

Train the trainers course on infection control and hospital hygiene in Bangladesh

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Introduction

The initiative of a single hospital in Bangladesh led to farreaching consequences, introducing the disciplines of hospital hygiene and infection control.

Monowara Hospital in Dhaka (MWD), Bangladesh, was opened in 1990. It is a 64-bed private clinic, including an operating theatre, a delivery room and an outpatient department. The hospital management wished to introduce guidelines for the control and prevention of infection. Since these did not exist in Bangladesh, hospital director Jahangir Hossain decided to enlist the support of his Dutch consultant Jan Bosman. They succeeded, and the implementation of the guidelines led to improvements in the hospital. Subsequently, MWD organized a seminar in 1996 in Dhaka on Hospital Hygiene and Infection Control, which raised the interest of other hospitals and government officials. A need for further education in this field was identified. The School for Specialized Health Education, Northern Netherlands (SOIG), in Groningen, was invited to develop a 'Train the trainers course on hospital hygiene and infection control'. The project was made feasible by the financial support of the Dutch organizations on education in third-world countries SIMAVI/Stichting Vronestein and the Rotary District 1590 Netherland, in cooperation with the Rotary Dhaka Bangladesh.

Preparation and execution of the project

The course was prepared and executed by MWD as the organizer and the SOIG as the executing organization, in close cooperation. The goal was threefold. First, to increase knowledge on hospital hygiene and infection control, and to improve skills to put this knowledge into practice. Second, to teach and train educational skills. Third, to support the participating hospitals in introducing adequate infection control policies. Selection criteria were formulated for the participating hospitals as well as for the students. Hospitals should be willing to install an infection control committee (ICC) in their hospital and support the prospective infection control practitioners (ICPs). The students should be registered nurses aged 25–30, fluent in speaking and writing English, and with a minimum of 5 years' working experience. The maximum number of

students was fixed at 16, although many more hospitals wished to enrol. Fifteen senior staff nurses and one ICC from 13 different hospitals in Dhaka and Mymensingh attended the course (Table 1). The course was scheduled within 1 year and consisted of three parts – one theoretical and two practical.

The theoretical part consisted of 27 days of classes, given in Dhaka from February to May 1997. The topics included epidemiology and prevention of hospital acquired infections (HAI), employees' health, policies and procedures, education and communication. Epi-Info was introduced for epidemiological data management¹. MWD had appointed two junior doctors to attend the classes to translate the English into Bangla whenever necessary. This proved successful, not only in translating the language into another, but also in helping to translate Western culture into Asian culture and vice versa. The junior doctors also rehearsed the lessons with the students after the teachers had left Dhaka, and coached the students during their work as ICPs.

The practical parts consisted of two visits in October and November 1997. First, two Bangladeshi students were invited to two hospitals in The Netherlands for an orientation visit 'to see how it works'. For a period of 2 weeks the Dutch ICPs introduced them to the daily practice of hospital hygiene and infection control in their hospitals. Second, a delegation consisting of the Dutch consultant, one of the teachers, the Director and the junior doctor employed at MWD, visited the participating hospitals in Bangladesh. During these visits infection control policies were discussed with the hospital director or his representative and a delegation of the ICC. This was followed by an on-site visit in the hospital. The newly trained ICP concluded the visit with a presentation on hospital hygiene and infection control in front of the delegation, the director and committee members and/or members of the medical and nursing staff. In this way the students' knowledge and the achievements made at the hospital were informally assessed.

Table 1 Size and affiliation of the hospitals participating in the 'Train the trainers on hospital hygiene and infection control' course in Bangladesh

Hospital	No. of beds	Affiliation
Dhaka Medical College Hospital	1400	Government
Institute of Post Graduate Medicine & Research Hospital	750	Government
Rehabilitation Institute and Hospital for the Disabled	500	Government
Mitford Hospital	600	Government
Mymensingh Medical College Hospital	665	Government
Institute of Child & Mother Health	20	Government
	(500	
	planned)	
Combined Military Hospital, Dhaka	850	Government
International Centre for Diarrhoeal Diseases Research, Bangladesh	2000	Non-government
Holy Family Red Crescent Hospital, Dhak	a 351	Non-government
Bangladesh Institute of Research and Rehabilitation on Diabetic and Endocrine Disorders	555	Non-government
Monowara Hospital, Dhaka	60	Private
Bangladesh Medical College Hospital, Dhaka	200	Private
Samorita Hospital, Dhaka	100	Private

Results

Sixteen students in Bangladesh have successfully completed the basic course 'Train the trainers on hospital hygiene and infection control'. They received their certificate during a final ceremony attended by the Minister and Secretary of Health Care and Family-Planning in Bangladesh. Thirteen hospitals in Bangladesh have (re-)introduced the discipline of hospital hygiene and infection control, and ICCs were (re-)installed. Written guidelines on infection control were developed and introduced in two hospitals. Most of the ICPs have given in-house education on the importance and techniques of hand hygiene, isolation precautions and prevention of injuries from sharp instruments. Educational posters and disposal boxes for sharp instruments have been placed in all hospitals. A (pilot) prevalence survey on HAI was carried out in two hospitals, providing useful information on the occurrence of HAI. Finally, the participants of the course founded the Bangladesh Society of Infection Control Practitioners, which publishes a 3-monthly newsletter.

Discussion

In Bangladesh the basic course was demand driven and executed on the basis of partnership. It obviously fulfilled a need. An index of the impact of the ICPs and ICCs on the prevention of nosocomial infections is not yet available. Nor is it in many developed countries. However, the training of ICPs and the presence of ICCs are steps towards effective infection control in hospitals.

Reference

1 Epi-info version 6. Produced by the Division of Surveillance and Epidemiology, Centers for Disease Control and Prevention, Atlanta, USA, in collaboration with World Health Organization, Geneva, Switzerland, 1994