

EVALUATION OF TEN-YEAR MICROBIOLOGY REPORTS IN A CLINICAL MICROBIOLOGY LABORATORY

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Microbiology laboratory in the Faculty of Dental Sciences has been providing microbiology services to the Dental Hospital, Peradeniya since 1998. This study aimed to analyze the Clinical microbiology reports from 2000 to 2009 to investigate the frequencies and associations among selected variables using non-parametric statistical methods.

A total of 2035 cases had been received during the period of study. Out of 805 (40%) samples that produced microbiological diagnosis, 63.2% were from males. Highest proportion of samples (60.9%) was received from adults (18-64 years) while the least proportion of samples (3.4%) was from children below 5 years. Notably, in 14.8% samples, age was not mentioned. Commonly received samples were from the infections of wounds (50%) and respiratory tract (32.1%). Frequently isolated pathogens were Gram-negative bacilli (32.3%), streptococci (29.3%) and staphylococci (21.6%). When the samples were positive for Gram-negative bacilli, 86% had *Pseudomonas* spp. Seventy two percent of the samples positive for staphylococci had methicillin resistant *Staphylococcus aureus* (MRSA). Age, gender, type of specimen and the pathogen showed significant association with the time ($P < 0.05$). Moreover, significant associations ($P < 0.05$) existed between age and pathogen, gender and pathogen, specimen and pathogen and also between gender and specimen.

In summary, the most of the specimens were received from adult males and from the infections of wounds and respiratory tract. Some requests were incomplete. Gram negative bacilli, streptococci and staphylococci were the leading pathogens with high proportions of *Pseudomonas* spp. and MRSA. Periodic evaluation of laboratory data may be useful in identifying unique patterns of pathogens, antibiotic sensitivity and clinical conditions which help good clinical and laboratory practice.