

**UNIVERSITI TEKNOLOGI MARA**



**THE PATHOGENIC ORGANISM IN HIGH VAGINAL  
SWAB AMONG PREGNANT WOMEN AT HOSPITAL  
TUANKU FAUZIAH FROM MARCH TO MAY**

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## ABSTRACT

### **The Pathogen Organism in High Vaginal Swab Among Pregnant Women at HTF from March to May**

The aim of the study was to determine the pathogen organisms in high vaginal swab among pregnant women in Hospital Tuanku Fauziah from March to May 2017. Pathogen organism is the microorganism that can cause disease when invade human body. Not all the microorganism is pathogen in certain circumstances. It is depends on the clinical judgement whether it can cause harm to the body or not. Therefore, in this research, we only focus on the organism that can cause disease to pregnant women at Hospital Tuanku Fauziah. The organism that usually found in pregnant women are *Streptococcus agalactiae* (Strep B), Yeast, and Colliform. Women that pregnant are at risk of getting infected with these pathogen organisms. The study design was cross-sectional study, which was the data obtained from the hospital was chosen as the study design project. Collection of data for cases of pathogen organism in high vaginal swab among pregnant women were from June 2017 until July 2017. The number of HVS sample positive with pathogen organism among pregnant women was 210 which were more than pathogen organism in non-pregnant women (55). The most prevalence among the pathogen organism was yeast followed by *Streptococcus Agalactiae* and the most least was coliform. The number of pathogen organisms in high vaginal swab among pregnant women were decreasing in March, April, and May which were 82, 66, and 63 respectively. So we can conclude that there was significant of pathogenic organisms in high vaginal swab among pregnant women at HTF from March to May.

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# CHAPTER 1

## 1. INTRODUCTION

### 1.1 Overview

Pathogens are usually distinct from the normal flora. Our normal microbial inhabitants only cause trouble if our immune systems are weakened or if they gain access to a normally sterile part of the body (Alberts et. Al., 2002). According to Stanley Falkow, professor of microbiology and immunology at Stanford University School of Medicine, developing a definition of a pathogen requires looking closely at the many complicated relationships that exist among organisms. From a practical perspective, bacterial pathogens are defined as microorganism capable of causing disease. In other word, pathogen organism is the microorganism that can cause disease when invade human body. Not all the microorganism is pathogen in certain circumstances. It is depends on the clinical judgement whether it can cause harm to the body or not. Therefore, in this research, we only focus on the organism that can cause disease to pregnant women at Hospital Tuanku Fauziah. The organism that usually found in pregnant women are *Streptococcus agalactiae* (Strep B), Yeast, and Colliform. But it's depends on the age of the pregnancy. If the pregnancy is below 37 weeks, all the three organism are pathogen but if the pregnancy is above 37 weeks, the organisms like yeast and colliform are considered not pathogen while Strep B is always pathogen. Usually if the woman is about to give birth, we only observe for Strep B because it will effect the baby while the present of yeast and colliform is normal at that stage. *Streptococcus agalactiae* (B-haemolytic *streptococcus group B*) is known to cause various infections in adults, but clinical interest in these bacteria