For information

SARS Expert Committee

Training on Public Health

Purpose

This paper provides an overview on training for doctors, nurses and laboratory staff in the Department of Health (DH) particularly in public health, and outlines its priorities in public health training in taking into account the experience in the Severe Acute Respiratory Syndrome (SARS) outbreak in Hong Kong.

Overview of Training in DH

- 2. Dedicated and professional staff is the most important asset enabling DH to fulfill its existing and future roles. As promulgated in the annual Departmental Training and Development Plan, the Department is committed to training and development of staff as well as promoting a continuous learning culture to meet service needs and strive for continuous improvement.
- 3. The Departmental Training and Development Plan outlines the broad training and development activities of DH, including general training as well as specific training programmes of the different Services which have been formulated in the light of their respective service goals. At the same time, staff are also encouraged to have their own individual training and development plans for a systematic development path to meet their career aspirations.

Training for doctors

4. Medical and Health Officers in DH are trained and developed through the career posting system. In the area of specialist training, suitable officers are selected to attend postgraduate courses such as Master in Public Health. Officers are also sent to overseas or local attachments in universities or other relevant organizations such as World Health Organization (WHO) and Centres for Disease Control (CDC) in USA to widen their professional exposure.

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- 5. As regards specialist training in public health, the subject of Community Medicine encompasses three specialties, namely Public Health Medicine, Administrative Medicine and Occupational Medicine. Specifically on Public Health Medicine, the training requirements are overseen and co-ordinated by the Consultant Community Medicine in-charge of the Disease Prevention and Control Division.
- 6. For non-specialist training, the "Continuing Medical Education (CME) Programme for Practising Doctors who are Non-Specialists" of the Medical Council of Hong Kong has commenced in October 2001, requiring doctors to acquire at least 30 CME points per year through continuous medical education. DH fully supports this Programme for the training and development of the medical profession and has taken up the role as a CME Provider in organizing CME activities for participation by doctors. DH is also the CME Administrator helping doctors to track their CME points.

Training for nurses

7. The Public Health Nursing Division (PHND) is responsible for the formulation of training and development strategies for nurses in DH. The development of both professional and managerial competencies is achieved through in-service training activities and local commissioned training programmes, as well as sponsoring staff to attend local or overseas training courses. The nursing staff are also trained and developed through career posting. Moreover, PHND will initiate appropriate training strategies for fulfilling training needs of staff arising from contemporary public health issues, such as SARS.

- 8. As for the preparation of qualified public health nurses, PHND is keeping abreast with the world trend of developing professional nurses at tertiary education level. It has succeeded to upgrade the in-service training of public health nurses to university degree level by sponsoring suitable staff to undertake a post-registration nursing degree programme specialized in public health commencing in 2002. DH will continue to sponsor a number of staff to attend this programme yearly according to service need.
- 9. Meanwhile, PHND is preparing to become an accredited provider of Continuing Nursing Education (CNE) Programmes, and one of the important tasks is to formulate strategies to facilitate staff to meet the Nursing Council's requirements for mandatory CNE in the near future.

Training for laboratory staff

- 10. Laboratory technical and scientific staff also play an important role in public health. Besides possession of the prescribed technical qualifications at recruitment, technical and scientific staff of DH's Pathology Service are provided with the necessary bench training on the job and are regularly rotated to different laboratories to expand their skills and experience. This arrangement enables the Department to cope with surge of workload at times of sudden increase in demands such as during the SARS outbreak. In-house seminars and discussions are regularly held to ensure that the staff are up-to-date with advanced knowledge and technologies in medical laboratory science.
- 11. In addition to in-house training, the technical and scientific staff are also encouraged to seek further qualifications in medical science, information technology and management, and are given the opportunities of attachment training to overseas institutions, such as the CDC, Central Public Health Laboratory (UK), National Institute of Public Health and the Environment (Netherlands), Laboratory Centers for Disease Control (Canada). Knowledge and skills thus acquired are useful in developing new scope of service, promoting research as well as networking with colleagues in and outside Hong Kong.

12. With the emergence of SARS, a number of laboratory tests have been developed to supplement the clinical diagnosis. These tests involved handling of high-risk virus as well as complicated molecular testing, and staff experienced in virological techniques have been trained up during the outbreak to take up the tests. Looking ahead, more staff will be rotated to the virology laboratory to acquire the necessary skills with a view to enhancing the workforce's capacity in this regard in preparing for possible future outbreaks.

Priorities of Development and Training in Public Health

- 13. To keep in pace with changing health needs of the community brought about by challenges such as changes in trends of diseases, emerging and re-emerging infections, ageing population, globalization as well as advances in medical technology and information technology, DH in 2002 has reviewed its core roles in fulfilling the department's commitments as health authority and health advocate to protect and promote the health of the community. And taking into account public aspiration and overseas practices, DH's core roles will focus on four main areas, namely (i) Regulatory, (ii) Advisory, (iii) Health Advocacy and Promotion, and (iv) Disease Prevention and Control. DH's training and development priorities will be planned and organized in tandem with its core roles.
- 14. The SARS outbreak in 2003 has further highlighted the need for enhancing training of health care personnel in preparing for new emerging diseases. This applies particularly in the areas of field epidemiology, data systems and management, and risk communication. The proposal of establishing a CDC-like organization to oversee prevention and control of diseases is being explored and this will have implication on public health training.
- 15. With advancement in information technology, DH is establishing a Public Health Information System (PHIS) to collate and analyze data from within and outside the health care sector to generate information, and to identify key areas where maximum health impact can be achieved with

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public health intervention. During the SARS outbreak, various electronic data systems have been developed for case investigation and contact tracing. The successful experience in interfacing different data systems of DH and the Hospital Authority has paved the way for building a similar platform for other infectious diseases. In this connection, DH will consider integrating various systems of SARS into the PHIS to enhance efficiency in data management. Suitable training will also be arranged to upgrade staff competency in the area.

- 16. In meeting the challenges brought about by globalization, emerging and re-emerging infections and advances in technology, DH will continue to strengthen its network with WHO and other health authorities to exchange intelligence on diseases and incidents that may have potential global implications. Taking into account the experience of the SARS outbreak, DH will expedite training activities on the following areas, with a view to better discharging its functions in disease prevention and control:
 - Developing specialized skills that are required for setting up of a CDC-like organization and strengthening preparedness and response to infectious diseases, e.g. field epidemiology, virology, biogenetics and health informatics;
 - Building capacities for risk management and communication, e.g. training on crisis management and meeting the media;
 - Organizing training activities that will enable health care staff to obtain the necessary professional qualifications in public health, e.g. the Fellowship of Hong Kong Academy of Medicine for doctors and Degree on public health for nurses; and
 - Enhancing networking with local and international authorities and institutions in research development and prevention of infectious diseases, e.g. regular visits to other health authorities, collaboration with universities on research projects and attachment to reputable organizations such as CDC and WHO.

Way Forward

17. At the macro level, all relevant parties including the Government, the health professions and the academics should also build up their own capacities and enhance sharing of expertise in protecting the health of the community. For instance, health administrators and health care providers have to plan ahead and equip themselves by building up core competencies on crisis management, risk communication and field epidemiology through structured training programmes and continuing professional development. Moreover, in undergraduate training of doctors and nurses, the importance of epidemiology, microbiology and biostatics in disease prevention and population health should be emphasized.

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