

RESPIRATORY DISEASE OUTBREAK IN A JORDANIAN HOSPITAL: LEARNED LESSONS FOR PLANNING NURSING SCHOOL TRAINING

Abstract

Every real and perceived emergency such as natural disasters and pandemics requires a response. The occurrence of several pandemics in a number of Jordanian hospitals raised public and professionals concern. This commentary highlights and describes how a school of nursing dealt with the outbreak within one health care institution; gives an example on one of the applied measures; and discusses learned lessons. Policy should be available to face emergency interruptions of nursing clinical practice.

Key words: respiratory disease outbreak, Nursing school training, Jordan,

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1. Introduction

An outbreak of an unknown respiratory illness occurred in a hospital in Zarqa, Jordan that caught media attention and affected seven nurses, one of whom died as well as one doctor, and the brother of one of the nurses(1). Intensive measures were conducted to identify the type of the infection that had symptoms similar to those of pneumonia. Samples from patients were examined for swine flu, bird flu and SARS, showing that they didn't have any kind of worldwide known disease(2). Although the ministry has confirmed that the outbreak has been contained and that the infected individuals are not in danger of spreading the disease to others, the public still had concerns particularly after the admission of Swine flu cases to other hospitals. Similar to hospital workers, student nurses remain at risk of contracting infections if unprotected. Although schools that train students in hospitals must be prepared to deal with such outbreaks, no special protocols are currently in place for this situation. Therefore, it is important for nursing schools to have policies to deal with outbreaks in health care institutions. This report describes how a school of nursing dealt with the outbreak within one health care institution; gives an example on one of the applied measures; and discusses learned lessons.

Immediate Action

While the subject of infection control is well covered within the nursing units, the severe acute respiratory outbreak in 2012 highlighted that pre-service students were under-prepared for training in such circumstances. This assertion was influenced by the public pressure to ensure the safety of students and their instructors, particularly after the death of one nurse in the outbreak. Despite the Ministry of Health assurances that the outbreak has been contained, the public pressure on the school escalated. This forced the administration to take measures to ensure the safety of students while maintaining the objectives of clinical training. Because reducing contact between people is an important way to stop the spread of infections, and given the occurrence of incidence at the end of the semester, the students were called back to the university. One of the applied measures was the conduction of an Objective Structured Clinical Examination (OSCE) as a substitute to the standard bedside exam.

OSCE vs. Bedside

The pediatric nursing unit is traditionally assessed using bedside case studies and short written examination format. However, an OSCE was introduced following the outbreak. There was a strong positive correlation between the OSCE component and the written component of the exam ($r= 0.557$, $p= 0.001$), and a very strong

positive correlation between the total unit mark and the OSCE mark ($r=0.779$, $p=0.001$). The traditional bedside case study and the OSCE correlate strongly; hence student's performance in one predicted their performance on the other.

What regimens should be used if another outbreak of respiratory illness occurs?

The most important way to stop the spread of infections is reducing contact between people, for example closing schools. However, this approach is not feasible for ensuring the best training of student nurses, particularly with the frequent occurrence of such incidences. Closure of schools, postponing training, and changing settings are considered temporary solutions. Schools' administrations need to partner with hospital leaderships to formulate a plan to deal with these outbreaks. They need to take into consideration the public's response (parents and foundations). They need to assess health care professionals' attitude to pandemics such as influenza(3,4). They need to conduct special training of clinical instructors and students on epidemics prevention activities. Research studies are required on the management approaches of outbreaks. It is important that schools and hospitals reach a consensus to ensure a ready-to-use protocol and to be willing to facilitate the protocol. Previous reports showed multiple interventions were taken to contain outbreaks. Dwosh et al.(5), for example, described three interventions for containment of SARS outbreak in a community hospital; infection control measures were implemented throughout the hospital, organizational interventions restricting hospital access were implemented, and SARS assessment and treatment unit was set up. To conclude, respiratory infections can spread easily in the hospital setting. Although the implementation of infection control measures is effective in preventing transmission of this disease, other measures are required to ensure the safety of student nurses. Emergency plans should be formulated by

nursing schools in association with hospital administrations.

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