

## **Evaluation of a Hospital-wide Infection prevention & Control Certification Program, Increasing the Quality Limits for Patient Safety and Staff Satisfaction; St. Michaels Hospital, Toronto, Ontario, Canada**

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### **Objective:**

To evaluate the effect of comprehensive Infection Control certification on confidence and comfort level of the health care workers.

### **Methods:**

The Severe Acute Respiratory Syndrome (SARS) Outbreak highlighted the significance of formal training in infection control practical aspects as well as the development and publication of standards. Minor errors in the use of personal protective equipment were identified as sources of contamination of Health Care Workers' to SARS CoV. Our hospital's policy mandated that all staff, be certified in infection control through a competency based educational program. A multi-disciplinary educational module, derived from a SARS specific model used to educate the SARS designated care team; was developed. Essential components included basic infection control principles, specimen collection, use of protective clothing, high risk procedures, modified protocols for ventilator management and oxygen/aerosol therapy, transportation and care of equipment and the environment. Competency checklists for each module were developed. Education was customized, depending on the potential risk of exposure to SARS. A train the trainer model with direct involvement of the Infection Control Practitioners disseminated the program hospital-wide.

A self-directed learning package including a video demonstration of application and removal of the Personal Protective attire was developed for the physicians.

### **Results:**

Evaluation of staff satisfaction indicated an average staff satisfaction of 98.3% with the pace and content of the sessions and also increased staff confidence while caring for patients in isolation. In a survey conducted by the Infection Prevention and Control Service at St. Michael's Hospital, a significant association was noticed between the level of confidence and comfort in providing patient care and certification among the two groups of staff (certified versus non-certified,  $p < 0.001$ ).

There was no spread of SARS to staff or patients in our hospital, despite the admission of 5 confirmed cases and 27 patients that met the SARS case definitions.

### **Conclusions:**

The program was highly successful in both preventing the spread of SARS within the institution and easing staff's anxiety.

- Infection Prevention Control Education must be a mandatory frequent part of the training for medical and paramedical programs with commitment and support from internal and external stakeholders.
- Directives and policies must have an implementation and a role out plan.
- There is a need to evaluate the long-term effectiveness and retention level of the competency based program.
- Ratio/bed of Infection Control Practitioners must be re-evaluated based on the new demands of the field.