

Public Private Partnership for Communicable Disease Surveillance and Control in Kerala- Miles to go!!

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ABSTRACT

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Kerala State which has made impressive improvements in material conditions of living is now facing a huge burden of cardiovascular diseases. The article discusses the burden of cardiovascular diseases and its determinants, current strategies for its control and future directions. The paper calls for an urgent need to reorient the primary health care system to meet the challenges.

Keywords: Cardiovascular disease, Primary Health Care, Kerala

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Kerala has been grappling with outbreaks of infectious diseases in the past decade. There are persistent issues like Leptospirosis and Viral hepatitis A while Dengue fever and Chikungunya are tending to become endemic. Emergence of disease such as H1N1, Japanese Encephalitis and Scrub typhus are also becoming a major problem. HIV, Tuberculosis and Hepatitis B still killing people in the State along with newly emerging diseases like West Nile fever, Kyasanur Forest Disease and Lyme's disease.¹

Communicable disease surveillance is essential for early detection of outbreaks, in order to initiate investigations and control measures and also to efficiently monitor intervention programmes.² Integrated Disease Surveillance Program (IDSP) is in place in the State from 2005 onwards.³ But the State depends more on a daily telephone based reporting system, which is in place from 2003 onwards.⁴ Several outbreaks were detected and many early warning signals are being picked up by the system. However the data with the system is merely the tip of the iceberg, as data from the major groups involved with infectious disease management are either not being collected or not analysed properly.⁵ It is important to have a more efficient public health surveillance system, which is able to pick up any unusual events early enough and alert decision makers enabling them to act timely and effectively.

Currently the private sector accounts for more than

70% of all facilities and 60% of all inpatient beds in the State.^{6,7} There is reasonable public sector infrastructure for performing disease surveillance in the rural regions of the State. However such infrastructure and necessary personnel are not present in the urban regions. Private hospitals, Nursing homes and clinics meet most of the curative needs of the urban areas. Most of the data from the private hospitals are not used properly and many a time increase in the number of cases is not timely detected. Many private hospitals and laboratories are better equipped in terms of technical resources and diagnostic tests and so itself the information from those institutions is important for surveillance system.⁸ The private sectors' immense resources in terms of diagnostic services, which is the least developed agenda in Government sector under IDSP, make it an irresistible partner for public health surveillance. In the event of an emerging epidemic, it is likely that the private sector units rather than public health sector units feel the early warning signs.⁹ So it is very essential that the private sector need to be engaged effectively in the communicable disease surveillance process.

Public Private Partnership (PPP) in communicable disease surveillance in the State could be a voluntary collaboration initiated by the Public sector that builds upon the strengths of partners, to achieve a shared agenda which produces sustainable results for the benefit of all. Several examples of PPP highlight a

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potential for the creation of a powerful mechanism for addressing difficult problems by leveraging on the strengths of different partners; however, these also illustrate complex issues, as such arrangements bring together a variety of players with different and sometimes conflicting interests and objectives, working within different governance structures.

IDSP has been trying to involve private sector in disease surveillance process, but with limited success. The reasons could be many and are listed in the **table 1** below.

| Public Sector | Private Sector- system factors | Concerns of the private sector |
|---|---|--|
| Has not felt the importance of private sector | Largely unorganised | Confidentiality of the patient |
| Has not owned the PPP in disease surveillance | Huge variations-ranging from a single man clinic to corporate hospitals | Complexity of the reporting procedure |
| Fearful reporting from bottom level | Public health is being viewed as a low priority issue. | No feed back Poor recognition |
| Reporting and actions by same staff and tendency to hide cases | Inadequate training and lack of Information on disease surveillance | Apprehension about losing the patient |
| Attitude- "Including Private sector will increase burden" and "I am OK, you are not OK" | Frequent change of paramedical staff/lab technicians | Isolated poor experiences |
| Lack of confidence in dealing with big hospitals | Variations in quality of diagnostic and treatment services | Power relationships "Why should we notify?" |
| No intelligent analysis at local level | Presence of unqualified staff in some of the institutions | Time constraints |
| Misconceptions about some of the tests (eg. NS1 antigen) | | |

PPP Lessons learned from other surveillance systems

Polio surveillance is an example of successful public private partnership among the disease surveillance programmes. There are also pilot projects in the country in the private sector where private sector contribution to surveillance activity have been successfully demonstrated as in North Arcot District Health Information (NADHI) project conducted by CMC, Vellore and pilot project of disease surveillance in Kottayam district of Kerala.^{10, 11} Lessons learned from these surveillance systems might be helpful to develop a strategy for wider participation from health providers in the state under IDSP.

Experience with NADHI surveillance system in Vellore and Kerala Model of District based surveillance have

shown that the following incentives are sufficient for private sector participation.

- Actual cost of participation re-imbursed without delay
- Support time for a person in large private hospital / Institution for collation of reports.
- Inclusion of name in the network directory
- Representation in the District surveillance committee
- Certificate of recognition and invitation for participating in National and State trainings.
- Access to IDSP computer web reports
- Quarterly bulletins on health status of the region from District Surveillance Officer.
- Feedback on surveillance from the district surveillance officer on a regular basis.

The experience of NADHI has shown the importance of a motivating person or group, which is needed for successful sustainability of the programme. There is need for hand holding and constant support and encouragement from this person or group for the private practitioners. "The participating units and doctors have to feel that they are benefiting the society through the activity and at the same time gain knowledge regarding pattern of diseases in the community. Both these factors can be achieved through a proper feedback mechanism, which has to be built in as part of private sector partnership".^{10, 11}

Proposing Kerala model PPP for communicable disease surveillance

i) Diseases to be under surveillance

Limited number of diseases as decided by the State

ii) Flow of Information

Surveillance system to be linked to the 'e- health' initiative of the State, which is expected to roll out in wide scale within a year. Selected private hospitals, initially and later all hospitals, and laboratories shall be given access to web portal, who will enter the required information of the patient at the time of diagnosis. The system, which is linked to the Global Positioning System, will send an alert to the Medical Officer PHC (email) and Junior Health Inspector (hand device) of the concerned area from which the patient belongs to. Same time the information will be shared to District Surveillance Unit and State Surveillance Unit. There will have to be provision for spotting the case in a district map automatically, which the DMO/Dy DMO (PH) will review every evening. The public health actions taken for that particular case have to be filled by JHI with

remarks of Medical Officer and Dy DMO (PH)/ Epidemiologist in serial order. The reporting units should also be able to view the action taken at the periphery, for the patients they reported. The entire process could be monitored by State Surveillance Unit.

There will be system for alerting DSU on hotspots (programmed for each disease eg. More than one dengue within two weeks within 150 m radius). Information regarding contact numbers of all MOs, Field workers, DSU and nodal persons of reporting private facility over the entire State will be available for easier communications.

Types of health facilities to be involved

Type of suitable Health Facility can be prioritized based on the number of patients seen and pattern of disease seen in the hospitals/clinics. Geographical coverage will have to be ensured. Dy DMO (PH) will choose additional centres as required based on specific situational analysis in the district. This would include geographical representation, tribal areas and urban slums. Recruiting the units can be initiated in a phased manner.

Surveillance Units in total number of units in a phase-1 may be limited to 15 -45 / 100,000 population in the rural regions and 15-30 /100,000 in the urban regions. This can be increased over the next phase of recruitment. All Medical colleges have to be involved.

Process of PPP for Communicable disease surveillance

Enlist and geographically map all private health providers in each district. Identify hospitals/clinics to be involved in initial stages. The interface agency (eg Indian Medical Association) shall help in convening meetings and convincing hospital managements and doctors about their roles and responsibility in disease surveillance. No formal MoU is needed. Identify a nodal person (preferably a staff nurse) from each hospital, who serves as a single window for the information on communicable diseases in that hospital. Nodal officers should be able to map out all possible sources of data in the hospital that would ultimately be collated. It is the responsibility of the nodal officer to make sure that the information regarding the communicable diseases diagnosed on the day is being entered in to the portal. The nodal officer will be trained and retrained by the Public health system.

Role of public health system in PPP for surveillance

- Initiate and own the process of partnering with

private sector

- Public health actions for all notified cases, as per SOP
- Offering Non-financial incentives like appreciations and recognitions
- Involving major partners in District Surveillance committee
- Involving Private sector doctors/ staff during Quarterly/Monthly review meetings
- Providing all technical inputs and support for disease surveillance
- Facilitate district level Private sector task force for communicable disease surveillance and control
- Consolidated monthly surveillance data and updates to be circulated to all partners

Role of private sector in Communicable disease control

Private health care should be viewed as a valuable resource. The opportunity should be seized to improve care, treatment outcomes and build a system of long-term sustainability in disease control through an effective public-private partnership. Most national disease control programmes in the past seem to have ignored the private medical sector, opting to concentrate their efforts only on government facilities. Little effort has been made to engage the private sector; private medical practitioners have not been invited to participate in the planning and strengthening of national disease control programmes, even in countries where the private sector is prominent. There is therefore now a compelling case for active collaboration between the Government and the private medical practitioners in the delivery of care. Some of the areas where PPP could focus in Kerala are as follows

A. Policy formulation and implementation

1. Infection Control mechanisms in hospitals- Air born infection control, blood born infection control
2. Protocol based treatment of communicable diseases and evidence based diagnosis
3. Rationale use of drugs and Prevention of drug resistance

B. Grant in Aid for Infrastructure Development: eg. Build-Own-Operate model for advanced laboratory testing, MDR TB Ward at private hospitals

C. Contracting out for facilities: eg. X ray in rural areas, Water sample testing, Confirmatory tests for surveillance

D. Technical Expertise, Agencies for action:

Outbreak investigation, control, Rapid Response Teams (Private Medical College Specialists and Interns)

E. Management and Operations: Leasing difficult rural area PHCs which is inefficiently managed by Government due to non-availability of doctors to Private medical colleges for training

F. Technology Demonstrations: m health for information sharing, Net working all hospitals for sharing information and speedy communication, sending X rays through WhatsApp and getting it read by experts etc.

G. Capacity Building and Training: Capacity building for formal, informal and continuing education of professional, para-professional and ancillary staff of private sector on fever protocol, Infection controls mechanisms etc. by private agencies/NGOs. This would directly help in improving the technical skills of health worker to improve the quality of service.

Allowing private entities to venture into public health education will generate private sector interest and have an immediate impact in increasing training capacity- eg Medical Entomology Institute, Certificate courses on infection control etc. Provision of tax incentives to encourage private sector investment in healthcare capacity building, education and training may be considered.

H. Field interventions: Advocacy Communication Social Mobilisation activities for Communicable disease control, motivating partially/unimmunised children, Targeted intervention for HIV, promotion of larvivorous fish etc. The National AIDS Control Organization (NACO) of the Government of India has outlined a detailed process for bidding, selecting appropriate partner NGOs, and monitoring their performance for service delivery.

I. Financial Assistance for public health models, Corporate Social Responsibilities for public health initiatives

J. Social Franchising models for improving quality of services

K. Vaccines and free drug outlets for selected diseases: eg. Anti TB drugs, Anti Malaria drugs

L. Information sharing and updating: CMEs, Workshops, Emails regarding new strategies, new protocols, new policies, public health responsibilities etc.

M. Local Self Government and PPP

PPP is a suitable method of delivering services commonly provided by local governments and is generally applicable to most components of service delivery. The types of services that could be provided through PPP will vary from one local government to the other based on their needs and priorities. Local governments may consider partnerships with the private sector for activities like solid waste management.

N. Private sector task force for Communicable disease surveillance and control: It could form the Face of private sector to discuss issues, monitor and motivate colleagues.

PPP- TB Control Model

Various PPP models for RNTCP showed increasing trend in detection of sputum positive cases in Thane (14%), Kannur (15%), Mumbai (19%), Hyderabad (23%), New Delhi (36%) and Punalur (50%). Treatment success rate was more than 80% in Hyderabad and Kannur.^{12,13} Assessment of cost and cost-effectiveness of Hyderabad and Delhi PPM projects indicated that PPP could be effective, affordable and cost-effective approaches for improving case detection and treatment.¹³ Schemes for involving NGOs and Private practitioners were established since 2002 onwards.

Barriers for participation in RNTCP schemes in Kerala state was explored from private sector doctors. Lack of flexibility, apprehension about losing the patient, fear of losing confidentiality and lack of trust in intermittent regimen are identified as the main causes for not involving in RNTCP. Accordingly the PPP policy of the State has been revised. The doctors were classified into three categories- one who would like to send the patients to Government sector, one group who would like to follow RNTCP but would like to hold the patient and third group who follows only daily regimen. Strategies have been formulated to customise partnership for all categories of doctors. Sensitising the Government sector staff on the need of PPP and how to deal with private sector was found helpful. Services were customised using the flexibilities of the programme. Emphasis is being given for building local partnerships. Non-financial incentives are being promoted along with financial incentives. A mechanism for feedback to private doctors is being developed. The key word has been shifted from RNTCP to TB Control. Indian Medical Association is working as an interface for PPP activities for TB Control in the State. A

network of 102 private laboratories (DDRC) has been involved in TB Control activities by providing quality assured diagnostic services including Cartridge Based Nucleic Acid Amplification test at subsidised cost. 168 Peripheral health Institutions in private sector for RNTCP services has been created where patients will get free anti TB Government medicines. 92 laboratories are working as Designated Microscopic Centres in private sector. It would be too early to comment on the success of these interventions. Strengthening PPP was possible because of the strong administrative will and the understanding that personal relationships are the best key to Public Private Partnerships.

Private hospital Consortium for TB Free Kochi

Private hospital consortium for TB Free Kochi has been formulated and looks promising and revolutionary. It bases upon the social responsibility of private sector in Ending TB blended well with profitable customer care services Private hospital Consortium for TB Free Kochi's mission is to ensure uniform high Standards of TB diagnosis and treatment to all citizens of Cochin who seek care in private sector. IMA Cochin branch is facilitating the consortium and acting as an interface between consortium on one side and State TB Cell, District TB Centre, District Health Administration, Urban Health Mission, Tuberculosis Units and other IMA branches. IMA is doing advocacy with institution heads and co-ordinate regular review meetings.

Notification of TB from Private sector through Nikshay portal

Sincere attempts for improving notification of TB from private have been initiated very recently in the State. The main barriers identified for TB Notification from private sector were the fear of confidentiality, lack of information about how to notify, fear of losing patient and doctor's apprehension about the diagnosis. The need for surveillance was highlighted rather than regulatory approach. Confidentiality of the notified patients was ensured. Doctors were given a Nikshay ID and password, through which they could enter the details of diagnosed TB cases directly or through a mobile based application. IMA, as an interface, also facilitated TB Notification through newsletters, personal communications, CMEs, one to one communication and IEC materials. CBCI efforts are also appreciable in bringing in Catholic Health Managements. A nodal paramedical person is entrusted to the activity in major hospitals by making them a single window. They have been trained to co-ordinate with MRD, Pharmacy, Laboratory, Extra pulmonary specimens and doctors. Government sector officials were empowered to keep

personal rapport with their private sector counterparts. Special efforts were taken to appreciate the efforts of those who participate sincerely.

STRATEGIES FOR ENHANCING IMPLEMENTATION OF PUBLIC-PRIVATE PARTNERSHIPS

Guiding Principles

- Partners are equal
- Mutual Trust between the counterparts
- Thrust on confidentiality
- Fraternity feelings
- Empowering and entrusting paramedical staff
- Emphasis on need for surveillance rather than threatening
- Appreciating and recognising efforts of partners
- To involve "private for profit sector", speak business, not charity- Segment the market, Involve segments on priority and Compensate adequately
- Promote standards
- Ensure quality of care through a participatory body
- Bring-in local partnerships
- Involve mutually acceptable interface- IMA
- Participatory approach to decision making
- Innovations at regional level

Legislative frameworks, polices and operational strategies: A policy would need to be adopted and strategies developed to allow private participation as equal partners in planning, implementing, monitoring and evaluating public-private partnerships. Public-private partnerships have to be allowed to develop at the operational level at which these are to be implemented.

Implementation through local coordination committees

Local coordinating committees may be set up at district level to rapidly and effectively operationalize public-private partnerships. These committees should comprise Public sector staff at the local level, prominent practitioners and representatives of their associations (IMA, IAP, QPMPA), locally-active NGOs and community groups, large-scale corporate employers in the area, if any, and be attended, at least at the beginning, by senior bureaucrats, elected leaders of the state or municipal bodies. The current diphtheria and H1N1 outbreaks at Ernakulam district is being managed by IMA District Task Force through this model.

Behaviour change for PPP and building managerial capacity of Public sector to deal with private sector

Inculcating PPP behaviour among the public sector staff and training them on how to deal with private sector is important.

Role of an Interface agency

Indian Medical Association, in the current context, will be a mutually acceptable interface for PPP in communicable disease surveillance. The role of IMA will be to bring in two sectors together and to involve in “difficult to solve” issues.

Sustaining Partnerships: Achieving sustained partnership between Public-Private health sectors for the benefit of the community is a challenging task. This demands a lot of advocacy, flexibility, simplified recording and reporting system, provision of technical assistance etc. Short-term results of such ventures with heavy inputs may be very promising and encouraging. However, sustaining interest, motivation and involvement of private doctors/hospitals in communicable disease control as per the national objectives is a major challenge.

Quality Control: Through a participatory body would be appropriate.

Monitoring and Evaluation of public-private partnerships

Local branches of medical associations (IMA, IAP, and QPMPA) should be involved in the appraisal of PPPs and prominent members should undertake monitoring of PPPs in adjoining areas by mutual consent. Evaluation based on performance and process indicators needed

CONCLUSION

There is an air of optimism surrounding PPPs in Kerala. Used judiciously and fitted to local circumstances, they clearly have the potential to drastically change the communicable disease related healthcare landscape in Kerala. PPPs will survive only if the interests of all stakeholders are taken into account. This means detailing specific roles, rights and responsibilities, establishing clear standards, providing training for public sector managers, active dissemination of information, and constantly refining the process to make the system more efficient. The public sector has to lead by example, and be willing to redefine itself and work with the private sector. The latter must in turn be willing to work with

the public sector to improve mutual cooperation and understanding. It is critical that the driving principles for such initiatives be rooted in ‘benefit to the society’ rather than ‘mutual benefit to the partners’ and should center on the concept of equity in health. Norms must stipulate that partnerships contribute to strengthening of social safety nets in disadvantaged settings and should be set within the context of ‘social responsibility’ as the idea is not meant for private funds to be put to public use nor to privatize public responsibilities. They should complement and not duplicate state initiatives and should be optimally integrated with national health systems without any conflict of interest. Development of a public-private partnership in itself should not be seen as an outcome, but a process and an output; it is important for partnerships not to just exist in form but to contribute to improvements in health outcomes.

END NOTE

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Editor’s Remarks: Kerala represents a paradox in Health determinants. Though India is a developing country Kerala had the determinants of a developed nation years aback. As the per capita income further increased the burden of cardiovascular diseases has increased. This article discusses the burden and the strategies needed to control this burden. The paper calls for an urgent need to reorient the primary health care system to meet the challenges.

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