Brief report

Viral Hepatitis Surveillance in Sri Lanka.

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Viral Hepatitis (VH) is a major public health problem in the country. VH is endemic in all parts of Sri Lanka, and occurs throughout the year. Outbreaks are experienced every 5-6 years, but with lesser magnitude. The average annual admission rate to government hospitals in Sri Lanka for VH declined from 40.9 per 100,000 populations in 1990 to 22.5 per 100,000 populations in 2001 (1). Improved socio-economic conditions and improved health care services are some of the reasons for this decline. However, according to the data available at the Medical Statistics Unit, 5092 cases have been treated at government hospitals. The Case Fatality Rate has declined from 0.9% in 1985 to 0.4% in 2001 (1). This may be due to improved case management and public concern for the diseases. Data available at the Epidemiology and Medical statistics Units shows that hepatitis A is the commonest type of VH in the country; prevalence of hepatitis B and C ranges from 0.27% to 2.5% and 0.56% to 0.97% respectively (2,6). These data are based on epidemiological and serological surveys done in defined geographical areas in the country.

VH is one of the notifiable diseases in Sri Lanka for the last four decades. It was gazetted as infectious hepatitis in 1960 and re-gazetted as VH in 1974 in the notifiable diseases list. Reporting of VH in Sri Lanka is based on clinical diagnosis. Therefore, the possibility of mis-diagnosis exists. A large number of VH patients are treated by allopathic and Ayurvedic practitioners in the private sector or do not seek treatment at all and are not reflected in the reported figures. All VH patients may not require hospital admission. Patients treated at the out patient department reported. Like for other notifiable diseases, the Medical Officer of Health (MOH) is the responsible officer to investigate these cases and take necessary action to control and prevent the disease in the respective health administrative areas.

In year 2000, the Epidemiology Unit of the Department of Health Services introduced a special investigation form to collect additional information. The objective of introducing this form was to strengthen the surveillance of VH and particularly to understand the disease epidemiology at the MOH level and in the country and to develop control and prevention strategies for the country. Special investigation of each case is a more reliable mode for collecting valuable data with the minimum cost. The aim was to describe VH by its type based on laboratory findings, which is usually not available at the time of disease notification. This form was revised in 2002, to make it a more effective and efficient tool for surveillance. It is expected that the MOH would be the immediate beneficiary of this tool to understand disease epidemiology at the MOH level and to implement control and prevention activities. Understanding susceptibility, groups at risk, source of infection, complications, etc. are important to control the disease. However, the Epidemiology Unit has observed that this system of special investigation of VH is not satisfactory; its coverage is less than 50%. A substantial proportion of investigation forms are incomplete and are received late at the Epidemiology Unit. Late notification from the institutions, incomplete addresses, non-availability of forms at the MOH offices, lack of transport, and lack of time due to heavy workload are common reasons for this. These data are routinely collected and forwarded at MOH level, and have a minimum use for taking action for control and prevention. The responsibility of MOHs in this activity is vital and the situation could be easily improved with necessary guidance, supported by supervision and monitoring.

In Sri Lanka, routine laboratory surveillance for VH is limited due to many reasons: lack of laboratory facilities at the hospital/district level; difficulties in sending specimens for laboratory investigation from hospitals; and increased workload at the MRI are some of them. Strengthening laboratory investigation facilities at the government hospitals, at least at the provincial and base hospitals, where competent, trained laboratory technicians can be made available is a timely need. More laboratory investigations are carried out at laboratories in the private sector due to many reasons. A large number of investigations are performed routinely at the private laboratories by qualified medical experts, but are hardly available for surveillance purposes. Absence of a link between government and private sector

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laboratory data is a missed opportunity in strengthening laboratory surveillance.

Attempts to study the burden of VH in Sri Lanka are minimal. Disease complications, absenteeism, loss of working days, cost to personnel and health care services are not studied adequately. The burden due to VH may be very high considering the large number of cases reported as well as well as if account is made to the non reported cases. The Epidemiology Unit has analyzed only the available morbidity and mortality data of VH and it is limited to a few basic epidemiological variables. Estimation of the disease incidence and prevalence are important. It is also important to know the type of VH, as the burden of disease might significantly vary by its type.

Hepatitis B, C and E are emerging in many parts of the world (7). Many countries are studying the VH pattern in order to carry out effective control and prevention activities, such as screening, immunization, strengthening of universal injection safety practices etc. There was no large-scale hepatitis B vaccination programme in Sri Lanka until 2003. Only people at a risk or those who could afford to pay, in the private sector were immunized against hepatitis B. The Ministry of Health with assistance from the Global Alliance for Vaccine and Immunization (GAVI) has introduced a routine infant hepatitis B vaccination into the Expanded Programme on Immunization (EPI) from 2003 in a phased manner. However, introduction of effective vaccine alone will not be adequate. A control and prevention programme with all possible strategies, such as universal precautions in hospital practice is essential.

There is a growing need to have a national programmme for control and prevention of VH in Sri Lanka. This should be addressed to all types of VH but the main emphasis should be Hepatitis A. This programme should necessarily be a multisectoral within the department of health services and also with other government and non-governmental institutions. There is a great responsibility for the local government institutions, particularly in providing safe water, strengthening hygienic sewerage disposal mechanisms and strengthening law enforcement. Screening, safe injection practices, immunization activities (eg; Hepatitis A vaccine for high risk groups), massive awareness campaigns and surveillance are the key responsibilities of the Department of Health Services. There should be a National Task Force for control and prevention of VH. Policy development, monitoring and evaluation at national level are essential responsibilities of the Task Force. The future challenge is not just to start a national programme for prevention and control of VH, but to have an effective sustainable programme within the public health services, which should be practically targeted to the control and prevention of VH.

Where we are at present

- VH is a major public health problem though the morbidity and mortality have declined.
- VH is an endemic with major outbreaks every 5-7 years.
- Hepatitis A is prevailing in Sri Lanka; type B and C should not be under estimated.
- Burden of VH is not studied adequately.
- Reporting and investigation of VH are not given sufficient priority.
- Epidemiological surveillance is less supported by laboratory evidence.
- Available surveillance data are inadequately used at MOH /DPDHS level.
- Contribution of Private and Aurvedic sectors in VH surveillance is minimal.
- Hepatitis B was introduced into the EPI in 2003; yet to achieve high coverage.
- Available limited research is mainly focused into the incidence /prevalence.

What we need are

- An active, sustainable national programme for control and prevention of VH with priory commitment by the government and Ministry of Health Sri Lanka.
- Comprehensive assessment of burden of VH.
- Strengthen surveillance, particularly with improved reporting, investigation and using data for action.

- Improved laboratory facilities, particularly at periphery.
- Immunization programme for high risk groups in Hepatitis A and B.
- Research on subtypes, mutation, risk factors, complications, vaccine efficacy, etc.

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