages up gradation of CHCs so that they can provide emergency obstetric care to pregnant women. The consistently high NNMR in Uttar Pradesh can also be attributed to unavailability of emergency obstetric care in CHCs. According to the RHS-2015, only 134 out of 773 CHCs in the state are functioning as per norms of IPHS. More than 85% of CHCs in UP have no obstetric care specialists.

5. Consequences: Poor Quality Healthcare Services on Offer:

5.1 Insufficient and Pitiably Public Health Infrastructure:

Availability of health infrastructure alone cannot improve health status of people; number of other associated factors help in improving health status. Analyzing health status and public health infrastructure of EAG states Vajpai (2014) found that states like Uttarakhand, Odisha and Chhattisgarh have better coverage of health infrastructure compared to other EAG states; however, their health outcomes remain unsatisfactory. He further argues, "Delivering the required health services depends on availability of amenities like water, electricity,

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beds, medical and paramedical manpower” along with spatial distribution of available health infrastructure. Availability or unavailability of one resource affects optimum utilization of other resources in health institutions. Anand (2013) defines these inter-dependent factors affecting delivery of health service as quality of public health infrastructure. She argues that these factors enhance efficiency, commitment and productivity of medical and paramedical human resources in the Health sector.

The revised guidelines of Indian Public Health Standards (IPHS) released in 2012 acknowledge these inter-dependent factors affecting productivity, efficiency and commitment of public health facilities. It prescribes minimum standards, such as building, manpower, instruments, equipment, drugs and other basic amenities in health institutions with respect to functional requirement of SCs, PHCs, CHCs and District Hospitals. Explaining the overall objectives of prescribing these minimum standards for public health institutions, IPHS documents reads, “the overall objective of IPHS is to provide health care that is quality oriented and sensitive to the needs of the community.”

Rural Health Institutions Functioning as per IPHS Norms			
Health Institutions	Total Functional	Functioning as per IPHS Norms	% of Institutions Functioning as per IPHS Norms
Sub Centre	20521	0	0.00
Primary Health Centre	3497	170	4.86
Community Health Centre	773	134	17.34

Source: Compiled from RHS-2015

The first guidelines of IPHS was conceptualized in 2007 and it was revised in 2012, it is now more than nine years since then. Rural Health Statistics Report-2015 reveals that, India’s progress towards upgrading its health institutions as per the agreed norms of IPHS is very slow. According to the data of RHS-2015, only 21% Sub Centers and Primary Health Centers and 26% Community Health Centers in India are complying with the norms of IPHS-2012. In Uttar Pradesh this progress of upgrading health institutions is much slow compared to national average. The data presented in above table reveals that very few institutions are functioning as per the IPHS norms in the State. Almost no up gradation of most peripheral health institutions such as SCs and PHCs in last nine years exposes government’s ignorance. National Rural Health Mission (NRHM) in its recent initiative of grading CHCs found that there are only four CHCs in Uttar Pradesh, which have satisfactory infrastructure, human resources and other services such as Drugs and supplies, Service availability and Client Orientation. It also found that most of CHCs (467) in the State don’t even have minimum infrastructure and human resources to deliver required services³.

³ <https://nrhm-mis.nic.in/hmisreports/analyticalreports.aspx>

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5.2 Acute Shortage of Medical and Paramedical Human Resources:

Medical and Paramedical human resource in health facilities is the backbone of health care system. They are the one who deliver services using other resources available to them. India has acute shortage of medical and paramedical manpower for its public health system and this shortage is reflected in UP also.. Primary health care facilities such as PHCs and CHCs deliver health care services to poorest of the poor in rural areas; therefore, malfunctioning of these facilities adversely affects health status of most disadvantaged people in the society. Data presented in following table shows that poor rural people have been deprived of medical and paramedical human resources. Acute shortages of human resource at every level of health care system have made institutions such as SCs, PHCs and CHCs irrelevant.

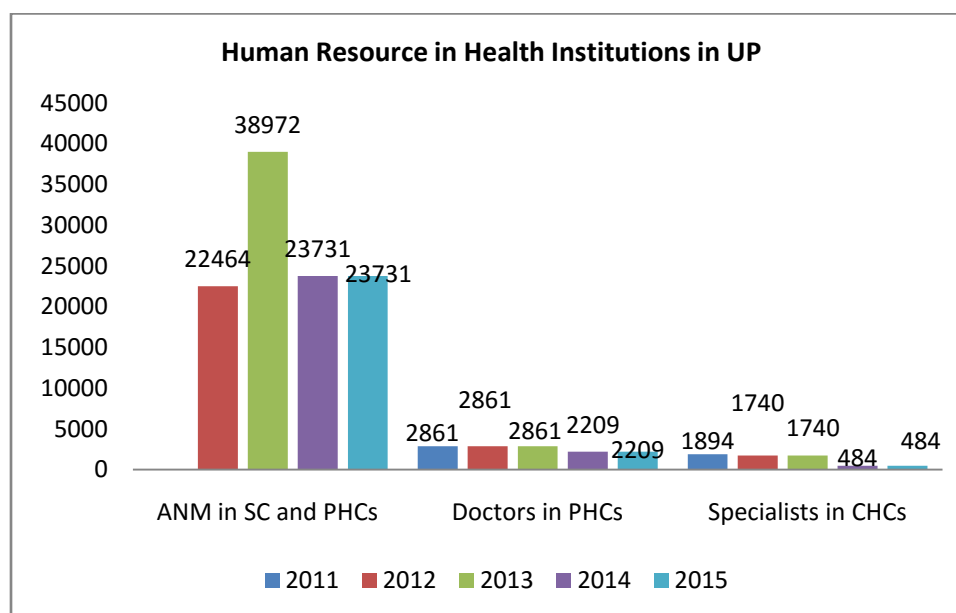
Medical and Paramedical Staff in Public Health Institutions of UP				
Human Resource	Required	In Position	Shortfall	% Shortfall
Doctors at PHCs	3497	2209	1288	36.83
Surgeons at CHCs	773	112	661	85.51
Obstetricians & Gynecologists at CHCs	773	115	658	85.12
Physicians at CHCs	773	103	670	86.68
Pediatricians at CHCs	773	154	619	80.08
Total Specialists at CHCs (Surgeons, OB&GYN, Physician and Pediatrician)	3092	484	2608	84.35
Radiographers at CHCs	773	82	691	89.39
Pharmacists at PHCs and CHCs	4270	2883	1387	32.48
Laboratory Technicians at PHCs and CHCs	4270	963	3307	77.45
Nursing Staff at PHCs and CHCs	8908	4412	4496	50.47
ANM at Sub Centers	20521	20265	256	1.25
ANM at SCs and PHCs	24018	23731	287	1.19

Source: Compiled from RHS-2015

The shortfall of health workers in public health institution in absolute number is very low compared to the number of people who are trained as medical and paramedical every year. These posts can be filled easily as there is tremendous increase in the number of medical and paramedical health workers in the state and across the country. In 2013, Uttar Pradesh alone had capacity to produce more than 3300 medical doctors annually from 30 government and non-government medical institutions. In 2012, it had capacity to produce more than 7500 GNMs and 3800 ANMs (Hazarika, 2013). Despite having enough qualified health professions, people have been deprived of health workers in public health institutions. Data presented in following graph reveals that the number of ANMs in SCs and PHCs in Uttar Pradesh has decreased from 38972 in 2013 to 23731 in

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2015. Similarly, a sharp decline has also been observed in number of doctors and specialists in PHCs and CHCs.



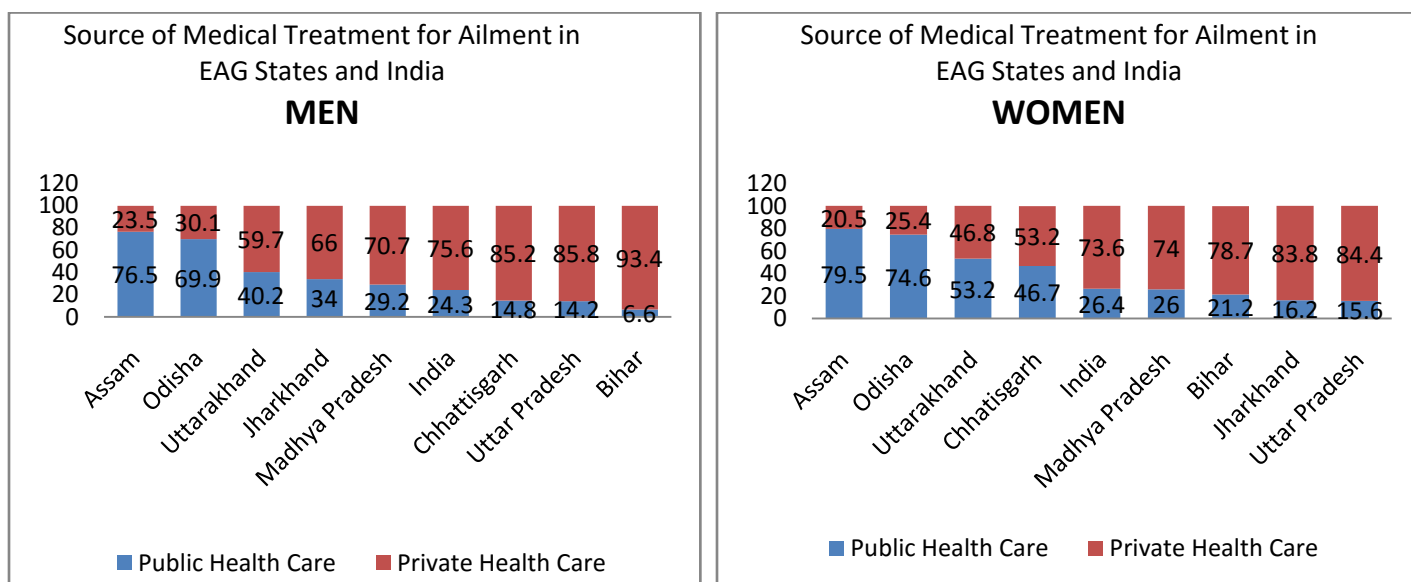
Source: Compiled from HHS-2011 to 2015

Greater availability of health worker had direct correlation with better service utilization and health outcome. Rao et al (2012), in a study found that states with higher health worker density have low IMR, whereas poor health worker density in states leads to higher IMR. The study also found that health worker density in Uttar Pradesh along with other EAG states is lowest and has highest burden of morbidity and mortality. Going into details of health workers density in India, various studies have found wide disparity in distribution of health workers in rural and urban areas (Hazarika, 2013; Rao et al, 2012). Rao et al (2012) in their study found that 60% of health worker (both medical and paramedical) are present in urban areas. The health worker density is 10.78 workers per 10,000 population in rural and 42.03 workers per 10,000 population in urban areas. These figures include health workers engaged both in private and public health systems (Rao et al, 2012). Uttar Pradesh with nearly 78% population living in rural areas is adversely affected by this disparity. In such a situation, it is the government's duty to improve public health infrastructure in rural areas to decrease this disparity. However, it has not been in the priority list of successive state governments in Uttar Pradesh. NRHM in its latest grading of CHCs in Uttar Pradesh found that only 155 (25%) CHCs have the minimum required infrastructure and human resources. Out of this, it found only 4 CHCs providing quality health care service to people. All these CHCs are located in cities of outskirts of cities such as Lucknow, Ghaziabad, Firozabada and Hamirpur. The grading report have also revealed that out of 155 CHCs having minimum required infrastructure and human resources, nearly 50% are located in 14 relatively more urbanized districts such as Azamgarh, Allahabad, Lucknow, Aligarh and Kanpur (city).

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5.3 Thriving Low Quality Private Health Care Services in Uttar Pradesh:

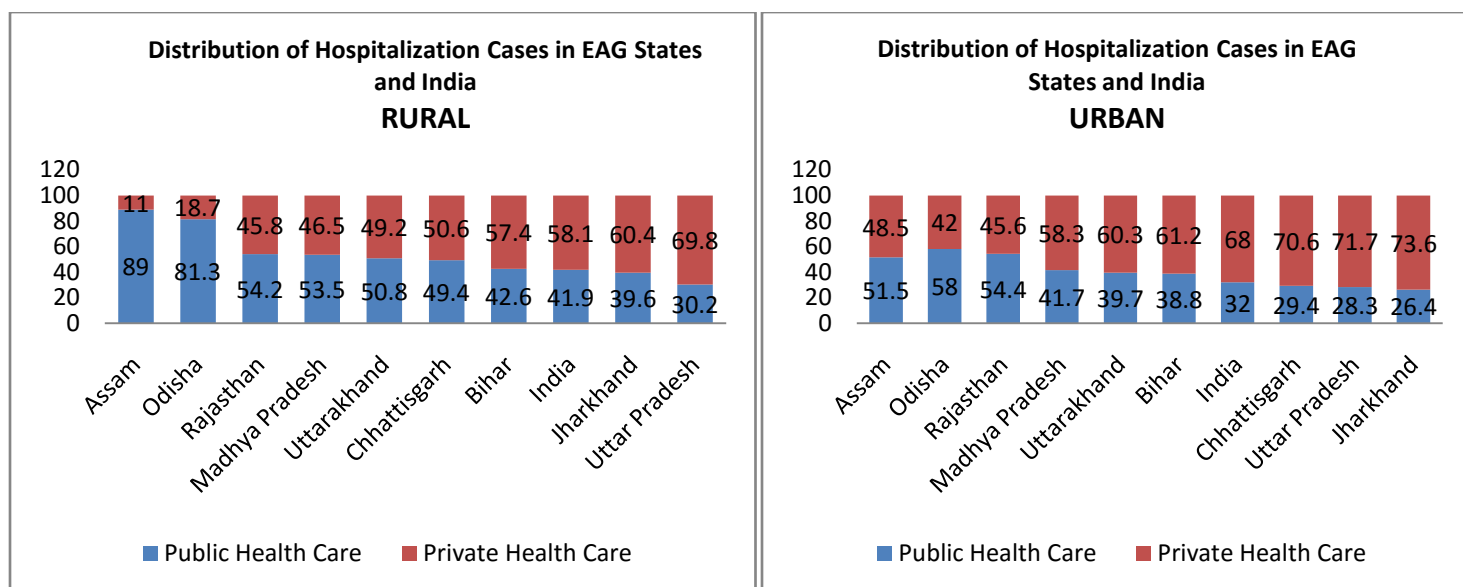
Inadequate public health infrastructure in Uttar Pradesh has provided space for private health care system to thrive. In India, private health care system has become a major health service provider and covers two third of total medical treatment. In the case of Uttar Pradesh this figure goes even higher. In a state with poor socio economic indicators, private health service provider covers more than 85% of total medical treatment (See graph below). A private health provider also includes unrecognized health practitioners practicing medicine illegally and quacks.



Note: figures on bar are in percentage

Source: Compiled from 'Health in India', NSS 71st round (January to June 2014)

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Note: figures on bar are in percentage
 Source: Compiled from 'Health in India', NSS 71st round (January to June 2014)

Uttar Pradesh constitutes largest share of rural and poor people in the country, but the unavailability of public health care system has forced them to go for expensive and poor quality private health care services. Among most poor EAG states, accessibility of public health care (both OPD and IPD) is lowest in the state. According to the NSSO data presented in above graphs, the public health system (primary to tertiary level) share only 14% of total OPD burden. In the case of IPD services, it share less than one third (30%) of IPD burden in Uttar Pradesh.

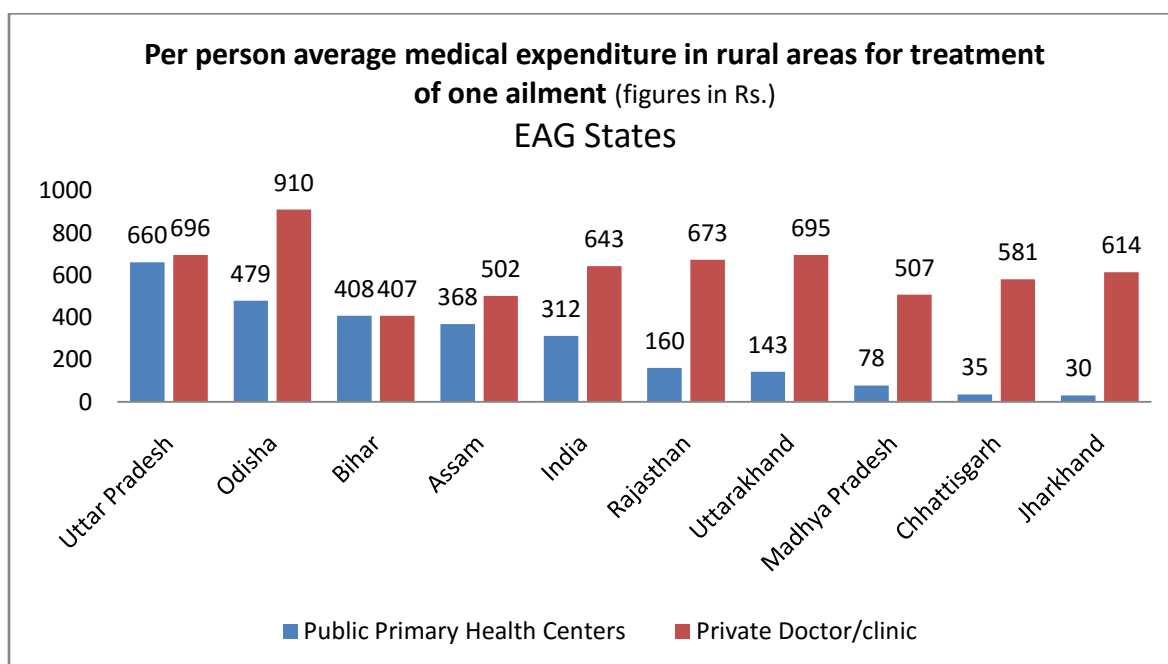
Despite sharing largest burden of IPD and OPD cases in Uttar Pradesh, health care services provided by the private health care system is under question. The Annual Plan Report of Uttar Pradesh for 2014-15, prepared by State Department of Planning acknowledged scarcity of public health care facilities but also raised question on quality of care provided by ever increasing private health care providers. The report reads, "Health care in UP can be summarized as a composite challenge of access, quality and demand. The large public sector does not have adequate access besides being found wanting in quality of care at the cutting edge (PHCs and Sub-Centres). The private sector has access but poses a challenge on account of a serious lack of quality to the extent that it often becomes a threat to the health of people⁴." It seems that the people of UP have two choices before them a public health care system is inadequate and inefficient on one hand and private health care system offering low quality and expensive services , on the other.

⁴ <http://planning.up.nic.in/spc/annual%20plan%202014-2015/Annual%20Plan%202014-15.html>

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5.4 Soaring Cost for Poor Quality Health Care Services:

Data discussed in above sections of this document reveals that the quality of health care services provided by both public and private health care system is poor. However, with no option people are forced to pay exceptionally high amount to avail existing health care services in the state. In Uttar Pradesh the average per person cost of treatment of one ailment is highest amongst most poor (EAG) states (see graph below). The average cost of treatment at primary level (Health Sub Centre and PHCs) in UP is Rs. 660 per person; it is more than double of national average (Rs. 312 per person).



Source: Compiled from 'Health in India', NSS 71st round (January to June 2014)

Data shows that normally the cost of treatment in public health system is much low compared to similar treatment available in private institutions. However, in the case Uttar Pradesh along with Bihar; the cost of treatment in public and private institutions is almost same. The high cost of health care services further affects people's ability to access them. According to NSSO 71st round survey, four percent in rural and three percent sick people in urban India have absolutely no access to medical care. Among these people, 63.6% in rural and 73.6% in urban areas reported financial constraint and high cost of treatment as reason behind inaccessibility of medical health care. Nearly one-third (29.43%) population of Uttar Pradesh lives below poverty line; for them accessing inflated public and private health care services available in the state is next to impossible.

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6. Conclusion:

Article 42 and 47 of Indian Constitution under ‘Directive Principles of State Policy’ describes that providing quality health care to citizen is a duty of government. These articles act as guidelines that the state must pursue towards achieving certain standards of living of for its citizen. Moreover, the Supreme Court in its several interpretations of the Constitution held that the health is integral part of ‘Fundamental Right to Life’ guaranteed under Article 21 of the Constitution. The Supreme Court in its judgments included ‘live with dignity’ in Article 21 and stated that any act, which affects the dignity of an individual, will also violate his/her fundamental right to life. While explaining dignity of life of an individual the Supreme court indentified number of necessities of life such as adequate nutrition, clothing and health care⁵. This constitutional framework makes providing health care to public an obligation of government. However, poor health status of people and inadequate coverage of public health care in various parts of country reveals that the successive governments have ignored this obligation of ensuring fundamental right to life with dignity to its citizen. Low priority to improve and expand public health care system in various states of India has been one of main ways of violating citizen’s right to life with dignity. Uttar Pradesh is one such state with absolutely no improvement and expansion of public health care system. Currently it is relying on a public health infrastructure which is more than two decades old. It has led to acute shortage of health institutions and health workers and thereby affecting delivery of quality health services. Furthermore, it has made health care services unavailable, inaccessible, unaffordable and of poor quality. In the light of constitutional obligations of state to provide health care as a right of citizen, depriving people of Uttar Pradesh of quality public health care is violation of the Constitution.

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⁵ <http://www.cehat.org/rthc/paper3.htm>

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