# HEALTH ROUND TABLE ON STRENGTHENING HEALTH MANAGEMENT INFORMATION SYSTEM (MIS) OF MUMBAI

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**By** 







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## Friedrich Naumann FÜR DIE FREIHEIT STIFTUNG FÜR DIE FREIHEIT FORD FOUNDATION & MADHU MEHTA FOUNDATION

#### VENUE:

#### YASHWANTRAO CHAVAN CENTER,

Gen. Jagannath Bhosale Marg, Nariman Point, Mumbai- 400021

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#### ABOUT PRAJA

Founded in 1998, the Praja Foundation is a non-partisan voluntary organization which empowers the citizen to participate in governance by providing knowledge and enlisting people's participation. It aims to provide ways in which the citizen can get politically active and involved beyond the ballot box, thus promoting transparency and accountability. It primarily focuses on four major issues: Health, Education, Civic and Crime and studies the impact it has on common people of Mumbai. In last few years Praja's studies have been well sighted, and have significant reach amongst the policy makers and police influencers as well as the common people.

#### PRAJA'S GOAL:

- Empowering the citizens, elected representatives & government with facts and creating instruments of change to improve the quality of life of the citizens of India.
- Creating a transparent, accountable and efficient society through people's participation.

#### **BACKGROUND:**

Praja's Health White Paper titled: STATE OF HEALTH OF MUMBAI and released in July 2012 raised several red flags, such as: more than 30% of households spend 11% or more of their annual income on hospitals and medical costs; 75% of Mumbaikars use private sources like private clinics and private hospital and hence there is a need for a strong mechanism to collect data indicators from them.

The study showed that 75% of Mumbaikars are using non-government clinics/hospitals, however only the data of 25% who use government hospitals is available. The main objective of the conference is to strengthen the Health MIS of Mumbai city with the overarching aim to improve the health of the city.

Praja believes that if this gap is left unplugged, then there could be adverse impact on the health status of Mumbai. The immediate need of the hour is to have a robust, up-to-date health information system that will further

complement and assist in achieving the goals of all our present and proposed programmes on public health. Similarly, Mumbai which is better poised to build a more perfect health information system, considering its administrative resources (local, state and national) and strong presence of civil society that includes businesses and several private organizations, can lead in developing the system which can be replicated in other parts of the country. It would be a step towards achieving State Directives enshrined in our Constitution on improving public health systems.

#### WELCOME:

Ms. Milind Mhaske, Project Director, Praja Foundation, formally welcomed all the eminent guest present to discuss means to strengthen Health MIS of Mumbai. Mr. Mhaske said, we are very fortunate to have focused groups of people; key players on the issues of health of the city, we have elected representatives from Public Health committee, officers from government administration, deputy health administrator and his team ex-DHOs and ex-Health Executive Officers, NGOs, Researchers and experts from organization. All the people present here have studied and have lot of experience related to Health MIS & Health programmes of the city. Mr. Mhaske further requested Mr. Nitai Mehta, Managing Trustee, Praja Foundation, to present objective and the outline of Round-Table Discussion.

Mr. Mehta once again welcomed all the participants and shared that Praja Foundation had released state of health in Mumbai on August 2012. The report consists of different components related to various medical issues observed across the city, such as diseases, number of personnel, household survey and such. Nevertheless, one of the most important aspects of the survey was the seven health red flags we had raised regarding health of Mumbai, they are as mentioned below:

#### SEVEN RED FLAGS:

- Over 3.8 Lakh Mumbaikars suffered from Malaria last year
- Over 2.7 Lakh Mumbaikars suffered from Diabetes
- 63,227 citizens of Mumbai were prone to the life threatening Tuberculosis
- 80% Mumbaikars do not have health insurance
- 30% of Mumbaikars spend more than 11% of annual income on medical costs
- Public Health Surveillance (Health Information System) is inadequate
- Government focus is more on tertiary healthcare & not on primary healthcare

Mr. Mehta stressed that in-depth discussion on in each of these areas would be enriching and added that the focus of this round table is public health

surveillance, and need for complete coverage. The report specifies that only 25% of the population access municipal or the government services while 75% of the population uses non-government services that include private hospitals, charitable hospitals, & private clinics, and government track data only from these 25% of the population; such a documentation processes generates highly inadequate data.

Mr. Mehta explained that the first round table is planned to understand how data can be collected from across the population. He suggested that it is essential to make long term and short term planning for healthcare in Mumbai or for that any part of the state. However, for which it is highly important that the data should be collected from all across the population. Mr. Mehta welcomed and handed over the proceedings to Mr. D.M Sukhtankar, Ex. Municipal Commissioner, Mumbai and Chief Secretary, Government of Maharashtra.

#### CHAIRPERSON OPENING REMARK

Mr. D.M Sukhtankar, said that such a conference actually should have been appropriately organized by the Municipal Corporation, because it is one of their obligatory duties to provide medical facilities under section 3 of the Municipal Corporation act. Historically, the two departments, Education and Health dept. of Municipal Corporation have been compiling information and statistics related to various issues in their respective fields. Presently, we need to identify gaps in collecting information and areas that blocks its flow to the total repository of that information; as well as means to lay channels for proper flow of information. In this context, the word of caution is to be precise in laying down format and avoid elaborate format and not collect information just for the sake of it. It is important to begin with very basic, core of information. One needs to be cautious about planning various health facilities and taking timely measures to prevent timely out breaks of certain diseases which are connected to climatic changes, particularly, those that are of predictable nature. Thus instead of adding new components to the existing systems of information, unless absolutely necessary, it is essential to stress on only those items and matter that contributes in making policy decisions. However, the mandatory information required at national level should be continued to be collected; but as the decision makers, as an electoral representative or as an administrator at Municipal level, information required to influence policies or to plan certain types of facilities is not large or of exhaustive kind of information.

He further expressed that, presently the new technology facilitates new lines of communication; therefore we need to identify those new tools of data collection and harness them. It is essential to develop user-friendly data collection systems and provide skilled based trainings on new technology systems, to the private

sector data collators to enable them to share their information and appropriately bring it into the mainstream processes.

Mr. Sukhtankar, finally pointed out that along with the physical health, components of psychological health of a person should also be considered while developing new data collection systems, so that total well being of human health is captured.

#### REPORT ON THE STATE OF HEALTH OF MUMBAI

Mr. Mhaske made presentation of the part one and two of the study conducted on health by Praja, Hansa and Helias Foundation. The data, he said was collected through RTI related to city's citizens & civic issues and performance of elected representatives of the Mumbai city over the last four years. As part of that health statistics was also collected, the data which was collected from data which were collated from (160) Municipal Dispensaries, (24) Municipal Hospitals and (4) State Hospitals. The data primarily looks at the occurrences of different sensitive diseases and ailments since 2008-09 to 2011-12. Apart from that data related to health personnel, health budgets and causes of death data over the last few years.

Sensitive Diseases/Ailments				
	2008-09	2009-10	2010-11	2011-12
Malaria	23,317	39,898	78,448	39,828
Diarrhoea	81,321	116,295	125,999	99,839
Hypertension	28,337	32,469	38,388	25,518
Tuberculosis	31,510	29,692	32,383	29,878
Diabetes	23,777	23,838	22,493	21,264
Typhoid	8,288	4,220	6,557	7,561
Hepatitis B	990	444	547	931
Dengue	682	866	1,403	1,879
Cholera	96	124	236	178

The table above shows that cases of Malaria have considerably decreased by about 40 to 45 percent. To get a complete picture a survey was conducted, where information was collected from citizens of Mumbai.

Mr. Bhavesh Mansinghani, Research Director, of Hansa Research briefed about the processes of the survey conducted and its key findings. He said there was need for Praja Foundation to come across Pan Mumbai survey that covers citizens of all Mumbai and try and represent them in a perfect way.

#### **OBJECTIVES OF THE STUDY**

1. Assess the incidence of various diseases like Malaria, Diabetes, TB, Cancer etc. amongst different households in Mumbai.

#### 2. Understand their usage and spends on health and medical facilities

#### RESEARCH METHODOLOGY

Mr. Mansinghani said the research methodology used here was to attempt to represent entire Mumbai so we choose a sample from each of its 227 Municipal wards of Mumbai and assign an equal sample to each of those wards, trying and collecting a sample from them. The basic target Group for the study was both males & females belonging to the age group of 18 years and above and resident of the ward itself. For the demographic representation sample quotas were set for representing gender and age groups on the basis of their split available through Indian Readership Study (Large scale baseline study conducted nationally by Media Research Users Council (MRUC) & Hansa Research group) for Mumbai Municipal Corporation Region. Similarly, the required information was also collected through face to face interviews with the help of structured questionnaire. He further added that selected 4–5 prominent areas in the ward were identified as the starting point and from each of those areas 12–5 individuals were selected randomly and the questionnaire was administered with them. Once the survey was completed, sample composition of age & gender was corrected to match the population profile using the baseline data from IRS. This helped us to make the survey findings more representatives in nature and ensured complete coverage. The total study sample was 15,191.

#### **FINDINGS**

Mr. Mansighani said that the respondents were asked about the incidence of diseases in the family in current year. The study concluded that almost 14.8% of households in Mumbai have encountered a problem of Malaria and about 10.4% have encountered Diabetes followed by TB, hypertension and Cancer. While other serious diseases like Cancer. There are about 3, 80,000 cases of Malaria in Mumbai, but here government figures shows close to only 39,000. Details in table-1&2 given below:

Table-1

Pro	jected
to	Actual

Diseases	Incidence	Estimated Cases per 1000
Base (All Respondents)	15191	
Malaria	14.8	148
Diabetes	10.4	104
Hyper tension	3.0	30
ТВ	2.4	24
Cancer	1.5	15

Households in Mumbai

Table-2

Diseases	Number of households who have suffered
Base (All households)	25,15,589
Malaria	3,72,307
Diabetes	2,61,621
Hyper tension	75,468
TB	60,374
Cancer	37,734

As mentioned in table-3 &4 Mr. Mansighani further shared that when the respondents were asked that when they encountered such kind of disease / ailments which kind of hospitals they generally visit. Only 24 percent said they visit government hospitals, while the large majority prefer Private Clinics and hospitals. However, the matter of fact remains that only about a one third of the Mumbaikars use government hospitals for getting themselves treated from these diseases.

Table-3

Hospitals Visited	All
Base (Suffered from a disease)	6165
Government / Municipal Hospital	24
Private Clinic / Hospital	64
Both	12

Projected to Actual Households in Mumbai —

Table-4

Hospitals Visited	Number of households	
Base (Households)	10,20,908	
Government / Municipal Hospital	2,50,122	
Private Clinic / Hospital	6,52,360	
Both	1,18,425	

Mr. Mansinghani further said that table-5 shows the study of administrative ward-wise incidences of diseases in the family, such as malaria, hypertension, TB and diabetes. The result was that if it is compared to average cases, across Mumbai, the wards which are above average are actually, B, E, G/S, H/E, and H/W, ward, which are particularly areas which are Sandhurst road, Elphiston road, and such.

Table-5

Ward	Malaria	Hypertension	ТВ	Diabetes
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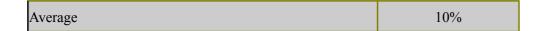
	Number of cases per 1000			
Overall	148	30	24	104
A	149	34	8	139
В	427	90	109	44
C	107	56	15	85
D	119	20	8	87
E	313	55	78	142
F/N	146	39	22	107
F/S	115	28	28	85
G/N	135	20	29	75
G/S	247	43	32	80
H/E	160	44	13	170
H/W	261	32	41	145
K/E	168	51	27	104
K/W	122	22	12	96
L	154	23	20	128
M/E	130	22	43	115
M/W	98	10	27	86
N	144	38	16	114
P/N	82	15	9	98
P/S	170	24	13	52
R/C	172	18	4	101
R/N	93	34	8	96
R/S	77	7	5	74
S	131	31	39	122
T	51	12	18	66

<sup>\*</sup>Cells highlighted show significantly higher incidence as compared to overall Percentage of Annual Family Income spent on hospital/medical costs.

In table-6, the study further looked at the expenditure made on the diseases, from respondent's entire income, so a percentage of entire household spent on health and medical related facilities. On an average 10% of the household income is spent on hospital/medical facilities and there are about 30 percent who actually spent 11% of their household income for health and medical related issues, which is closer to other developed countries where a major part of their medical expenditure is spent on health insurance.

Table-6

Hospitals Visited	All
Base (All Respondents)	15191
Less than 5%	31
6% to 10%	39
11% to 20%	19
21% to 30 %	7
More than 30%	4



He shared that the information collated from NRHM Website shows that hospitalised Indians spend more than 58% of annual income on medical costs and over 25% hospitalised Indians fall below poverty lines because of medical costs and that is word of caution for us. He further added, that table-7&8 gives details on incidences of Medical Insurance, as to how many have applied for the medical insurance in every household and have medical insurance in their own name. The study showed that only 20% of the households have one member who has medical insurance in their household. That shows that 80% are still insecured about their medical and health requirements. However, as per NRHM study only 10% Indians have medical insurance and it covers only hospitalisation costs (mainly for chronic diseases) and not expenses incurred for OPD (Out Patient) or drugs.

Table-7

Medical Insurance	All
Base (All Respondents)	15191
Yes	20
No	80

Projected to Actual Households in Mumbai

Medical Insurance	No of households	
Base (Households)	25,15,589	
Yes	5,14,438	
No	20,01,151	

Mr. Mangesh Pednekar concluded the session, saying that he agrees to what Mr. Sukhtankar stated that are we adding more and new information to the existing system and how best we can utilize the available information and what is the best and effective means to utilize it. He expressed that our concern should be to know whether we are getting the representative picture of the real problem; the Govt. statistics represents only 25 percent of the real problem or those real issues or just a tip of the iceberg. So there is a need to generate some representative study to understand real problems of rest of 75 of the population. The present study, may not give exact estimation of the problem but it is more or less close to the real problem. He further shared that, it is not always that the situation is very bad in context to health, for example Mumbai has excellent death registration system which exists for more than 100 years, then there is population based cancer registration data, which functions for more than 50

years and is routinely documented and in terms of quality it is very good but there is a need to learn the ways to utilize these facilities. For example, the Praja foundation's August report states that health report is available. But the point is, is the funds adequately spent and is there clarity on how it should be spent? So there is a need to use existing data bases and refine it.

To clarify his point Dr. Pednekar gave an example. He said they have Mumbai core study where they have recruited 130 people in early 1990s. The primary objective of the recruitment was to study tobacco attributable modalities that are the diseases tobacco contributes to. So eventually when one wants to have modality system then that system related to modality needs to be available in the city. In this case they received good support from executives from Health dept. All the required information was available, but one needs to understand that the data may not be available in the way one requires, so one has to refine it. Although data is available, it needs to be coded as per the international classification of the diseases. The gap was observed to limited resources because of which less number of staff was hired. Although information is available, it is not annually published, it is not routinely available, so people are not aware of the real problems. So there is a need to focus upon correct areas and link the information with problem and resources. For e.g. we know that tobacco causes tuberculosis, but we need to identify the factors associated with the diseases. So if we identify that smoking and under-nutrition is the major significant factor, that increases the risk of tuberculosis, then one can focus on these issues and use the available resources optimally and make the system effective.

### HOW HEALTH DEPARTMENT OF MCGM MAINTAIN DATA AND CHALLENGES IN IT...

Dr. Santosh Revankar, Dy. Executive Health Officer, presented information on MUNICIPAL Corporation of Greater Mumbai (MCGM) public health department M.I.S. cell. He said the Management Information Evaluation System Cell was established in year 1988 at F/South under IPPV Project; currently it is located at Epid Cell, Kasturba Hospital since November 2007.

The data is collected in all the cemeteries in Mumbai, under MCGM. It is collected at the ward office level, they are properly arranged, tied in bunches and handed over to Kasturba Hospital. In Kasturba once again entries are made and put on record. Here, computerized Birth & Death Certificates are available from 1996 onwards similarly, Birth & Death Registration through SAP & Online Certificates are available from 2007. Eventually all indicators will be collected through SAP (System Application Protocols).

#### **RBD: REGISTRATION SYSTEM**

Dr. Revankar explained that the government of Maharashtra prescribes certain formats in which data is saved, the format of the same is a follows:

#### **Daily registration**

General Hospital	Fill the forms & send to
Maternity & Nursing home	ward M.O.H.
Cemetery	
Ward office	Feeding the forms of MIS (5 <sup>th</sup> of every month) birth, death & still birth

#### MAIN ACTIVITIES OF MIS CELL

Dr. Revankar explained that the data is collected from health posts such as Family Welfare & MCH activities and PNDT. There three levels of bureau offices under which these health posts work; they are in western and eastern suburbs. And all the data from the health posts are collected at the bureau level and consolidated at the head office. Dr. Revankar, further described detailed process of MIS it is as mentioned below:

- The monthly report of performance is compiled & 18 indicators report is prepared for submitting to Govt., by the MIS Cell on line.
- The MIS Cell also undertakes analysis of Births and Deaths Age, Sex, Education etc. & sends report monthly & Quarterly in prescribed formats to the GOI & GOM. Births occurring in municipal hospitals and private hospitals. In slums there are still cases where people continue to prefer home deliveries, although they have reduced to a greater extent. Thus our health infrastructure has improved considerably over the period. Lot of trainings has been given community health workers and to the general masses. People have been responding and it has worked well over several years.
- Under SAP system all Birth and Death report are generated and centralized reporting system is introduced.
- Fortnightly diseases reports are prepared sent to Municipal Commissioner. Addl. Municipal Commissioner (WS), Executive Health Officer. Continuous watch is kept by conducting mapping processes to verify epidemic or sporadic cases.
- Monthly Consolidated reports of various health programmes, run by Public Health Department for Executive Health Officer, Jt.EHO, Dy.E.H.O.'S so that they can extend their additional inputs.
- Training cum orientation program was arranged by MIS cell for Medical & Paramedical staff of all the health posts, wards, Bureaus, State Govt., Hospital, PVOs for introduction of the new NRHM format in Jan 08.

- Work of creation of Database of Medical Institutions where Births & Deaths occurs is in progress as per Govt., Instruction.
- Fortnightly Report (Ward wise) Births, Deaths & Marriage are prepared & send to Addl. M C [WS].

Dr. Revankar informed that recently, a new directive has been stated by the State government that at least single personnel from the private institutes should be trained to do online registrations of the births occurring in private hospitals. In usual case it takes about a week or more to register the cases. This activity is in process and soon the concerned department would issue the birth certificates fasters. He further pointed out that there is a need to put a tab on this procedure to avoid erroneous registrations. Dr. Revenkar further informed that in case of deaths, they are registered in the cemetery within 24 hours. Addl. Municipal Commissioner assesses the situation every fifteen days. It is ensured by the double check system where senior officers of other zones randomly make visits to monitor false reporting.

#### ELIGIBLE COUPLE SURVEY-2011.

Dr. Revankar said this was more of family welfare activity where, entire Mumbai was surveyed by health post staff at health post level. The survey was conducted basically for the slum people, and people living in slum like areas. Presently, with advent of SRA, vertical slums have risen in the city, however their health seeking attitude continues to be similar to slum people. Dr. Revankar further gave details (Table-9) on eligible couple survey 2011. He said the eligible couples mentioned here are those who are eligible to give birth. Out of which, there were those who accepted sterilization. And the couple protection rate is 60.48 percent. And those who did not accept the method were the newly married ones or the couples which wanted to have more than one child.

Table-9

<b>CENSUS Population 2011</b>	1,24,32,830	
Population surveyed		47,78,352
Eligible Couples		7,04,066
Eligible couples	accepting	2,55,421
sterilization		
Other Method		1,70,391
CPR		60.48
Not accepting method		2,78,254

Every fortnight at the health post, our Community Health Volunteers collect this data, he said. Details of the same are as given in n table-10. He further shared that there are 18 indicators; the data under these indicators are consistently collated. Dr. Revankar expressed that in last column of the table annual expected level of achievement shows satisfactory figures.

Table-10 Annual Final Family Welfare, , MC.H immunization & Hepatities "B" Report (2011-2012)

2012)				
Sr. No	INDICATOR	ANNUAL ELA	GRAND TOTAL	% ANNUAL ELA
a b	Vasectomy Tubectomy	27730	1619 12295	82
c 1	Laparoscopy Sterilization		8767 22681	
<b>1A</b>	Ster.On 2 Child	16638	5942	36
2	IUD/Cu-T	48669	45890	94
3	Oral Pills (Cycles)	240682	201214	84
4	Condoms (Pieces)	4650000	4710057	101
5	Vitamin-"A"	1120433	394009	35
6	ANC Registration	262096	194714	74
7	D.TP IIIrd	238269	200806	84
8	O.P.V IIIr	238269	199579	84
9	B.C.G	238269	191900	81
10	Measles	238269	181251	76
11	T.T Mother	262096	194062	74
12	DP.T -Booster	189796	189627	100
13	O.P.V – Booster	189796	189013	100
14	D.P.T B-II	243637	203230	85
15	T.T10Years	243637	251457	103
16	T.T 16 Years	243637	220751	91
17	Hepatitis –"B"	238269	186773	78

#### **Profile of Mumbai**

While giving information on Census population 2011, Dr. Revankar, said that initially city was very thickly populated, but now the residential population has spread out in suburbs, as more commercial activities have grown in the central

part of the city. He pointed out that there is a very drastic increase in the western suburbs.

Table-11

Census Population	City	W/Sub	E/Sub	Total Greater Mumbai
2011	3106514	5509888	3816428	12432830

#### **Birth & Death Rates**

In the table-13, Dr. Revenkar said that birth rate is 13.48 percent and the death rate is 7.37 percent. Maternal mortality rate is the indicator of the health activity that is conducted with mothers (ANC) that is the detection of the pre-pregnancy and its early registrations, so that healthcare facilities are provided to both mother and child.

Table-13

Table-13	
Indicators	YEAR 2011
Birth	167563
Birth Rate	13.48
Death	91688
Death Rate	7.37
Infant Death	4948
<b>Infant Mortality Rate</b>	29.53
<b>Maternal Deaths</b>	239
Maternal Mortality Rate	1.43

#### **VITAL STATISTICS SINCE YEAR 2001**

Dr. Revanker said that their department has been collating information since 2001 on different indicators as shown in the table -14. It is observed that the birth and the birth rates have gradually fallen down. Similarly, Maternal Mortality Rate has also come down. The details of the same are given in table-14.

Table 14:

YEAR	POPULATION	BIRTHS	BIRTH RATE	DEATHS	DEATH RATE	INFANT DEATHS	I.M.R.	MATERNAL DEATHS	M.M.R.	NEONATAL DEATHS	N.M.R.
2001 CENSUS	11978450	188417	15.73	85051	7.10	7255	38.51	16	0.08	4392	23.31
2002	12178868	185094	15.20	84680	6.95	7142	38.59	31	0.17	4245	22.93
2003	12377718	186414	15.06	87961	7.11	6743	36.17	32	0.17	4135	22.18
2004	12661952	185729	14.67	86433	6.83	6505	35.02	50	0.27	3981	21.43
2005	12867208	184171	14.31	87128	6.77	6469	35.12	82	0.45	3924	21.31
2006	13072464	179861	13.76	90113	6.89	6218	34.57	114	0.63	3922	21.81

2007	13277720	178402	13.43	90346	6.8	5892	33.02	61	0.33	3462	19.40
2008	13482976	182759	13.55	92558	6.86	5754	31.48	81	0.44	3576	19.57
2009	13688232	175298	12.81	90033	6.58	5866	33.46	148	0.84	3467	19.38
2010	13893488	184916	13.31	97371	7.01	5532	29.92	211	1.14	3244	17.54
2011 CENSUS	12432830	167563	13.48	91688	7.37	4948	29.53	239	1.43	2979	17.78

#### N.R.H.M. - NATIONAL RURAL HEALTH MISSION

While speaking of NRHM interventions Dr. Revanker said that under NRHM, several activities are newly included. The activities of department of Family Welfare and Mother & Child Health Care are included in this programme, primarily, introduction of SC/ST. The column is included to retrieve the data of SC/ST and reporting the same. Salient features of NRHM Monthly reporting is as follows.

- 1. Inclusion of SC/ST data
- 2. Detailed information about ANCs
- 3. Detailed about contraception method- NSV, Minilab TL etc.
- 4. Detailed about deliveries/ obstetric/ LSCS and Pregnancy outcome.
- 5. Detailed information about MTPs
- 6. Detailed information about Maternal Death and Infant Death
- 7. Detailed about Immunization & Vit-A
- 8. Addition of RTI/STI and Adolescent Child Health

Dr. Revankar, further shared that the new strategy has been introduced since January 2008. The methodology of collection of data has been modified. The details of the same are as follows:

- This new format to be introduced from Jan 08 onwards
- The methodology of collection of reports are modified
- The registers has to be updated specially columns to be introduced at health post level, Maternity home and all Obstetrics Depts.
- R15 registers will be sent to all the institutions for ANC data entry at Maternity homes, Hospitals PPC.

#### PRESENT REPORTING SCHEDULE

Table 15: Reporting of Health posts, Maternity Homes, Peripheral Hospitals, and Medical Colleges etc. Methodology

Maternity Home Peripheral Hospital	Health Posts + their reports	Respective Bureau	MIS
PMPs, Nursing Home	Health Posts (Quarterly)	CDOs of ward	
PVOs & State Govt, Hosp.	Monthly Report		
Medical Colleges	Monthly Report		

#### NRHM / RCH II (BACKGROUND)

Dr. Revankar expressed that the Government of India has resolved to launch the National Rural Health Mission/RCH II to carry out necessary architectural correction in the basic health care delivery system, as it has recognized the importance of Health in the process of economic and social development and need to improve the quality of life of citizens. He further added that the Mission adopts a synergistic approach by relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water. Previously, nutrition, sanitation, safe drinking water hygiene was taken care by different departments, but now it comes under one roof. Earlier he said, water testing used to take long time, but now plans are made to upgrade then system to get faster results. In case of diarrhea cases these water samples are tested on priority and reports are given within 24 hours so that immediate corrective actions are taken.

Dr. Revankar, share an incident occurred recently in ward-A. Residents complained about vomiting and diarrhea, due to water contamination. Thus water was sent for testing, however the concerned authority did not wait for the reports to deliver and immediately distributed chlorine tablets, and educated locals on preventive care. The department worked in collaboration of Hydraulic department and administered necessary corrective measures at all possible levels. However, the number of cases failed to fall down. It was then realized that the suction tanks of those particular societies, were getting contaminated by their sewage water. In the mean time health, water, sanitation departments were blamed and targeted by the public and press. But in reality people's health was affected due poor maintenance of those particular societies. Dr. Revankar explained that because the data was generated, progress of incidences could be monitored and they were able to derive at the logical conclusion. Dr. Revankar expressed that in this particular case MIS played an important role.

He further explained that NRHM's Plan of Action includes increasing public expenditure on health, reducing regional imbalance in health infrastructure, pooling resources, integration of organizational structures, optimization of health manpower, decentralization and district management of health programmes, community participation and ownership of assets. It also uses management tools into district health system, and meeting Indian Public Health Standards in each Block of the Country.

Dr. Revankar explained goals of NRHM, they are as given below:

#### *GOALS*

1. Reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR)

- 2. Universal access to public health services such as Women's health, child health, water, sanitation & hygiene, immunization, and Nutrition.
- 3. Prevention and control of communicable and non-communicable diseases, including locally endemic diseases.
  - Dr. Revanker explained that their dept. has actively focused on non-communicable diseases, and that Addl. Municipal Commissioner has taken keen interest in initiating activities related to hypertension and diabetes. Regular checkups of these two diseases are conducted. At community level camps are conducted with the support of local corporators. The beneficiaries belonging to forty years and above take advantage of these camps. A system is developed where patients are linked with local dispensaries where dietitians and doctors visit to educate and monitor their diseases and consults them.
- 4. Access to integrated comprehensive primary healthcare
- 5. Population stabilization, gender and demographic balance.
- 6. Promotion of healthy life styles.

#### VULNERABLE COMMUNITIES

Dr. Revanker explained that vulnerable communities include those groups of people who are underserved due to poor geographical accessibility, (even in better off States) and those who suffer social and economic disadvantages such as Scheduled Castes/Scheduled Tribes (SCs/STs) and the urban poor.

He shared that in the current year couple of slums has come up in new regions. People living here have to travel about one to two kilometers to access basic health facilities, so in the current year five new dispensaries are started all over Mumbai.

He further added that scheduled Caste people (166.6 million) and Scheduled Tribe people (84.3 million) in India are considered to be socially and economically the most disadvantaged group. Scheduled Castes constitute 16.2% and Scheduled Tribe 8.2% of the country's population (as per the 2001 Census).

Their percentages in the population and numbers however vary from State to State. Scheduled Castes and Scheduled Tribes do not live only in homogeneous communities, but are found within heterogeneous communities both in rural and urban areas. CHVs visit these communities and provide medical assistance.

The RCH indicators for slum population are worse than the urban average. Marginalization results in poorer social indicators for these groups, including maternal and child health indicators. This can be as much a result of service provider behavior as of health seeking behavior and capabilities.

#### **DISCUSSION:**

Mr. Sukhankar took the lead to co-ordinate the discussion. He invited all the invitees to share their views on the two presentations made previously.

Dr. R.M.Chaturvedi, Prof. Head Community Medicines (P.S.M), Sion Hospital. He has served in K.E.M for 35 years. He questioned why shouldn't we transfer the good practice of birth & death registration to other areas? He further explained that he had visited the court where the birth & death registration is directed by court order. Earlier registration was done in court, but now people are aware that if they delay in registration then they would have to go to the court and spend some money on it, therefore registration of birth is very fast. We have developed a system where online submission of data of birth and death registration, and it has become successful. And there is awareness about it as if one does not have birth registration one cannot get passport. So there is a need, there is an act and there is a process.

When one talks about the notifiable act one which is the weakest act of Municipal Corporation or government of India The Municipal Corporation has identified 20-25 list of the diligence to be notified, that list does not match with the list of the central government, or does not match with Gujarat list. Every state local body has different state of notifications, so it appears that we furnish what Central govt. does not require. So there is a need to introduce strong act in corporation so that people obey it, like in case of Birth and Death registration act there is a procedure to go to the court, that act enforces people to obey. Now, if government has only 25% of data and 75% still remains to be covered then is the weakest area that leads to the failure of most of the public health programme. For e.g. If Malaria case is notified in corporation, then it employs its machinery and percolates it to the field people, MOH, and action is taken.

Corporation cannot take action if the case is not notified. Private people do not notify because, our act is weak and no action can be taken. So we need to have strong act for notification, and this should be done with the consultation of State government or Central government so there is need for uniform act, and there is need from Center Notification act. For e.g. when there was plague in Surat, there was no act, so Surat had to take action under the British act, as that act was not repealed.

- 1. Develop strong notification Act.
- 2. Develop strong notification system.
- 3. Use advance technology benefit. All private hospitals may be given access to the portal where they register directly so that the information trickles down faster, which would enable corporation to take immediate action.

Within one year corporation should develop a system where direct notifications can be done by the periphery, failing which their nursing home registration can be cancelled, they can be penalized, and if they repeatedly neglect they can be sentenced to jail.

Ms. Neera Kewalramani, Ex. Deputy Health Officer, said that BMC has a gynecology cell instated that collects information from the private & public hospitals, between 2006-08, I was part of it. In case of Malaria we see a drop. So where there is will, force, communication and involvement of all the stakeholders, its prevalence can be reduced. Same has been observed concerning monsoon related diseases. Previously, it was very difficult to get information from private practitioners, but after involvement of counselors and State Ministers it has become much easier. Definitely, there is a need to make strong amendments in the act. It has been observed during monsoons newspapers are keen on reporting on diseases, so when people are made responsible in public then they give information. So, information can be collated from people and private hospitals in case of diseases which spread rampantly and affect people; but in case of other diseases we have to evolve and involve others.

Death registration by the court is done as per the central act. Related to RBD act, all the birth and deaths that are reported are registered. But there is a timeframe for registration. Within one year of registration, court order is not required. It is only after one year birth and deaths are registered under court order, under local jurisdiction. But due to awareness people register it in a week's span. Previously there were several cases of home births and so people used to come as when they wanted to register, but now such cases have reduced.

Notification of the disease: all the infections diseases are supposed to be informed to the local health authority that is the notification. In context to greater Mumbai, under section 421 of Mumbai Municipal Corporation act there are 21 diseases included in the notification list. It is mandatory on part of any general practitioner or private consultant or sector to report to the concerned health authority. This has been implemented and we have begun to get reports from private sector. This year too we got lot of information on dengue cases and corrective measures were taken to curtail spread of the diseases.

Dr. R. M. Chaturvedi, asked what is the punishment in case people fail to notify? There is no action; there is no punishment, so people do not obey it.

Dr. Santosh Revankar, deputy Executive Health Officer responded that premonsoon meetings are conducted with private hospital, major nursing homes to discuss and sensitize them on notification of diseases. We have succeeded in

establishing good rapport with them. On which Dr. R. M. Chaturvedi agreed that there have been sensitizations but is that enough?

Dr. Revankar, responded that in couple of case, in case of small nursing homes they directly talk to the press and that is how we understand, and we reach them and rope them in and sensitize them. It is a continuous process. Previously this was a huge problem. There was under-reporting from the private sector but now it is gradually being reported. He said he agrees that there are no stringent punishments to section 421 perhaps that needs to be done.

Ms. Leni Chaudhuri, Programme Manager, Narotam Sekhsaria Foundation said that having engaged with public health data both from research and advocacy perspective, believes that this kind of exercise acts a value addition. She further added that data per se though it is very useful, it is essential to think how it can be made useful to the people who are at the field level and those working on it. It is essential that it has to be simply analyzed and made accessible to as many people for advocacy purposes. Similarly, cross analysis of the data on different themes can be made relevant to more number to people. There is a need for some kind of synergy with the data, however if consultative processes like such are planned prior to the data collection and analysis then it can be used for several other purposed and it could be jointly owned.

Ms. Sulbha Pathak, Researcher, Tata Institute of Fundamental Research shared her experience while she was working on a paper on Malaria epidemiology. She collected the data from registers of KEM and Kasturbha hospital for three years consistently. However, to access information on age and sex distribution, on active surveillance from Mumbai Municipality, but unfortunately such break up of data is not available. She was told that it was sent to the Center so it was not available. She thus went to the health centers and collected the data she required for from the workers notebooks and digitized. She said in most cases classified data is not available in registers, but can be found in notebooks, but it is not considered valuable. The point she made was that there is a need to collect data, classify it and digitize.

Dr. Pendenkar commented that when one defining ones health priorities, it has to be made public what figures are we looking at whether they are 25% of data available with the government and the 75% that has been missing, and whether it is representative of total population. One also needs to consider that these 25% who access public health services belong to lower income groups and cannot represent higher income groups. So the representation is equally important.

Dr. Ram Barot, Councillor and Health Committee member shared collecting data is not the only important factor, but suppose a health card is made where

person's health history is stored. In the beginning it can be administered in one ward. It should also give health history of his ancestors.

Dr. Chaturvedi, commented that we already have too many cards, Aadhar etc. on this Dr. Ram Barot countered that that if proper card system is adopted, we would be able to collate 75% of data and then it would easy to make right kind of health policies.

Dr. Chaturvedi shared that the card system is used in Russia, but it is not feasible, here as our data is not yet computerized. He further informed that there is software available where people's Id numbers are used and it gives complete health history of that person. Dr. Chaturvedi further commented on one aspect of report presented by Praja foundation related to sensitizing the private practitioner. He said the report states that 14.8% people suffered from Malaria then is, so if we consider family size14.5 then out of two families one member suffered from Malaria. The total cases had gone up to 19 lakhs in Mumbai. This figure is very less considering the population 1.2 crores. This happened because sample survey is best statistical tool to identify a problem. The technique adapted is full proof, but in an interview people would tell what their doctors have told them and for private practitioner any fever is Malaria. So there is a need to consider the diagnostic criteria.

Dr. Jayant Khandare clarifies, he say firstly, the survey that Praja conducted was completed in a span of approximately two months, on the basis of interviews, the questionnaire was administered, those who said yes to the questions their answers were so entered and reported from the identified pocket. Secondly, as far as Malaria is concerned only 25% of the population cannot be counted. The investigators have collected information from door to door, from both slums as well as slum-like areas. So surveillance active data is more. In Mumbai 60 to 70 percent are slum and slum-like areas, therefore the figures are representative.

Mr. Ghosh of Hansa foundation further clarified the previous points, he said that in real life we are dealing with consumer perception in everything, and when census of India visit us and ask a woman whether she is literate and if respond positively they do not ask her for proof to check whether she is actually literate. The basic fact is that this report could not be real estimation of Malaria cases, it is just a perception, but the fact is that there may be huge gap between the numbers RTI reflects and what people are claiming, there is a huge incongruity in both the numbers and that is the concern.

Mr. Sukhtankar, concluded the discussion saying that the over reporting may harass the concerned authority and they may start breaking up, but total under reporting is much evil than over reporting.

#### BEST PRACTICES AND FRAME WORK FOR HEALTH MIS

Dr. Deepesh Reddy, a Medical Consultant, with WHO RNTCP Technical Assistance Project, Mumbai made a presentation on Health Management Information Systems (MIS), he shared basic concept of H MIS, building blocks for a good health MIS, and gave example of eMamta. He said H MIS, is a process whereby health data (input) are recorded, stored, retrieved and processed for decision making (output) which includes managerial aspects such as planning, organizing and control of health care facilities/programs at various levels. He further explained that the quality of data actually influence quality of decision making at various level, for e.g. there is a staff who practice routine operation in the field to generally controls Malaria so one does not have to worry much. But during monsoon, it is observed that number of cases have risen so in such situation the question is how one should reinforce health force, so does one observes the need of raising number of cases and that is where tactical decisions has to be made and we have to increase field force and put into operation. So such a policy decision has to be made at the higher level and it has to dynamic decision.



Dr. Reddy further explained that the trio of such system is inputs, process and outputs. Inputs include kind of technical content one actually gives, such as training to government health practitioners and other stakeholders. The processes is specific to the quality of content, it is related to data flow, its storage and its security. And finally how the data is being used, whether reports are prepared, work plans are made etc., it would contribute in making definite policy decisions. Details of the same are given below in table-16.

Table-16

INPUTS	PROCESSES	OUTPUTS
Technical content	Data flow	Reports
Hardware	Data Storage	Work plans
Software	Data Security	Quality Data
Training		
Finances		

Dr. Reddy further explained characteristics of H MIS, he said it could either be manual or computerized or combination of both. It could also be web based or desktop based, but it is critical. The 2 Tier (Fat Client + Data Base Server system) is a commonly used IT here. However more proposed system is 3 Tiers (Thin Client + Application Server + DB Server). He added that, MIS for hospitals and other health care systems needs to be done differently in context to health management system, which has to be ongoing process. This sort of information, Dr. Reddy said, is required by the Government of India, both at State and National level. Similarly, multilateral and bilateral agencies who are concerned about the data, as well as community based organizations who work at grassroots level usually do not have the capacity to generate their own data all the time, so such data may contribute in their work. The source of the data is people of the nation most of who work with private and non-profit organizations, so all these stakeholders needs to be part of HMIS and begin sharing the data. Its framework should actually encompass both the data available with private sector as well as public sector. They all ultimately become users too, who uses the software.

Dr. Reddy, on sharing components of H MIS (details in table-17) said that at the onset this could be a very good surveillance tool, presently our health surveillance system is not good, except for e.g. polio, measles etc. It is dependent on the framework and HMIS policy is in place.

Table-17

Various sub- component	s/sub-systems of Health information System
Epidemiological surveillance	Identification/notification of diseases and risk factors, Investigation, follow-up, control measures
Routine service reporting	Hospital/health center based indicators on performance of the various services
Specific program reporting	Various programs in operation in a particular country, topically include; Reproductive child health, AIDS, MALARIA, TB, LEPROSY, Integrated Child health and many other programs under different departments, names
Administrative systems	Account and financial systems Drugs management (procurement, storage and delivery) Personnel management Asset management (equipment/buildings etc) Maintenance system
Vital registration	Birth, deaths, migration etc.,

There needs to be mechanism that helps in collating information by the nodal person. Government machinery has employed such people at every level. Similarly, the data that is to be generated from private institutions perhaps can either be collected by ANMs, health supervisors, or a new person may be recruited. At state level we have specified officers such as in MP ad Maharashtra we have deputy health DHS, or Joint Director, while at the Center level, there is an agency called Central Bureau of Health Intelligence (CBHI), over the years we can have Health Bureau at central level. (Refer fig: 1&2)

ORGANIZATION/PERSON RESPONSIBLE FOR HMIS MATRIX				
Location/hospital	Person responsible			
Sub-center	ANM			
PHC/Hospital	Pharmacist, computer(designation of a statistical assistant)			
District	District statistical officer- health, family welfare Dt. TB, Malaria, Leprosy officers			
State	Dy/Joint director Statistics- Family welfare – Dy/Joint director- Vital statistics Surveillance Unit Sample Registration system			
Central Government	Central Bureau of Health Intelligence Statistics Division- Department of Family Welfare CGHS Statistics Division- Department of Health Sample registration system- head quartered			

Fig:1 State Level (AP) Model

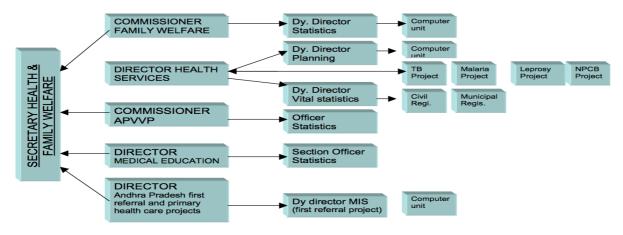
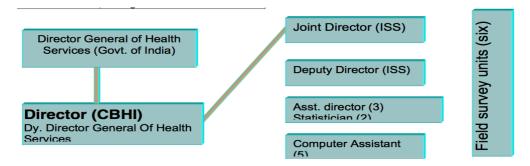


Fig:2 Central Level Model



#### CHALLENGES IN CURRENT SYSTEM

Dr. Reddy said that the major challenge is that the data available at Central level is inadequate and cannot use it whenever there is a need. For e.g. in case of malnutrition, few years ago govt. tried to address this issue through ministry of health system. There is no medical programme against malnutrition, but there is nutrition welfare programme under ICDS and comes under Ministry of Child and Women welfare. But if medical health programmed has to be implemented then it has to collaborate with the two ministries and how it is tackled. The data available is fragmented and sketchy, at the same time its periodicity varies so cannot be used

At State level manual use data management even when software are available. So there is a need for capacity building at State level. And at district level the true level lies in the raw data collected by the field workers. However, there is a need for capacity building of the data collector to understand the adequacy of the data they are collating and how quickly it is electronically transformed. Details on challenges at all three levels are presented in table-18.

Table-18

Level	Challenge
	Central level Data base inadequate Fragmented data with different ministries & departments

	Research institutions surveys and adhoc data
State	Still on Manual basis in many places Fragmented – different directorates Not much data from research institutions
District & sub district level	Manual reports / books with people in field using them Challenge in adequate data & good quality data Prompt entry & Monitoring

Dr. Reddy further expressed that lot of data is being collected in raw data, and in reports, but how much of this data is utilized it is the question. Again there is tendency to get fresh data rather than creating and upgrading database. If the private sector really wants to get involved then they need to know the jargons used in data collection processes.

#### COMMON CHALLENGES IN OUR SYSTEM

- Exhaustive information collected but hardly used
- Even routine info. is collected fresh every time
- A bit more of Jargon / codes
- Absence of prompt feedback defeats the purpose of information collection The highest level data available with the high level hospitals, they actually tend to share less data. Actually they have valuable information, which would otherwise not be available. So unless we have data tied up in our routine ongoing system it would continue to be deficient. He further added that data always come in statistics but there is also need for data that throw light on instances of prevalence as well as social aspect. And other aspects of data improvisation are as mentioned below:

#### DATA

- Higher the level of hospital, lesser the information send up
- Mainly service statistics rather than incidence / prevalence
- Little socio-cultural data if any. Restricted to the health services and programs
- In adequate training and motivation with changing needs
- Lack of updated data base
- Less use of applications (GIS or mobile health tools)
- Bilateral or multilateral agencies usually conduct own studies
- Adaptation of technology slow in Public health
- Use of info for decision / policy making?

#### VISION / OBJECTIVES OF H MIS

Dr. Reddy said that the vision is to gain optimal health outcomes across community, regardless to private or public health systems. That actually means that such a health outcomes encompass all institutions, it would particularly ensure quality of health care; improve clinical outcomes; really alerts on disease trends / real time; holistic view of resource utilization; monitor indicators of performance; tools for effective policy making.

#### USE OF IT

He said that IT cannot be an isolated solution, so once a framework is in place, IT can be used for its efficiency. Unless there is strong administrative commitment it would not make an impact. E.g. Gujarat has improvised Health MIS and they have institutionalized administration structure around it, at State level there is Joint Secretary who actually monitor it, even at district level there are administrative technocrats are held accountable for it. Once basic system is in place sms alerts, sms alerts, links to touch screen kiosks for community, smart cards for patients, biometrics, online appointments, telemedicine linkages, research linkages with medical colleges etc can be used.

Dr. Reddy further shared the following definitions on different systems and steps on needs to take in developing health management information systems:

#### Some Definitions

System A collection of components that work together to achieve a common objective<sup>1</sup>

Information System A system that provides information support to the decision-making process at each level of an organization<sup>2</sup>

Health Information System A system that integrates data collection, processing, reporting, and use of the information necessary for improving health service effectiveness and efficiency through better management at all levels of health services<sup>3</sup>

Health Management Information System An information system specially designed to assist in the management and planning of health programmes, as opposed to delivery of care<sup>4</sup>

#### Steps in Developing a Health Management Information System

- (1) Review the existing system
- (2) Define the data needs of relevant units within the health system
- (3) Determine the most appropriate and effective data flow
- (4) Design the data collection and reporting tools
- (5) Develop the procedures and mechanisms for data processing
- (6) Develop and implement a training programme for data providers and data users
- (7) Pre-test, and if necessary, redesign the system for data collection, data flow, data processing and data utilization
- (8) Monitor and evaluate the system
- (9) Develop effective data dissemination and feedback mechanisms
- (10) Enhance the HMIS

Dr. Reddy said that apart from this horizontal coordination of vertical programmes in the system needs to be improved such as Malaria, TB, and HIV. Similarly, how can the modern day indicators can be clearly demarcated, who collects it and what frequency and whether it can be made available with whatever geographical challenges one is dealing with.

The example of Emamta, software which was used context to National goal of Millennium Development Goal against minimizing the deaths of children under 5, the data that is received through national survey its frequency do not match our needs and requires strong monitoring system so that we are able to conduct proper mapping thus e-system called Emamta has come in place. Emamta can be fed with date entry from periphery, data entry from the field workers diaries, structured module, then data verification system, work plans can be generate, reports can be developed.

Dr. Reddy concluded his informative session by explaining how emamta was used in collating data related to child mortality

Inputs required	Processes involved	Output reports
MCH Card – Both JSY and Non- JSY	Registration of MCH Card	Facility Service Statistics
Individual identification details – linked to household	Updating of MCH Card	Facility Service Statistics
Services rendered	Monthly updating at Block level	

#### **DISCUSSION:**

Mr. Sukhtankar, once again took lead of the discussion. He said that other government departments manually collated and register their data, but in case of health interventions, data is collected and registered by different private

agencies, they could be nursing homes, medical practitioners, and others. So there is a need to rope them in the process.

Considering, scarce flow of information from the private sector, should one presently, focus on the needs of the vulnerable group that access government facilities and are dependent on it. It can later look at other sections of the society, in case of limited resources. In the given situation what methodology needs to be employed for data collection? He appealed the participants to think about how one can utilize the existing information.

Dr. Pathak said that she disagree the perception that most of those who go to the Municipal hospitals are slum dwellers. She said the anthropological studies conducted clearly shows that majority of them go to private practitioners and quacks, they do not go to public hospitals until their illness aggravates. So there is a need to include other practitioners in this process.

Dr (Mrs). S.V.Akarte, Professor and Head Preventive and Social Medicines, J.J. Hospital said, yes, we need to rope in the private practitioners because many access their services. While designing private practitioners includes general practitioner, ayush practitioners and also private hospitals and nursing homes. The group should focus up on the deliberation on legal binding in case they fail to report. Should their licence to practices can be confiscated, without which it would be difficult to rope them in and bound them to social responsibilities. Later other capacity building inputs can be administered.

Similarly, simple formats should be used while using new technology. In Andhra Pradesh, sms based health reporting is used. WHO has developed handheld equipments, for health reporting, thus making it easier and eliminate tediousness. Data transfer would be 100%, which could be motivating for the health workers who actually collect the data. There is a need to look at all the issues at the site of data collection so that the inadequacies related to data collections are minimized.

Dr. Nachiket Sule, The Foundation for Medical Research in Community Health (FRCH), shared the case in Kolapur district, where private practitioners were roped in public health system and their data was tracked down. This intervention was related to PCPNT act, the collector at Kolhapur district developed a device called silent observer, and amazingly the sex ratio improved within two years. This was achieved because all the data with the private players was monitored by the public health authorities. All the nursing homes had to report all the data and their registrations to the public health authorities. This may not be completely true as few of them expressed that people accessed sex-determination services from clinics outside the district. But this intervention has positive impact and if the same is adapted in neighboring district, better sex-

ratio can be achieved. Issue was prioritized at large, as Kolhapur was having the worst sex-ratio as per the 2001 census. But 2011 census shows improvement by 10 to 14 percent.

Dr. Sule further informed that Emamta is employed in Maharashtra as well it is named differently. It is called Mother & Child tracking system. It has been implemented at Pan India level and ANC tracking is being done at this level too. It may not be exactly as Emamta process, but is a good technology. He added that the private practitioners need to be roped in because the data that comes from them is very huge, so unless we analyse the data it would be difficult to get whole picture.

Mr. Anirvan Chatterjee, The Foundation for Medical Research, said that if we are talking about digitization the question is about its authenticity. There are targets for each detail; there are targets for each health posts. When I collect information on TB from the register, I cannot be certain whether it was filled when patient consulted and not one month later. It is all linked to deterrent, to have some truth in a law. We need this sort of assurance because we do not want agree that there is tuberculosis. I fail to understand why we cannot accept that there is 30 percent MDR. I believe that when health facility intervenes it is to tackle the problem and not sustain the problem so if a system is developed where reporting a disease is not a taboo, then reporting would become better.

Would it be practical for a private practioner who consults hundred patients in an hour to send data manually so if the same data is put on portal or through sms then it would be easier and there is where the three tier system can be applied. And there has to be separate mechanism where the data is verified the data and that is the onus of the government and other health facilities.

Leni Chaudhari said that there are two ways of looking at whether the data needs to be collated from the private practitioners, one is the perspective & other is practicality. There is need to collect data from private practitioners because they are part of the State's system. Most of them are registered as private charitable hospitals and use lot of state resources, and get tax exemptions etc. Similarly, within the government machinery there is much sanitized extension of public medical sector to the private health sector for example, through Rajiv Gandhi Jeevan Scheme, where the empanelled private medical sector is also included among the facilities. In such cases government either subsidies or pay them for whatever expenses they incur.

Secondly, while we are moving towards universalization of health care, private sector is within the universalization space. So there is clear need and indication as to why we need to do it. It is logically established. The need is to think of the mechanisms by which we do it. If private sector is not regulated, or is not

considered accountable for other things they do then they will not contribute their data as well.

Mr. Mansinghani said that it is not just a taboo, or government's unwillingness, but the 75% that we have been talking about is completely unregulated space. Medical Council of India is trying to crack down private health sector practices concerning drugs they use etc. So certainly there would be resistance.

There is correlation between socio-economic class and education etc. People are unaware of the protocols. Therefore it is actually a very difficult task to rope them in; therefore we need strong legislation and strong punitive actions.

Mr. Sukhtankar said that there seems to be consensus that this gap needs to be filled. So the table should focus on methods or devise we should employ concerning certain diseases where we expect preventive actions. Certain notified diseases, how that data would be registered from the source and get transmitted, where it needs to be collated and how it should be analyzed, what should be the modus operandi.

Dr. Chaturvedi said that modus operandi exists, but it is manually done and tedious process so now we have to apply e-technology. E.g. all the patients are put on web based server data related. Patient is given ID. Data can be filtered as per requirement. Software can be developed as per our requirement.

Neera: There has to be enforcement.

Dr. Revankar: It is not that government conceals any data. It is a wrong picture. In case of Malaria, it is our own success story. We have succeeded in roping in quacks and have trained and educated them. Section 421 act needs to be relooked. In near future clinical establishment act comes in practice, it is central government's act. Several states are using it; Govt of Maharashtra is in the process of framing the rules. Clinical Establishment Act covers everything related to human body. It charges heavy Penalty, it is in three stages. Our system is not 100% efficient but we are improving. We have established good rapport with private practitioners, though not all but with few.

Related to collection of basic data continues to be done through hand held devices. We are still primitive; we collect the data as per the register and formats sent.

Dr Khandare related to Vital statics are concerned we get prompt reporting. In case of Kolhapur, there is legal background and PCPNDT is strongly implemented, and reporting is prompt, therefore the sex ratio has improved. Plus a device is used so F-form is promptly filled. F-forms are received from private sectors from all sonography clinics.

About disease occurrence in society, there should a good awareness related to laws rules, some penalization should also be there. H1N1/HIV/dengue is found in elite groups and is hidden. The reasons are many but they have been but most of the cases are reported by the private practitioners.

Dr Sule pointed out that duplication of data is s burdening public health systems therefore quality of data has to be improved.

Mr. Sukhtankar concluded the discussion with a positive note; He said that private sector should be made aware that reporting of the data is conducted for the betterment of the people and society in general.

Mr. Milind Mhaske thanked all guests on behalf of Praja foundation. He also
shared that series of discussions are being planned and that Praja Foundation
expect more intensive and decisive discussions in future. Mr. Nitai Mehta, also
thanked all participants.

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#### Round Table on Strengthening Health MIS of Mumbai.

#### A Brief Summary of Roundtable Discussion

The importance of a Proper healthcare plan for this city can hardly be understated. Health care around the world in any country is one of the biggest challenges for the well-being of it citizens and its impact on the economy.

To plan an effective healthcare policy, it is important to have the right kind of data. Data that is rich in quantity as well as quality. Data that can – and often does – predict healthcare trends. Data that include various components of healthcare. And data that can be very effective in devising ways and means that can prevent or reduce incidence of diseases.

One of the most important components of devising and designing healthcare policy is in the area of information regarding the general and specific aliments that afflict the population.

For the past few years, Praja Foundation has been collecting data on healthcare from civic hospitals, state government and Municipal dispensaries. This is the same information that the Municipal Corporation and the state government uses while planning its healthcare policies. Praja in its report on the state of health In Mumbai found that only 25% of the population uses the government (MCGM and State government) facilities, while 75% of the city's population does not. Currently data from this huge segment of population is being collected only on an ad-hoc and voluntary basis.

For an effective healthcare policy, such data dissemination needs to be all inclusive.

In the discussion that ensued, it was evident that MCGM is highly aware of the importance of data flow. The Corporation has already streamlined several systems and strengthened processes that have not just increased the scope of information dissemination, they have also made the data flow highly efficient.

It was also felt that the governments - central, state and local - need to be co-ordinated in their approach towards healthcare data requirement. However, the need for a process that can draw data and information in a prudent, digitized format from the private sector was unanimously agreed upon. The participants also recommended inclusion of nongovernment sector in information gathering through acts of notification and even providing some punitive measures to the Acts, if required.

The Round Table also discussed ways and means to improve H MIS (Health Management Information System) through technology and processes, both qualitatively and quantitatively. While the practicality of getting date from the private sector was also discussed, the Round Table concluded that it is crucial for the government to devise the means – through a carrot and stick policy, if need be – to collect data from the non government healthcare sources in as simple a format as possible.

1 Juli

D. M. Sukhtankar (Ex. Municipal Commissioner, Mumbai)

In Inkhaukar

Nitai Mehta (Managing Trustee, Praja Foundation)

Milind Mhaske (Project Director, Praja Foundation)

Mohil Mhanke.

Dr. Mangesh Pednekar

Bhavesh Mansinghani (Director, Dev. and Research, Healis) (Research Director, Hansa Research)

Anjan Kumar Ghosh (Senior V.P. Hansa Research)

Fry in June Chal

#### Round Table on Strengthening Health MIS of Mumbai.

Dr. S.V. Akarte Dr. R.M. Chaturvedi Anirvan Chatterjee (Prof. and Head, P. S.M., J.J. Hospital) (The Foundation for Medical Research) (Prof. and Head, P.S.M) Nachiket Sule Dipesh Reddy Leni Chaudhari (FRCH) (Public Health Professional) ( (Prog. Mngr, Narrotam Sakhsaria Foundation) Laced at hem Dr. Saeeda Arif Kha Ms. Sulabha Pathak Dr, Ram Barot ( Councilor, Health Committee Member) (Councilor, Health Committee Member) (Researcher, TIFR) Oommen C. Kurian Dr. V. S. Jaiswal Dr. Neera Kewalramani (Ex. Deputy Health Officer) (Senior Research Officer) (Asst. Director. MIS, NRHM, Mumbai)

Priyanka Sharma Balwant Kirar Kaustubh Gharat (Project, Manager, Praja Foundation) (Project Co-ordinator, Praja Foundation) (Project Co-ordinator, Praja Foundation)

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