



MORTALITY AND MORBIDITY PROFILES OF JHARKHAND: AN OVERVIEW

Neha Prasad

Research Scholar, Department of Economics, Ranchi University, Ranchi

ABSTRACT

Mortality and morbidity are two basic vital statistics generally used to measure the health status of a population. It is reiterated continuously by the international agencies and policy makers that up-to-date and regular vital statistics is the most basic but essential requirements for both proper planning and monitoring of the ongoing plans. Being one of the eight Empowered Action Group States (EAG States) and highly vulnerable to Group I Diseases before anything else, comprehensive, accurate, regular, reliable and timely availability of vital statistics is the most urgent need in Jharkhand. Quite strangely, in spite of too much emphasis, the status of vital statistics mechanism in Jharkhand is quite obscure. The functioning of CRS and SRS is quite messy if not totally defunct. The most disturbing fact is that it seems that nobody bothers about the current exacerbated condition of data processing mechanism in the Jharkhand. In spite of being obligatory, the CRS in Jharkhand do not produce state's own 'mortality by cause' and 'morbidity' profile as many other states. The currently available mortality and morbidity profile of Jharkhand is quite incomplete, fragmented and in most of the cases incomparable. This paper highlights and evaluates the status of vital statistics system in Jharkhand, which largely remained unnoticed in spite of its crucial importance in health planning.

Introduction

Birth rate, Death rate, Infant mortality rate (IMR), Neo-natal and Pre-natal mortality rate (NNMR and PNMR), Child mortality rate (CMR), Maternal mortality rate (MMR), Mortality rate by sex, age, region, resident, causes of mortality, incidence rate and prevalence rate of various types of morbidities (diseases) again by sex, age, region and residence are the most important vital statistics, which a welfare oriented country needs in its overall comprehensive planning. How much a country and the government is serious towards health needs and hence welfare of its population would be quite apparent only from status (legal provisions), execution and expansion of its vital statistics system throughout the country. As allocation of funds entirely depends on the needs of the population and only a full-fledged vital statistics system is able to explain the health needs of the population. The importance of a full-fledged vital statistics system becomes indispensable if the country is vast, have huge population with variant needs and there is serious finance crunch to fulfill all the needs simultaneously. For such countries, making choices is the undesirable reality at every step of planning. If a country do not has a comprehensive full-fledged vital statistics system, then it will have to allocate and plan its scarce resources only on the basis of assumptions, which lead to only wastage of resources. Some areas or measures may fetch more resources than need and some remain in dearth in spite of drastic need. In India, Civil Registration System (CRS) is the nodal agency for the collection of vital statistics like- birth rate, death rate and causes of death rate but attributed to its limited expansion and huge inter-state differences in set-ups and implementation, many interim institutions like sample registration system (SRS), Survey of causes of death (SCD) Central Bureau of Health Institution (CBHI) and many other institutions are also introduced in the country to

fill the gaps of vital statistics. Besides, census and NFHS too collect birth rate, death rate, IMR and MMR on certain period. The central government is also planning to maintain all health information online through its ambitious scheme Health Management Information System (HMIS). Under this scheme, there is plan to connect directly with all the Primary Health Centers (PHCs) with the help of internet, so that the time gap in flow of data can be eliminated. The need for reliable and up-to-date national and sub-national (up-to district and block level) statistics for births, deaths, and cause of deaths has never been greater but unfortunately, neither the central nor the state governments have realized this as a priority. The requirement for a complete and up to date Vital Statistical System to yield reliable data on vital events hardly needs any emphasis. These data are essential for socio-economic planning and development and also to evaluate the effective implementation of various programs (Setel, 2007). In India, in spite of its high focused status and pressing needs, we do not find any serious effort from the central government to build –up and maintain a full- fledged CRS evenly throughout the states. There are huge inter-state discrepancies in set-ups and functioning of CRSs. Jharkhand is at the lowest third position in birth registration in all over the country, marginally before Bihar and Chhattisgarh. The current birth rate coverage under CRS in Jharkhand is mere 56.2 and coverage of death rate is 49.4 only (RGI 2010). When condition of birth and death registration like most basic vital statistics is so poor, we can imagine the drastic situation of mortality by cause and morbidity statistics of the state. We keep on reading various data/figures about the statistics of the Jharkhand but, anybody seldom bother about how they are gathered and processed from the field. It is up-to the state governments to make every effort to collect and process data from the various sources in the field and compile them in a complete report and send it to central agency on time. In spite of being a high focused EAG state and vulnerable to group I diseases, Jharkhand do not have a complete, well compiled, up-to-date report of mortality by cause, morbidity prevalence and incidence rates figures. The central government too has seldom focus on this problem; rather than being worried and taking initiatives to strengthen the CRS and interim institutions especially poor performing states, it has adjusted with the incomplete, irregular and fragmented not so comprehensive health statistics of poor states. This careless attitude towards health informatics both at central and state level; either by central or state governments hampered heavily in past through non-achievement or sluggish progress of feasible targets, and still today, is one of the leading obstacles in timely completion of health targets, whether it is Millennium Development Goals (MDGs), National Rural Health Mission (NRHM) or any other national health targets. The progress towards the MDGs, for example rely on accurate data on causes of deaths (among other things). The past decades have witnessed a wave of health reforms in many low- and middle-income countries. However they cannot be evaluated accurately in almost every case as there is poor investment in building good systems of reporting routine data. A good example is Mexico where, we read that, there has been equal investment in health information systems as in health care reforms. This has resulted in more effective knowledge about the consequences of these reforms in this country than anywhere else in the world (Setel, 2007). In India, due to absence of a well-functioning disease surveillance system and reliable cause of death registries has limited measuring the

national prevalence and incidence rates of morbidities. The continued cost of ignorance borne by the country and the states without civil registration far outweighs the affordable necessity of action (Mahapatra, 2007).

Keeping in mind the indispensable importance of vital statistics of the population at national, state, district level and disaggregated as possible at the smallest functional unit level, present paper has tried to capture the current data keeping mechanism of India with especial reference to Jharkhand. The paper exclusively focus only on current system for maintaining mortality profile, causes of death and morbidity profile of India with special reference to Jharkhand. There are total six chapters in this paper. first chapter is introduction and objectives, the second one explains the various institutions authorized to keep mortality statistics in India, the third one describes the cause of deaths statistics mechanism and reports till-date in India and some field experiences of data processing mechanism from two government hospitals in Jharkhand, the fourth explains the morbidity profile (non-fatal health outcomes) keeping mechanism of India, fifth chapter has thrown some light on the interrelations between the vital statistics, state governments and the health planning and the last one is the concluding remarks. Every chapter has a summary at the end and the paper ends with an overall conclusion.

Mortality Statistics

It is essential to assess the status of existing mortality statistics reporting mechanism in India to take appropriate interventions for its improvement. In India, the Registrar General of India (RGI) collect, compile, analyze and publish mortality statistics annually for the country under the provisions of the Registration of Birth and Death Act (1969) through the Civil Registration System (CRS) and the Sample Registration System (SRS).

Civil Registration System (CRS)

The vital statistics are most effectively generated by comprehensive civil registration (Mahapatra, 2007).The CRS may be defined as a unified process of continuous, permanent and compulsory recording of the vital events and characteristics thereof, as per legal requirements in the country. The data generated through a complete and up-to-date CRS are essential for socio-economic planning and also to evaluate the effectiveness of various public's related programs. All over the world, Civil Registration records are the best source of the vital statistics. They also serve as the cornerstone of public health systems; as a full-fledged CRS also provides sex-wise, age-wise, cause-wise and resident-wise mortality rates of the population instead of mere crude birth and death rates. In India, the Registration of Births and Deaths Act, 1969, provides for the compulsory registration of births and deaths. At present, the CRS covers registration of births and deaths only. Every year, the office of registrar general of India (ORGI) publishes a compiled report on vital statistics of India based on CRSs. The latest published report 'Vital Statistics of India' for the year 2010 provides an overview of the working of the CRSs across the country and presents a compilation of data on registered births, deaths and infant deaths with rural-urban & sex-wise break-up and sex ratio at birth.

Coverage and Performance of CRS in India

The annual publication of 'Vital statistics of India' released by central CRS, ORGI is

mere a compiled report of states' CRS reports and their accuracy and comprehensiveness completely dependent on official reporting from various states. At present, an estimated 26 million births and about 9 million deaths take place in the country every year. According to UNICEF, The current registration level of births and deaths in the country is about 58% for births and 54% for deaths while, according to the ORGI, 68.3% of the births and 63.2% of deaths are registered in India. The poor registration in the rural areas of the country is the main reason for incomplete registration. As per the report, there are huge inter-state discrepancies in level of birth and death registration. Moreover, there are also wide variations in the quality, format, completeness and level of reporting in states' CRS's reports resulted in decrease in reliability and usefulness of the CRS report in the central planning process. In spite of these limitations, CRS is the only source for disaggregated vital statistics at district and sub-district level, as SRS can provide statistics only up-to state and residential level while, a full-functioning CRS is capable of providing figures at all the administrative levels.

Sample Registration System (SRS)

As the cent percent coverage of birth and death registrations by CRS is going to take too long time attributed to many reasons, to fulfill the urgent need of the timely available, accurate, robust and trustworthy vital data, the ORGI has adopted an alternative approach called the Sample Registration System to collect vital statistics on sample basis. Even after decades, the functioning and extent of CRS in India is still imperfect, resulting in incomplete registration of births and deaths, it has forced the authorities to find some interim substitutes of CRS, which can provide both reliable and effective data on time and serve as a cross-check of CRS.

The SRS in India is based on a dual record system. The field investigation under Sample Registration System consists of continuous enumeration of births and deaths in a sample of villages/urban blocks by a resident part-time enumerator, and an independent six monthly retrospective survey by a full-time supervisor. The data obtained through these two sources are matched. The published statistics from SRS are disaggregated by sex, age and geographic region. The SRS is generating timely and accurate data, which is nationally representative. At present, SRS is the most trusted and reliable source to provide reliable estimates of birth rate, death rate and infant mortality rate at the natural division level for the rural areas and at the state level for the urban areas on half-yearly basis (Mahapatra 2010). Jharkhand have in total 170 sample units; 60 from rural and 110 from urban areas.

As common reason behind many cases, the government either the central or the state in spite of every legal provisions, is failed to provide supplementary resources for permanent set-up of a mechanism to properly implement the cause of deaths statistics. States have tried to initiate and run the vital statistical system at different rates according to their capabilities. The slow and variant implementation rate among the states is absolutely the central government's failure, neither it had monitored and evaluated the performances of states' CRS and the related authorities, nor it had penalized the faulty states. Still today, after lots of attention and interventions, we continuously find tremendous discrepancies

in health outcomes as well as in health informatics across the states. Developed states which have almost achieved the national health targets are also good in data keeping, states previously known for poor outcomes, but have continuously been improving very rapidly, are also improving in health informatics. And it's totally not surprising that poor, backward and least developed states, whose overall developmental progress in all the socio-economic dimensions are lowest, are worst performer in health informatics too. From the existing trend of states' CRS reporting to central CRS office and their quality and timeline, it is clear that states who have continuously been defaulting or lagging behind in attainment of the development and health targets are also unable to complete their CRS reports on time in prescribed format. The planning of scheme and allocation of funds alone cannot provide the solutions. Unless or until, there is provisions for robust frequent monitoring and proper evaluation of the schemes. It would show not only the further path, but also the effectiveness of the schemes. For this, the government have to strengthen its vital statistics system on a war basis.

The Cause of Deaths Statistics

Along with mortality figure, the estimation of mortality by cause of a population too, provides a basis for setting up priorities in health programs. The data on causes of death is extremely useful for planning of health programs and evidence based interventionist strategies in the country. The age, sex and cause-specific mortality rates by residence are important indicators which help in monitoring the health trends in the population (RGI 2010). The cause of deaths statistics is therefore essential for a meaningful planning of health care needs and allocation of scarce resources to the most needy areas and population. In developed countries, data on disease specific mortality by age group is readily available from national vital registration system but unfortunately, in developing countries, where four-fifth of world's deaths occurs, the establishment and functioning of a full-fledged CRS is still a long dream; which hinders the estimation of the cause of deaths owing to insufficient coverage of vital registration and low reliability of the cause of death in the death certificate.

Provisions for Cause of Deaths Statistics in India

At the national level, the ORGI is responsible for collection, collation and publication of the cause of death statistics. At the state level, the Vital Statistics Division of the Directorate of Health deals with the cause of death statistics. As in India, CRS owing to its various limitations is not able to collect the cause of death statistics; ORGI has adopted another two approaches separately for rural and urban areas. The Survey of Cause of Deaths (SCD) based on verbal autopsy method is implemented in rural areas under supervision of SRS while in urban areas it is the Medical Certification of Cause of Deaths (MCCD) majorly based on post-mortem autopsy method.

Survey of Cause of Deaths (SCD)

In rural areas, until December 1998, the data on cause of death were collected through the 'survey of cause of death – rural scheme' (SCD-Rural scheme) from a sample of villages (random or non-random) using the verbal autopsy (a lay diagnosis and

reporting system). Despite a few limitations like improper medical certification, high proportion of recorded cause of death as senility and reclassification of disease group, SCD has been considered the most reliable source of mortality data in India for rural areas. Keeping in view the needs of users, the survey of causes of deaths (rural) has been merged with the SRS from January 1999 to give more impetus covering both rural and urban areas.

Medical Certification of Cause of Deaths (MCCD)

In urban areas - a medical certification of cause of death (MCCD) scheme has been operational. The Scheme had undergone phase-wise implementation in the State, starting from medical college hospitals. In second phase, District hospitals, specialized hospitals were covered. The ORGI had given necessary administrative guidelines regarding coverage of MCCD Scheme in both urban & rural area. The attempts are being made to cover all private & government hospitals since 1998. This system covers mostly those deaths which occurred in medical institutions, generally in urban and semi-urban areas.

However at the country level, besides, global burden of disease reports series (1990, 2000, 2010) with special report on India, NSS rounds on morbidity, RGI reports on Causes of Death, NCAER household surveys have been producing some broad, imperfect but acceptable mortality and morbidity profiles aggregately at the national level. Unfortunately, all these surveys are macro in nature, disaggregation of these data at state level is not possible or even if possible not reliable as the states 'sample size are very small.

RGI and Causes of Death Statistics in India

As it is mentioned earlier, RGI is the nodal agency for producing a comprehensive report on causes of death. India have statutorily well-defined, full-fledged, but in reality with fragmented mechanism and non-uniform across the country civil registration system, nonetheless tolerable which could provide an ad hoc cause of death statistics of India with incomplete and irregular data, but sadly, that too is not regular (at fixed time intervals). Till date, the ORGI (office of Registrar General of India) has produced two compiled reports on causes of death in India. The first release of a comprehensive report on 'Causes of Death' by ORGI (RGI 2003), GOI with collaboration of Centre for Global Health Research (CGHR), a Canada based institution was in 2005 based on all the deaths occurred in time period 2001-03, that too because, it was needed and majorly funded by the international donor agencies, and the second one is on MCCD in 2008 (RGI 2008). The basic difference between these reports is that the first one is based on verbal autopsy and the later one is based on post mortem autopsy.

Some Specific Features of Cause of Deaths Statistics in India:

The MCCD based on post-mortem autopsy method is a liable tool of obtaining authentic and scientific information regarding causes of mortality; there was provision of time-bound implementation of MCCD framework firstly in government institutions in urban areas and consequently to semi-urban and rural public health systems and private sectors too; in spite of the RGI instructions to bring all hospitals whether public or private including nursing homes and maternity homes and private medical practitioners in urban and rural areas

under the MCCD, the implementation and functioning of MCCD is not uniform across the states in terms of coverage, reporting and quality of data; the medical causes of death could be determined only by post mortem autopsy, and, even in hospital deaths in India post-mortem autopsy is not conducted in all the cases, thus, the accuracy of information on causes of death obtained even from the hospital statistics is far less than 100%; the overall coverage of MCCD being low, it is unable to provide the mortality envelope with the causes for the entire urban area in the country; available reports based on hospital data do not truly reflect the pattern of mortality causes occurring in the general population; with the merging of Survey of Causes of Death for rural areas to the SRS in 1999, there is no data being collected on causes of death for the rural area of the country, and coverage of MCCD in urban areas is very low thus, there is an imperative need for reliable, timely, representative and relevant information on causes of death due to diseases, injuries and risk factors for the entire cross-section of population in the country to yield cause-specific mortality profile at the national level and state level; such reports reach State Vital Statistics Office through the primary health centers (PHCs) in rural areas and the Municipal Health Office in urban areas.

Status of Cause of Deaths Statistics (MCCD) in Jharkhand

Up-to December 2012, 32 states/UTs including Jharkhand have reportedly issued notifications for the introduction of the MCCD scheme in their states. The latest report by ORGI on MCCD 2008 (RGI 2008) has excluded Jharkhand, as in spite of notification, Jharkhand has failed to submit any report on MCCD to ORGI. The ORGI has been very liberal in the application of either CRS or MCCD by the states. Owing to the various limitation and deficient coverage and functioning of CRS, the MCCD had to be implemented in phased manner as per the capacity of the states, and in initial phases, only teaching and specialized government hospitals are to be notified. There has been full freedom to states to notify, implement and submit the reports (whether complete or imperfect) as per their convenience to the center. Taking advantage of this liberty, despite of being notified itself in 2010, Jharkhand has not submitted any report on the MCCD as it has not produced any report on MCCD yet. To find out the reason behind failure of Jharkhand in producing reports on the MCCD and to cross-check the harsh realities of data collection mechanism in the field, the author made some visits to two of the Jharkhand's most advanced, technique-efficient and well-functioning public hospitals, one is a teaching hospital Rajendra Institute of Medical Sciences (RIMS) and another is District Sadar Hospital Ranchi. It seems that like many other policies and plans in Jharkhand, the MCCD too is running only on the papers. In spite of RGI instructions and notification by the Jharkhand government, two most technical-efficient, well-functioning urban based public health institutions, located in capital city of Jharkhand are unable to provide the MCCD.

In RIMS, though, post-mortem facility is available, (Issuing of MCCD requires post-mortem autopsy) but, most of the deaths occurred in RIMS do not necessarily go through post-mortem autopsy. Second most crucial reason as explained by Medical Records Department (MRD) of RIMS is the increasing trend of having multiple diseases. Most of the patients visiting RIMS are having multiple diseases make it very difficult to certify that

which one particular disease is the actual cause of death. They have stopped the procedure of mentioning cause of death in the death certificate, though earlier it was done. Besides MCCD, the data keeping mechanism in RIMS is quite satisfactory; whatever data provided by the MRD is fairly reliable. In RIMS, there is clear and distinct division of departments. The patients after initial check-ups send to respective departments according to their diseases and symptoms. Each department has their own ward and they keep the records of patients on daily basis. Further these records are sent to MRD for further processing. In order to make a morbidity profile of patients visiting RIMS, department wise rather than disease wise is quite possible. As the RIMS has patients throughout the state especially from the lower and middle class families the morbidity profile of patients visiting RIMS can be a representative of the Jharkhand's poor population. There is need to work on this direction.

The second hospital 'District Sadar Hospital' has been fronting with overcrowded patients, serious staff (medical and paramedical) crunch and frequent and premature transfer of senior officers and doctors. In such a chaotic condition, expecting reliable data keeping mechanism would be totally unjustifiable. None of the responsible staffs and even doctors could provide satisfactory answers, majorly their statements are incomplete, quite confusing and contradicting; it seems that they lack complete information and proper time, resources and training too. Nonetheless, they were cooperative with a research scholar and provided a copy of their monthly report as sent to state headquarter, which contained only the hospital's total number of in-patients and out-patients visits per month. A plan to interview with the civil surgeon, the highest authority of sadar hospital and the district health system could not be materialized owing to untimely and premature transfer of civil surgeon, though there performance were rated satisfactory by the hospital staffs. The segregation of departments are not clear and comprehensive as in RIMS, so even making a rough idea about disease profile of patients too, is impossible in Sadar Hospital. In such untidy scenario which prevails in district Sadar Hospital of capital city of Jharkhand, it will be totally unfeasible if not impossible to expect a sound mortality by cause or morbidity profile of even the hospital visiting patients. In near future too, only a revolution can make it possible.

In the midst of all-round chaotic political unrest situation prevailed in Jharkhand government and serious human resource crunch, particularly in the health ministry, it would not be difficult for anyone to imaging the exacerbated condition of the health systems and health informatics in remote, rural, naxal areas of Jharkhand. Many of the senior officers and doctors (interviewed casually) asserted and confirmed that conditions of both the health system and health informatics mechanism in the Jharkhand are very poor, but the condition of health system in newly created and naxal influenced districts (After separation of Jharkhand) are disastrous, almost collapsed, as in spite of every legal provision, the availability of even basic health infrastructure including human resources are only on the paper in newly created districts. However, in old districts the actual infrastructure facilities are much better. They further assert that the condition and functioning of the health system in the near future is not going to be established, given the heightened political interference attributed to political instability in the state. Some brave staffs stated in back that at present,

there is no real system of data collection from the field in Jharkhand, not only in rural areas, but also in urban centers, data are collected, recorded and compiled only on the tables as per the need and target. They take precautions so that this manipulated data look neither too good nor too bad. Their seniors too have consent on this, they keep mum or even help in data manipulation. The study of HMIS of an eastern Indian state of Orissa through interviews of 59 staff across various levels of health care system in four districts, revealed that within a district health system, through at least 114 registers and 188 reports, a minimum of more than 2500 data variables were being collected. Most of these data remained on records and were hardly analyzed and utilized. The review and reporting of data was not perceived by medical doctors (In-charge of various levels of health care) as their common task. The statistical staff involved in HMIS expressed many challenges in form of inadequate human resource, low competence, inadequate material supply, and enormous time needed to deal with large number of registers and reports. The feedback on reported data was not a usual phenomenon and was generated largely negatively in response to delay or discrepancies in data reporting (Bhojani et al., 2009). How will we confirm that how much is truth and how much is lie in their statements, when there is no actual mechanism (because on the paper Jharkhand has every law and provisions for every-thing in spite of its treasury being empty and political instability) for monitoring and evaluation of either health system or health informatics. We can only speculate or assume about it. But, certainly one thing is clear that even in Jharkhand intra-state variations are quite large and apparent in every dimension of the economy especially in health measures. After seeing few bad performing areas, we cannot simply presume that all the systems and areas will surely be bad.

Non-fatal Health Status Measures: Morbidity Prevalence and Incidence Rates

An updated and credible National health database is essential for effective planning, implementation, decision making, monitoring and evaluation of various health programmes & health sector developmental activities in order to achieve the objectives of National Health Mission (NHM) and the National Health Policy (CBHI, 2012).

Morbidity Profile

The occurrence of many diseases is though not always fatal but have heavy toll on the health outcomes and expenditures. An ideal health system must have the morbidity profiles of its population. The estimates of morbidity in general and the disease specific incidence rates in particular would serve as valuable information to the health planners and administrators for appropriate and timely measures to monitor, control and eradicate the diseases (Ghosh & Arokisamy, 2009). To make the priority-setting approach to selecting health interventions possible, governments first need information on the main causes of death and disease burden (Jha & Laxminarayan, 2009). So along with mortality profile, comprehensive, accurate and timely information about the morbidity profile of the population is equally important for resource effective health planning, especially in a resource constraint country.

The morbidity profile of the population of an area change significantly with changes in geographical pattern, climate, season, socio-economic norms and culture, surrounding

environment, living standards, food habits, occupational pattern, income quintile, age, sex and even with the education and level of awareness. In developed countries, maintenance of mortality and morbidity profiles region wise by a full-functioning vital statistical system mostly CRS is a regular phenomenon. After the commencement of “Global Burden of Disease Studies” many developing countries too, have started to prepare ‘cause of deaths’ and ‘morbidity profiles’ of their population. But this system is evolved only at national level. In developing countries including India, the data for cause of deaths and incidence and prevalence of morbidities is compiled and maintained at the central level only, majorly based on periodical surveys of randomly selected areas; not on regular data generated by permanent institutions like CRS as in case of developed countries, covering whole population. Though, India has a national level mortality and morbidity profile, but unfortunately, incomplete, limited and not so inclusive.

Provisions for Morbidity Statistics: Central Bureau of Health Intelligence (CBHI)

Established in 1961, CBHI is the National nodal Institute in the Directorate General of Health Services, Ministry of Health & Family Welfare, Government of India. The CBHI is the National Nodal Institution for Health Intelligence in the country with broad objectives to maintain and disseminate the (i) National Health Profile (NHP), (ii) Health Sector Policy Reform Options Database (HS-PROD), (iii) Inventory and GIS Mapping of Government Health Facilities in India and review the progress of health sector Millennium Development Goal (MDG) in India, etc. The CBHI has been regularly bringing out its annual publication "National Health Profile (NHP)" since the calendar year 2005. It involves sustained, systematic and sincere efforts to collect and collate an enormous national data from the Directorates of Health & Family Welfare of all the 35 States/UTs, central government organizations, National Health Programmes and various other concerned national & international agencies in India. With the help of CBHI's data, it is possible to figure out the rough morbidity profiles state-wise, though it would rather be not so comprehensive, but easiest, cheapest and reliable. What simply needed is frequent and robust monitoring of data compiling procedures at functional units, which are rather the part of the health system. The HMIS system is already initiated in the country, only there is a need to speed up this process equally throughout the country on a war basis. It is a good effort in the right direction which needs to be nurtured and cultured thoroughly as it is in its initial phase. With the computerization of the whole system and periodical monitoring and timely evaluation of functional units, the possibility of data manipulation and delay in reporting would be least.

Limitations of CBHI

NHP compiled by CBHI provides morbidity and mortality data age-wise, sex-wise, major state-wise for some more prevalent communicable diseases (CDs). For Non-communicable diseases (NCDs), it provides rural-urban, age-group segregated data for some major more prevalent NCDs, but for NDCs, it failed to provide state specific data rather it provides rural-urban age-group specific data. Thus, it is clear that CBHI has neither the single source nor a fixed methodology for data compilation procedure, which makes it difficult to utilize

or compare with survey based data for policy purposes. Another serious problem with CBHI data is the timeline. It has limited legal power to force all the state health societies to deliver data to CBHI on time, ironically, the stark differences in the quality of data and data processing capacities of the states are also apparent in CBHI's compiled data. Though the CBHI data is incomplete, irregular, fragmented but at the present time, it is the most comprehensive source as it collects data from all the functioning units throughout the year on monthly basis. The most serious flaw with CBHI report is that data keeping procedure is not same or equally reliable throughout the country or even the different functional units of the same state. The data may be as authentic as the functioning of that unit. There is no provision of cross checks, monitoring or evaluation of the provided data from the CBHI side. Still, this is the only institution which keeps and maintains mortality and morbidity profiles of the country state-wise based on data from state health societies. Like CBHI, there must be an agency at the state level which maintains causes of mortality/morbidity profile along with other health measures at the possible lowest functional unit level. As it maintains longitudinal profiles of the units, would be very helpful in analyzing the type, magnitude and area of the problem and help in diagnosing the actual causes of the problem thoroughly. The CBHI statistics based on longitudinal data-set, represents large section of the population spread in wider part of geographical area, while big periodical surveys (NSS or NCEAR) are cross sectional in nature, seldom repeat the same area or same group of population, which hinders the comparison of trend with the past, not helpful in declaring whether a policy or strategy is working or not.

This kind of institutions (like CBHI) is not yet initiated at state level. It would be an ideal condition that each of the implementing units (health service provider) has their own mortality and morbidity profiles. But, sadly, what to say about the functional unit-wise mortality and morbidity profiles, extracting state specific morbidity profiles based on available national profile is very difficult. So impetus must be given to states to initiate their own mechanism to collect, compile and analyze the vital statistics of the state at the state level itself. It would be quite less problematic, time and cost effective to manage (record, compile and maintain) vital statistics mechanism within the state rather than from the center. It's a well-known fact that almost all the states are facing serious resource constraints, and by no means they are in a position to increase budgets for health or even reshuffle the existing budgets towards establishment of a separate data keeping mechanism. The economists and researchers (with strong data base) will continuously have to make efforts so that the State governments can realize that establishment of a comprehensive, permanent full-fledged vital statistic system is one time investment; once the system got established and start functioning, maintenance costs would be minimum, it may be quite resource consuming in initial phases, but the fruits of this investment would be very sweet, multiple and long-lasting and most importantly helpful in further finance drawing from the center not only for the health sector alone but for all the sectors of the state.

Along with the anxiety of strong data manipulation at the smallest implementing units, comprehensiveness of the CBHI data is also questionable, as many different studies and surveys are continuously pointing the declining trend in utilization of public health services

even by the poor households. Still, in spite of all its limitations, the CBHI somewhat prompt to capture the prevalent disease profile of the country and attempt to provide somewhat a more realistic picture of state specific disease pattern of the country. Though, its effort too is incomplete but on the right direction and more authentic than any other macro surveys, as it collects and compiles data from the each small micro functional units of the public health system.

Vital Statistics, State Governments and Health Planning

With the initiation of decentralization process and devolution of powers under the panchayat system, it is important that various indicators of vital rates are available regularly even at the district or sub-district level for monitoring of development programmes as well as tracking of national and Millennium Development Goals (MDG) indicators. The key governmental agencies responsible for most of the social development programmes are now managed by the district-level functionaries, yet the information base at the lower level for regularly monitoring the programmes have remained inadequate and more often, decisions have been based on intuitive thinking rather than on reliable empirical evidence (Mahapatra 2007). As most of the health planning is done at the central level, state governments are neither enthusiastic nor find it relevant to give priority or attention to full functioning of the CRS, though, implementation of CRS is completely under the state domain; international agencies too, never concentrated on the quality and level of variations in data processing mechanism across the states nor have right to directly intervene in the functions of the states; collectively resulted in arbitrary attitude of states' governments towards health planning and health informatics mechanism. It is a well-known fact that even after lots of national and international efforts and continuous planning, India has continuously been failed to achieve the international goals of health status. Only with the help of state-disaggregated statistics generated by CRS at state level, India could be able to explore the prevalent large discrepancies among the states performances in health sector, only after that the central government started to focus on targeted planning. As need based planning is not only resource effective but also leads to completion of targets at time with minimum efforts. There are some big, populous and economically poor and backward states, majorly north and central Indian States, whose performances not only in health sector, but also in all the socio-economic measures are terrible, collectively responsible for overall unsatisfactory performance at the national level.

Not surprising that all the EAG states are also the most backward and economically poor states of India. Along with financial resources, they also lack vision, will power, and administrative mechanism from their local government side to be able to realize, plan or even follow/implement the center's instructions completely. Even among the EAG states, in spite their similar features, inter-state and intra-state variations are very stark. Thus, for more prudential planning and optimum utilization of scanty resources, a comprehensive, regular and up-to-date data base is the most basic need before anything else. As it is obvious that EAG states are either unable or not going to spur the initiatives to implement remedial measures themselves even for their own betterment, being the guardian and higher authority it's the responsibility of the central government to support and propagate the need

of establishment of a comprehensive, permanent and full-fledged vital registration system in the EAG states along with strengthening their health system.

For comprehensive planning and focused intervention at the most needed measures and places, the central government has submerged all its health schemes under one umbrella scheme NRHM in 2005 with more focus on 18 poor performing states. The motto behind either NRHM or EAG is to put more focus, time and resources towards poor performing states in some specific feasible (mainly population related) targets, which has already been achieved in other developed states. Presently, the central government too, has been indulging all its efforts towards strengthening of health system alone, completely ignoring the role and functioning of health informatics; quite surprisingly repeating the same mistake again what it has been made in past and states in present. This single limitation (unavailability of full-fledged vital statistics system) which seems very small and simple, but exacerbates (seriously hampers) the ability and role of the State governments to be an effective and determining agent in sculpting the health profile of its citizens, while our constitution has clearly mandated that "Health of the population is a state subject". Even being the prime sponsor, administration and implementing agent of the health related schemes and programs, only because of ignorance (deliberately or unconsciously) about comprehensive state specific mortality and morbidity profiles, the state government has no actual role either in effective planning for state specific health needs or proper implementation of scarce resources in right direction (in most needed areas). This ignorance compels the state governments willingly or unwillingly to be just an obedient follower of the central government. They blame, question and doubt on the intention of the center more and keep their own input less but, in reality, they are unable to complete preparation of their part (demand on evidence based), as obvious due to lack of proper comprehensive data, dysfunctional of administrative mechanism, they seems totally confused about their own future plans, past performances, and needs of the population and only lament and only demand more finance even after continuously failure to spend it all. Lack of state specific cause of mortality and morbidity profiles seizes the right of the state governments to be an active player and is a clear cut violation of the constitutional provisions for the states (may be indirectly). We cannot blame the center alone for this mishap. The states should take an initiative of their own rather than completely depending on the center for each small and big thing.

Conclusion

In India, there is every legal provisions for proper set-ups, implementation and expansion of each of the vital statistics equally for all of its states. But unfortunately, in spite of legal provisions, the execution and expansion of vital statistics mechanism among all of its states is not same. There are as huge inter-state gaps in the set-ups, executions and expansion of vital statistics mechanism as in health outcomes. In spite of continuous efforts and attention, the failure and lethargic performances of EAG states in almost all the health programs clearly indicates that there are some serious problem either in planning, implementation or monitoring of these programs. To tackle down the problems effectively we need exactly what are and where are the problems. Like inter-state, there are also huge

intra-state and inter-district discrepancies in health outcomes, which instead of a general solution require problem specific or area specific solutions. Identification of the exact problem and the specified area will save the wastage of valuable and scarce resources and leads to optimal utilization and early and timely implementation of the schemes. It will also reduce the burden of monitoring and it's a well-known fact that longitudinal data (generated regularly at fixed time intervals by a permanent set-up for the same population) is far better than cross-sectional data (generated through sample based surveys though at fixed time intervals but the surveyed population are not same) for accurate evaluation of the schemes. Thus, we can say that timely availability of vital statistics is not only helpful in comprehensive planning, proper implementation, effective monitoring and accurate evaluation of the health schemes, but it is the most basic but essential requirement of a health system.

References

- Bhojani, U.M., Prashanth, N.S. and Devadasan. N. (2009). Under reported deaths and inflated deliveries: making sense of health management information. Institute of Public Health, Bengaluru.
- CBHI (2012). National Health Policy. Retrieved from cbhidghs.nic.in/index2.asp?slid=1256&sublinkid=1163
- Ghosh, S. and Arokisamy, P. (2009). Morbidity in India: Trends, Patterns and Determinants, *Journal of Health Studies*, vol. 2(3), June 2009. JHS-ISSN-0974-6765.
- GoI, (2006): Mortality Statistics in India: A Report Status of Mortality Statistics Reporting in India
- ICMR (2003). Study on Causes of Death by Verbal Autopsy 2003-05. Indian Council of medical Research, New Delhi.
- Jha, P., and Laxminarayan, R. (2009). Choosing health: an entitlement for all Indians. Centre for Global Health Research.
- Mahapatra, P. (2010). An Overview of the Sample Registration System in India. In Prince Mahidol Award Conference & Global Health Information Forum.
- Mahapatra, P., & Chalapati, R. P. (2001). Cause of death reporting systems in India: a performance analysis. *The National medical journal of India*, 14(3), 154.
- Mahapatra, P., Shibuya, K., Lopez, A. D., Coullare, F., Notzon, F. C., Rao, C., & Szreter, S. (2007). Civil registration systems and vital statistics: successes and missed opportunities. *The Lancet*, 370(9599), 1653-1663.
- MoHFW, GoI, (2010). Sources of Vital Statistics. Retrieved from http://mospi.nic.in/mospi_new/upload/vital_stat_2010/topic.pdf
- RGI (2003). Report on Causes of Death 2001-03. Retrieved from www.cghr.org/wordpress/wp-content/.../Causes_of_death_2001-03.pdf
- RGI (2008). Study on Medical Certifications of Cause of Death 2008.
- RGI (2010). Vital Statistics of India 2010. Retrieved from www.censusindia.gov.in/2011.../CRS_Report/CRS_Report_2010.pdf
- Setel, P. W., Macfarlane, S. B., Szreter, S., Mikkelsen, L., Jha, P., Stout, S., & AbouZahr, C. (2007). A scandal of invisibility: making everyone count by counting everyone. *The Lancet*, 370(9598), 1569-1577.