

POF003: Wednesday 9th Nov. Main Symposium

**The education and practice program for medical students and
health care workers in Korea**

**Jun-Pyo Myong⁽¹⁾
Kim HW ⁽²⁾ , Seo HK⁽¹⁾**

Presenter's affiliation

**Department of Occupational and Environmental Medicine⁽¹⁾, College of
Medicine, The Catholic University of Korea.**

222 Banpo-daero, Seocho-gu, Seoul ZIP Code: 06591

E-mail: medical001@catholic.ac.kr

Department of Preventive Medicine ⁽²⁾

Abstract

Introduction

Tuberculosis infection is prevalent in Korea and health care workers are vulnerable to tuberculosis infection in the hospital. The aims of this study were to develop and validate an education program that teaches senior medical students how to wear and choose the proper size and type of respiratory protective equipment (RPE), which may help reduce the risk of contracting Mycobacterium tuberculosis (MTB) from patients.

Methods

Overall, 50 senior medical students participated in this education program. Methods of choosing the proper type of RPE, performing a fit check of the RPE, and choosing a suitable mask size were taught by certified instructors using the realtime quantitative fit test (QNFT). The validity of education program was evaluated with qualitative fit test (QLFT) before and after the education as pass or fail. Those program was applied to health care workers at a specific teaching hospital.

Results

The education program was effective, as shown by the significantly pass rate (increased 30% to 74%) in the QLFT after the education program ($p < 0.05$). Among study participants, changing mask size from medium to small significantly increased the pass rate ($p < 0.001$).

In addition, person specific RPEs were estimated with health care workers. A total of 12 nurses, 3 type of RPEs were needed. After the teaching course with fit test, all of subjects use good fit RPEs.

Conclusions

Incorporation of this program into the medical school curriculum may help reduce risk of MTB infection in medical students working in the hospital. In addition, the effort to prevent an infection in health care workers in Korea were needed via fit test.