**E**SCHERICHIA COLI SPP, S**T**APH ALBUS AND K**L**EBSEILLA SPP WERE AFFECTED BY SOME **A**NTIBIOTICS FOR **U**RINARY TRACT **I**NFECTIONS IN **B**ANI **W**ALEED **C**ITY

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**ABSTRACT**  
In a statistical research of 100 women diagnosed with urinary tract infections (UTIs) at Al Dhahirah Hospital - Ibn Sina Clinic - Aqaba Laboratory for Medical Analysis in the city of Bani Waleed in 2017, Agrahl (Ibrahim, H. K., Mohammed, A. A., & Omar, O. A. (2018).) and (Ibrahim, Hamza Khalifa). (2017). found that the most affected age group is the most common. The illness afflicted (26-30) years by 39 percent, making it the most affected age group when compared to others. The antibiotic (Augmentin) was shown to be the most important and effective antibiotic used in the treatment of urinary tract infection during this time period, accounting for 49 percent of cases, while UTI is more frequent in the winter, with a 59 percent infection rate. The increasing resistance to bacteria of our isolates under investigation might be related to the widespread use of antibiotics at random, allowing for a rise in bacterial resistance to various antibiotics.

**INTRODUCTION**  
In most nations throughout the world, UTI considered as the most frequent health disorders. After respiratory tract infection, it is the second most prevalent medical condition, and can resulted in hazard adverse effects. Previous research showed that six types of bacteria are the most prevalent trigger of urinary tract infections in females.(1) (2)  
Antibiotics are biologically generated chemical compounds that have the power to prevent the infectious spread of the illnesses resulted from the host's harmful microorganisms. One of the most significant characteristics of antibiotic medications used to manage the infections caused by UTI is safety, eliminated from the body in an optimum amount, has little or no impact on intestinal bacteria, and may not cause resistance.(3) (4)

**LITERATURE REVIEW**  
The study conducted by (Ibrahim, Hamza Khalifa). (2017). determined the types of bacteria that cause urinary tract infections in women through clinical trials conducted in laboratories, which are as follows: E.coli - Klebsiella - Staph Albus. Then the appropriate antibiotic was determined for each type of bacteria, after 24 hours From determining the type of bacteria in laboratories where a group of antibiotics was grown for each type of bacteria to find out the appropriate antibiotic for them.(6) (7).
METHOD

Within one day, the antibiotic was read for every strain of bacteria, so the researchers solved the infection issue and gave the cases the suitable antibody. The pictures below depict every type of bacteria and the antibiotics that kill them. Augmentin was found to be the most effective antibiotic in killing bacteria. (8) (18)

![Figure (2) the antibiotic on bacteria klebsiella.](image1)

![Figure (3) the appropriate antibiotic for the staph bacteria.](image2)

![Figure (4) status of the antibiotic on bacteria E.coli.](image3)

DISCUSSION

Previous research has found that UTI is more prevalent in women when compared to men due to the variation in the histopathological and anatomical construction of the UT system in males and females. Additionally, the urinary systems of males are less vulnerable to stool pollutants than those of females; and several research have found that secretions of prostatic gland contains antibacterial function against infection caused by bacteria. (9) (10) (17).
The results from the current research found that UTIs are more frequent in specific age categories, with adults being the most susceptible to be contracted, followed by the elderly, and then teenagers. This study's prevalence rate of infection caused by UTI was in line with the observations of the studies, which found that women have a higher incidence of UTI infection than men in all age groups. (11) (12) (15).

Adult females are by far the most vulnerable to UTI infectious disease, according to studies, due to many physiological reasons such as the menstrual cycle. (13) (16).

According to the findings as shown in Table (1) and Figure (5), changes in the vaginal flora and pH contribute to the stability of bacteria in epithelial cells, which facilitates infection. The presence of bacteria in the region around the urinary system and the vaginal entry is a predisposing factor for UTIs in women. Our research looked at antibiotics from the penicillin family that is involved in cell wall formation, such as Piperacillin (PIP), Imipenem (ATM), Aztreonam (ATM), and Augmentin (AMC). (14) (19) (20) (21).

Table (1) shows the symptoms associated with the year 2017. (2)

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Number of cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humaturia</td>
<td>11</td>
<td>11%</td>
</tr>
<tr>
<td>Supapubic Pain</td>
<td>14</td>
<td>14%</td>
</tr>
<tr>
<td>Dysuria70</td>
<td>70</td>
<td>70%</td>
</tr>
<tr>
<td>Fever and chills</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure (5) shows the number of cases of UTIs by 2016 months. (2)

CONCLUSION

The goal of the test is to see if some of the contaminated materials in the urine, such as bacteria, fungus, and parasites, may proliferate and cause illnesses in the urinary tract or kidney. The urine sample is collected normally and submitted to the laboratory for testing and pollinator breeding in the dishes. In instance, bacteria in the digestive system, such as E. coli, the most prevalent form of bacterium that causes urinary tract infections, are frequently responsible for urinary tract infections.

This method is the most effective because we use the monkey dish after noticing bacterial growth in the dishes. We need to know the antibiotic to prevent these bacteria from multiplying, so we use a sensitive dish called Sensitifhe and take a smear of E.coli, Klebsiella, and Staph Albus bacteria and grow it in its own dish (ie in the dish covered with the previous three types of bacteria). We then grow the antibiotics and place them in the nursery for 24 hours. We read the antibiotic for each type of bacteria after 24 hours and therefore addressed the infection problem and provided the proper antibodies for patients.
REFERENCES

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