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# A STUDY ON CONTAMINATION OF METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS IN STETHOSCOPES AND MOBILE PHONES OF DOCTORS AND MEDICAL STUDENTS AND IN MOBILE PHONES OF VISITORS IN A TERTIARY CARE HOSPITAL IN SRI LANKA

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#### INTRODUCTION

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Methicillin resistant *Staphylococcus aureus* (MRSA) is a significant contributor of health care associated infections (HAI). Stethoscopes used by doctors and medical students (DMS) are a potential source of MRSA carriage. Mobile phones are another potential source of carriage in community and health care workers.

#### **OBJECTIVES**

To assess the carriage of MRSA in stethoscopes and mobile phones of doctors and medical students and in mobile phones of visitors attending paediatric units in Colombo South Teaching Hospital (CSTH) and to correlate with the socio-demographic details and cleaning practices.

#### METHOD

A descriptive cross sectional study was carried out between July and November 2016 in all paediatric units of CSTH. A pre-tested self-administered questionnaire was used to gather related information. Swabs were taken from the diaphragms of stethoscopes and the keypads / screens of mobile phones of recruited medical officers and medical students and keypads / screens of mobile phones of the visitors. The specimens were processed on MRSA chromogenic agar which selects out MRSA colonies suppressing the growth of other organisms. Ethical approval was obtained from the Ethics Review Committee, Faculty of Medical Sciences, University of Sri Jayawardenapura.

#### RESULTS

A total of 76 DMS and 146 visitors were recruited. None of the swabs from stethoscopes yielded a growth. One of the mobile phones in the visitors group grew MRSA but none from the DMS group. A quarter of the stethoscopes were never cleaned and 89.3% were cleaned less than weekly. Seventy percent of mobile phones in DMS group and 66% of the visitors group have never been cleaned with a disinfectant. Forty one percent of visitors and 56% of DMS group never shared the phone with anyone.

#### CONCLUSIONS

Mobile phones and stethoscopes are not significant sources of contamination of MRSA in both study populations. Regular cleaning of stethoscopes and mobile phones should be encouraged.