Service Priorities and Programmes

Electronic Presentations

Convention ID: 1051
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To develop an innovative appliance for enhancement of communication among healthcare workers during management of infectious patients in the Accident and Emergency Department of Pok Oi Hospital

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Keywords:
Innovative appliance
Effective communication
Management of infectious patient
Infection control standard
Clinical safety
Clinical safety

Introduction

Ebola Virus Disease (EVD) has become the top global healthcare priority since September 2014. Hospital Authority (HA) implemented a serial of preparation works to hospitals. Accident and Emergency Department (AED) was identified as one of the high risk areas. HA has mandated that all AEDs should periodically conduct exercises for the preparedness to the EVD threat. To in-line with HA strategies, POH AED performed EVD drill in October and December of 2014. The earlier conducted exercise of handling suspected EVD patients conveyed by ambulance in October 14 was found that the communication among medical and nursing staff were not effective when the staff were shrouded from head to toe in a barrier gown, hood and mask, and peered through a visor. An innovative idea was employed to improve the communication and was tested in the second drill in December 14.

Objectives

To develop an appliance for effective communication among the healthcare workers during management of infectious case with compliance to infection control standard.

Methodology

1. A team consisting of medical and nursing staff was set up to identify the problems on communication during the patient management process when wearing full personal protective equipment (PPE) and the potential risk raised from communication breakdown. 2. A staff team of intelligence explored the devices available in market for clear voice transmission and could be operated easily without

risk of staff contamination. 3. A communication system including neck adjustable throat microphone with ear-bud, clip on finer Press to Talk (PTT) button and walkie-talkie on waist was tested and demonstrated among staff for feedback. 4. Infection control officer was consulted and the application of the device was accepted.

Result

1. The application of the developed appliance can successfully achieve the service demand and ensure clinical safety. With the financial support from executives, four sets of the devices were purchased and ready to use. 2. Staff training on installation and application of the devices was conducted and very affirmative comment was obtained. This innovative appliance to employ the combination of throat microphone and walkie-talkie allows clear and effective communication in loud environment. The system is operated under the cover of PPE without direct contact by staff. It can deliver high quality audio and protect staff from contamination. This excellent device can be utilized in many other episodes for clinical use, for example, in the management of radiation and Hazard material contamination.