

**UNIVERSITI TEKNOLOGI MARA**



**THE PREVALENCE OF URINARY TRACT  
INFECTION IN URINE CULTURE**

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**Dissertation submitted in partial fulfillment of the requirements for  
Diploma in Medical Laboratory Technology**

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**DECLARATION**

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations of Universiti Teknologi MARA, regulating the conduct of my study and research.

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## ABSTRACT

### PREVALENCE OF URINARY TRACT INFECTION IN URINE CULTURE

The aim of the present study was to determine the prevalence of Urinary Tract Infection (UTI) in population in relation to gender, age and symptoms stated in the clinical history of the patients. For this purpose, 755 demographic data of urine culture were obtained from Microbiology Laboratory in Hospital Raja Permaisuri Bainun, Ipoh, Perak from April 2014 until June 2014. The urine specimens were cultured into two media plates for identification of organism species. The colony count, Gram stain and cell count were also performs to assist the organism's identification. It was found that 247 from 755 urine samples were positive for UTI. The incidence of UTI in females (69.6%) was higher than males (30.4%) in the ratio 3:1. Patients above 60 years old had the highest UTI among of all ages and *E. coli* was the major organism identified in urine culture for 97/247 patients, followed by *K. pneumonia* (81/247) and *P. aeruginosa* (31/247). Abdominal pain, excess vaginal discharge and Diabetes Mellitus were the common symptoms in UTI. All the results demonstrated that organism identified had correlation with the gender and age where females was more prone to get UTI due to their shorter ureter than males and older people had low immunity to resist infection. *E coli* can overcome the body's natural defence and cause infection.

Key words : Urinary Tract Infection, urine culture, *E. coli*

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