**Catheter-Associated Urinary Tract Infection**

A number of conditions predispose people to urinary catheterization. With proper care, catheterization helps these patients in transition from illness to recovery. However, catheter-associated urinary tract infection results in many cases where the catheter is not well taken care of by stakeholders including the patient, family members, and caregivers. Besides, some human conditions in patients like old age, immunosuppression, urinary cancers and bedridden conditions among others make catheter-related UTI inevitable. Nevertheless, following care guidelines of catheterized patients will minimize the occurrence of UTI related to catheterization. Many diversity human conditions occur within catheterized UTI patient population.

**Summaries of human conditions within this patient population**

Many human conditions fall on this patient population. First, the geriatric patient falls within these populations. Old age comes with its challenges, especially in elimination. According to Gould & Saint (2014), old patient’s experiences incontinence and lifestyle adjustment that calls for prolonged catheterization. Besides, older people have low immunity status making catheter-associated symptoms inevitable. According to Meddings & Stone, (2015), geriatric hospitalized patients have higher chances of getting infections associated with catheters especially the female adults. Besides, catheter-associated UTI becomes problematic among old adults due to the need for prolonged use. Incontinence and other conditions of the aged make it compulsory for elderly patients to have an indwelling catheter (Meddings & Stone, 2015). As such, urinary tract infections affect these populations due to this vulnerability.

Another human condition in the patient populations is immunosuppression. According to Meddings & Stone (2015), catheterized immunosuppressed patients will have a high tendency to urinary tract infections. Weak immunity leaves the functions of fighting bacterial, fungal and viral infections to antimicrobials which are sometimes inefficient (Meddings & Stone, 2015). Besides, according to Meddings & Saint (2014), the antimicrobials sometimes fight even the beneficial bacteria non-selectively. For instance, non-selective antibiotics decrease the activity of bacilli bacteria in the vagina which leads to itchiness, burning painful discharge due to candidiasis (Meddings & Stone, 2015). Furthermore, weak immunity predisposes people to infections and if placed on a prolonged indwelling catheter that likelihood of infections is high (Meddings & Saint, 2014). Immunosuppressed by a disease like HIV/AIDS and patients taking anticancer treatments using long-term indwelling catheter are predisposed to catheter-associated tract infection.

Finally, human conditions relating to the trauma of the urinary tract trauma increases the susceptibility to Catheter-related UTI. For instance, cancers of the urinary and reproductive system increased the risk of catheter-associated UTI. Patients with such conditions need indwelling that predisposes them to UTI (Meddings & Stone, 2015). Besides, patients with a Urinary tract or reproductive organ trauma have this risk. Similarly, patients undergoing continuous reproductive surgeries increase their risks due to UTI due to frequent catheterizations. Lastly, bedridden patients develop a high risk for catheter-related UTI. According to Meddings & Stone (2015), the patients have limited movement and may be incontinent if not on the catheter. Owing to a high number of pathogens in this environ catheter-associated infections risk is high.

**Cultural considerations**

Catheter insertion, cleaning, and maintenance have many cultural concerns that the caregiver should consider when planning to implement their care plans. Often families are encouraged to care for their patients with assistance from the nurses and other professionals. The significant cultural concern is the nature of the relative to consider as a primary caregiver. Usually, the immediate member is chosen but caring for catheters needs the wife to attend to his husband and vice versa (Meddings & Stone, 2015). In case these are not available, female patients should have female relatives and male have their male counterparts. Children can be cared for by their parents except for teenagers who should be cared for by their same-sex parents or siblings (Nicolle & Coffin, 2014). The same applies to the elderly. This cultural concern is important to ensure privacy and to eliminate the fear of care.

**Implementation parties**

Two main parties will be involved in the implementation of this clinical project. These are caregivers and the patient. The caregiver refers to the medical personnel, including nurses, physicians, and nutritionists among others. The caregivers also include relatives who will care for the patients, especially for elderly patients and children. Patients and their relatives also play a big role in the implementation of the care to minimize acquiring of the urinary tract infection brought by the catheters. Maintenance of good hygiene and appropriate catheter care is instrumental in minimizing infections. Medical caregiver plays a big role in the implementation of care to minimize catheter-related UTI. They plan for insertion maintenance and observations of the catheters as well monitor for signs of infections and treatment.  They also play a critical role in patient education on ways to minimize or manage the infections.

**Implementation members**

    Many other members outside nursing play a critical role in minimizing catheter-related infections. For instance, the nutritionist advises the patient on appropriate food to take that boosts their immunity. Nutritionists also play a crucial role in planning for patient meals and nutritional advice that will aid recovery. Another professional is the physiotherapist. Physiotherapists plan and implement for patient exercises like the Kegel exercises that train elderly people to strengthen their lower muscles to eliminate incontinence. Furthermore, physiotherapist plans for exercises of bedridden patients and other patients on the indwelling catheter to ensure they increase their mobility to decrease the risk for catheter-related UTI. Finally, social workers assess the living conditions of elderly patients to ensure they live in a conducive environment that may not predispose them to infections.

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