

# Recurrence of urinary tract infections essay examples

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## **Abstract**

Urinary tract infections, abbreviated as UTIs, are bacterial infections that are very common in people who reside in the nursing home of South Florida.

Recurrence of UTIs in the nursing homes is very common, and 50% of women or men experience recurrence of the infection within six weeks therapy time. It becomes challenging to diagnose the UTIs in nursing homes because residents do not present genitourinary symptoms. The administration of antibiotics enhances occurrence re-infection with the organisms that are resistant and adverse effect of drugs. More research is significant on diagnosis and treatment of urinary tract infection among the residents of nursing homes.

Urinary tract infections, abbreviated as UTIs, are bacterial infections that are very common in people who reside in the nursing home of South Florida.

Prevalence studies conducted in United States, Canada and Europe indicates that 17%-55% of nursing homes women and 15%-31% of men who do not use indwelling catheters were bacteriuric (Rotjanapan, Dosa and Thomas, 2011). Bacteriuria incidence is also high among residents of the nursing homes. Recurrence of UTIs in nursing homes is very common, and 50% of women or men experience recurrence of the infection within six weeks of therapy time (Rotjanapan, Dosa and Thomas, 2011). About 5%-10% of nursing home patients who are managed with catheters have bacteriuria prevalence of 100% and 3-5 organisms are isolated any time (Rotjanapan, Dosa and Thomas, 2011).

Despite the incidence and prevalence being extraordinary, urinary tract infections are often asymptomatic. Limitations in microbiological and clinical

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diagnosis of the symptomatic infections make it hard to measure morbidity resulting from the urinary tract infection. E. coli is the infecting organism that is mostly isolated in women, while Proteus mirabilis is the most isolated infecting organism in men. However, around 15%-50% of UTIs ends up being asymptomatic bacteriuria (Juthani-Metha et al., 2009).

### **Effect of UTIs in the Nursing Home**

It becomes challenging to diagnose the UTIs in nursing home because residents do not present genitourinary symptoms. The illnesses that coexist can present with the symptoms, such as fever, which are similar to UTI symptoms. Moreover, residents who have cognitive impairment cannot report or recall the symptoms they experience. Consequently, overtreatment and over diagnosis are very common in nursing homes because the diagnostic has some uncertainty (Rotjanapan, Dosa and Thomas, 2011). UTIs make the administration of antibiotics in the nursing homes common with many drugs being aimed at treating the asymptomatic infections (Schweizer et al., 2005).

The administration of antibiotics enhances occurrence re-infection with the organisms that are resistant and adverse effect of drugs. The symptoms that are not specific make it difficult or the clinicians to diagnose UTI in the nursing homes. Many residents of nursing home suffer from UTI because they are immobile and they cannot be able to empty their bladders completely. In addition, some of them have poor hygiene that favors the growth of bacteria, while others have physiologic changes such as the

deficiency of estrogen, which are associated with age enhancing the spread of UTI (Schweizer, et al., 2005).

## **Risk Factors**

Various factors predispose people who reside in nursing homes to develop UTIs. Patient risk factors are caused by a combination of accumulation of the comorbidities and physiological changes that result from aging. Aging makes the T-cell to dysfunction and result in blunted inflammatory response that is mediated by cytokine thereby disrupting the acquired immunity. This cellular function, which is impaired, is observed in setting of autoimmune disorders, diabetes and cancer. Moreover, comorbidities (such as Parkinson's disease, stroke and dementia) result in bowel and bladder incontinence and they fail to function disrupting the innate defense mechanism of the body (Genao and Buhr, 2012).

When women have a deficiency of estrogen, they can experience urinary incontinence and vaginal prolapsed resulting to flow of pathogenic bacteria to the urinary tract. Hypertrophy of prostate in men leads to retention of urine, and they become exposed to the chronic prostatitis. Once the prostate gets inflamed, they form calculi, which entrap bacteria resulting to recurrent urinary tract infections. Nursing homes use parenteral antibiotics and indwelling devices exposing people to pathogenic bacteria. Use of catheters to remove urine interferes with the defense mechanism of the body enhancing the penetration of the bacteria to the bladder. Catheter encrustations obstruct the flow of urine enhancing the stagnation of urine making the bacteria to replicate (Das et al., 2011).

## **Prediction of Outcome**

Nurses have a significant role in ordering cultures of urine, and deciding on the antibiotics to administer in case of positive cultures. Therefore, educating nurses on the right time for ordering cultures can ensure that treatment is appropriate and reduce the use of antibiotics in treating UTIs in the South Florida nursing homes. Use of excessive and unnecessary antibiotics should be reduced in nursing home for the benefit of the residents, and the clinician should always be informed of a positive culture before treatment is administered for him to assess the condition of the patient. However, if nurses keep on administering antibiotics on patients even when they are not certain about the infection a patient has on the basis of nonspecific symptoms, the health of the patients will be affected by the wrong prescription (Schweizer et al., 2005).

## **Conclusion**

Urinary tract infections are bacterial infections that are very common in people who reside in the nursing home of South Florida. It becomes challenging to diagnose the UTIs in nursing home because the residents do not present genitourinary symptoms. The illnesses that coexist can present with the symptoms such as fever, which are similar to UTI symptom. It becomes difficult to manage UTIs in the South Florida nursing homes because of comorbidities, barriers in communication, and urinary symptoms that are chronic. Wrong diagnosis of UTIs makes the patients to receive wrong treatment and this makes the bacteria resistance resulting to recurrence of the infections among the residents of the nursing homes. More

research is significant on diagnosis and treatment of urinary tract infection among the residents of nursing homes.

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