The Impact of Psychosocial Factors on Peritonitis: A Social Work Approach

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Peritonitis is a preventable infection in people on peritoneal dialysis (PD). Psychosocial factors that may impact the onset of peritonitis include complacency, depression, forgetfulness, expediency, caregiver stress/burnout, and the "pet factor." The clinical social worker is skilled in addressing each of these areas to reduce the rate of peritonitis in the PD population. Intervention methodology, such as motivational interviewing, depression assessment, behavioral therapy, the dispelling of myths, stress reduction, adjustment counseling, and pet relationship significance assessment are utilized to effectively address peritonitis prevention. Patient education on psychosocial factors that may lead to peritonitis followed by appropriate social work clinical interventions may be implemented for a true interdisciplinary approach to peritonitis prevention.

INTRODUCTION

Peritonitis … The word invokes concern, even fear, in those on peritoneal dialysis (PD). Peritonitis is an infection of the peritoneum that results from bacteria entering the catheter tubing and into the peritoneal cavity (Shapiro, 2004). Other causal factors include: "bacteria from an exit site infection, bacteria already in the stomach or intestinal tract (due to diverticulitis or appendicitis), and touch contamination (The open end of the PD catheter or transfer set touches a non-sterile object, such as a hand or bed sheets; system accidentally disconnects; or a tear develops in the catheter or transfer set.)" (Shapiro, 2004).

People on PD are trained extensively in techniques for preventing such infections and educated about the consequences of peritonitis, such as increased medication, illness, and pain. A severe case of peritonitis may result in hospitalization, removal of the PD catheter, or, most tragically, death. Peritonitis caused by inadequate infection control practices is preventable. Infection control techniques include appropriate methods for hand washing and use of mask, proper connection/disconnection techniques with the transfer set, and meticulous catheter care (Shapiro, 2004).

If peritonitis is preventable, why do so many people get it? The 2011 Dialysis Facility Report indicates an average of 24 out of every 100 Medicare-eligible people on PD in the United States had a diagnosis of peritonitis in 2010 (Centers for Medicare & Medicaid Services, University of Michigan Kidney Epidemiology and Cost Center, & Arbor Research Collaborative for Health, 2011). While most education available regarding the topic of peritonitis deals with prevention and treatment, little has been written on the possible emotional and/or psychosocial factors that may contribute to an individual's peritonitis infection. This paper explores the psychosocial elements that may impact the onset of peritonitis, including complacency, depression, forgetfulness, expediency, caregiver stress/burnout, and the "pet factor." This paper also explores social work theories that could be the foundation for interventions that the clinical social worker may perform to address each element and assist in the reduction of peritonitis rates in this population.

PSYCHOSOCIAL FACTORS IMPACTING PERITONITIS

Complacency

Complacency is characterized in this paper with the mindset: "It won't hurt if I skip that step … I can get away with it." Complacency is defined as the failure to see the seriousness of a situation or to follow good procedure or attention to detail (Dekker, 2002). Long-term treatment of chronic illness can result in adherence fatigue, impacting successful medical management of the illness. A study by the National Institutes of Health, the Agency for Healthcare Research and Quality, and the Department of Veterans Affairs found that, as treatment progressed, participation in treatment adherence declined. According to Dr. Vincent Lo Re, this is consistent with behaviors for other chronic conditions in which "pill fatigue" is often presented (as cited in Auer, 2011). It is this author's opinion that complacency acts as an erosive device, undermining the foundation of sound infection control practices necessary for successful PD, and is the primary psychosocial factor that leads to peritonitis in people on PD. Complacency may occur as a result of a false sense of security, weariness, fatigue, or boredom. A quality improvement program conducted by Alcaraz, Brzostowicz, and Moran (2008) found that the main cause of peritonitis was related to a breakdown of adherence to proper infection control techniques. People began creating their own variation of proper procedures as early as 1 month following the completion of PD training, and exhibited increased complacent behaviors after 2 to 3 years without peritonitis events (Alcaraz et al., 2008). Menon notes that complacency and lackadaisical behaviors may present themselves when a person develops a false sense of security from absence of problems over a period of time (2005).

Weariness is a common denominator for both fatigue and boredom. Fatigue is defined as "a condition characterized by a lessened capacity for work and reduced efficiency of accomplishment, usually accompanied by a feeling of weariness and tiredness." Fatigue can have a sudden onset or be chronic and endured over a period of time (Fatigue, 2004). Boredom is defined as "the state of being weary and restless through lack of interest" (boredom, n.d., para. 1).

Nonadherence to infection control practices may be a result of boredom as well as weariness from performing daily/nightly PD treatments. Juan Olivero, Sr., MD, medical director of the DaVita Binz PD/HHD Training Program compares a person on PD following infection control practices with a pilot needing to follow flight safety procedures. Each time a pilot prepares for flight, he completes a flight safety procedure. Even if the pilot finds this process boring, monotonous, irritating, or time consuming, it is an essential element in ensuring the safety of the flight. Skipping even one step in the flight safety procedure can lead to flight complications, some possibly tragic. Likewise, it is important for people on PD to follow proper infection control practices with each connection/disconnection (personal communication, June 24, 2011). Glazer, Laurel, and Narasimham (2007, p. 206) note a possible link between a decreased sense of safety awareness over time and a lack of concern in airline employees in following safe operation practices.

Similarly, weariness and boredom associated with participating in daily/nightly PD therapy may also create desensitization in people on PD to the risks of not following safety practices. When exploring the correlation between fatigue and workplace errors for the health care professional, Dowson and Zee (as cited in Ellis, 2008) indicated that the effects of fatigue in the medical setting have been shown to negatively impact the health care worker's "alertness, vigilance, concentration, judgment, mood, and performance." Likewise, errors made by pharmacists have included fatigue associated with high prescription volume and overwork, as well as boredom during slower periods and lack of attention (Glanutsos, 2008).

To address complacency, the person must first be educated regarding infection prevention techniques and consequences of nonadherence to such infection control practices. He or she receives extensive education by the training nurse on these issues during the PD training program. Once education has been provided, the clinical social worker joins in collaboration with the interdisciplinary team to keep the person on track with safe practices. The clinical social worker works in partnership with the person through motivational interviewing (MI) to identify personal issues related to complying (or not complying) with infection prevention practices (McCarley, 2009). MI consists of four essential components: 1) expressing empathy, 2) rolling with resistance, 3) developing discrepancies, and 4) supporting self-efficacy (MINT, William R. Miller, & Stephen Rollnick, 2003).

Through empathy, the clinical social worker builds rapport and sees the struggles with safe practice issues through the eyes and experiences of the individual, thereby gaining an understanding from the person's point of view (Welch, Rose, & Ernst, 2006). Next, the clinical social worker avoids power struggles by "rolling" with the individual's resistance to change. Rapport is strengthened when the clinical social worker resists challenging or arguing with the person in an attempt to force him or her into compliance (MINT, William R. Miller, & Stephen Rollnick, 2003). Through effective listening, the clinical social worker helps the person to become aware of contrasting behaviors versus the person's own identified goals in the "developing discrepancy" phase (Welch et al., 2006). Lastly, the clinical social worker provides ongoing empowerment and patient-identified problem-solving encouragement through the "support of self-efficacy" phase. The clinical social worker brings to light the person's previous achievements and his/her own internal power strengths to inspire hope about making changes for the person's well-being (MINT, William R. Miller, & Stephen Rollnick, 2003).

The clinical social worker assesses the weariness level of a person on PD to detect possible unknowing or subconscious ceasing of sound practices in order to return to in-center hemodialysis. If identified, the clinical social worker explores with the person, confirming his or her modality desires; collaborates with the interdisciplinary team for possible PD treatment modifications; and assists with physician-directed modality change as warranted.

Depression

Weariness and boredom may be a natural result of long-term participation in PD therapy and may or may not be related to depression. Depression is characterized in this paper with the mind-set: "I don't care. It just doesn't matter if I get peritonitis." Decision making on whether to follow peritonitis prevention practices may be impacted by depression. Depressive symptoms range from mild to severe. Symptoms of depression may include changes in appetite, insomnia or hypersomnia, fatigue, low self-esteem, impaired concentration, feelings of hopelessness, recurrent thoughts of death, or suicidology (American Psychiatric Association, 1995). Care must be taken for a collaborative approach with the physician in ruling out physical symptoms related to depression. Once depression has been diagnosed, each symptom may affect a willingness to participate fully with infection control practices.

The clinical social worker provides depression assessment for a person on PD by exploring the prevalence of depressive symptoms in the person's life. The clinical social worker may utilize various tools for assessing depression, including the Kidney Disease Quality of Life-36 survey (RAND & University of Arizona, 2000) and the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Once symptoms of depression are identified, the clinical social worker explores possible causal agents that lead to depression. Methods of depression treatment are based on the causal agents identified and may include clinical theory applications, problem-solving techniques, identification and reinforcement of effective coping mechanisms, discussion with the individual and his or her nephrologist regarding psychopharmaceutical intervention, assessment for harm to self or others, and

referral to community mental health/psychiatric services. The National Association of Social Workers' professional code of ethics charges the social worker with the responsibility of assessing for possible suicidology, whether conscious or subconscious, through the means of peritonitis (2008). If suicidology is ruled out, then appropriate collaboration with the nephrologist and interdisciplinary team is required and intervention is made.

Forgetfulness

Another psychosocial factor that may be related to peritonitis is forgetfulness. Forgetfulness is characterized in this paper with the mind-set: "There's too much to remember. I can't keep it all straight." Many factors may affect an individual's memory.

Interventions for forgetfulness are presented in a dual approach. The clinical social worker may first assist the person in identifying a potential cause of the forgetfulness. Possible factors that may impact memory impairment include drug or alcohol usage, stress, depression, medication, adjustment issues, organic memory impairment, head injury, certain medical treatments, nutritional deficiencies, aging, and other medical issues (Hoch, 2010). Working in collaboration, the clinical social worker and the interdisciplinary team can help to identify the factor(s) impacting forgetfulness and work toward an appropriate intervention. Physician involvement is required in addressing possible medication or organic/medical factors. By addressing the causal factors of forgetfulness, the clinical social worker can work to reduce or eliminate the elements of stress, depression, or adjustment issues associated with forgetfulness.

The second approach to addressing forgetfulness is to employ behavioral therapy techniques via memory enhancers. People on PD are supplied with written instructions to use as guides during the training process. Guides such as the *Patient At-Home Guide* and *PD Procedure Guide* provide memory aids that are readily accessible to people on PD (Baxter Healthcare Corporation, 2009a, 2009b). The clinical social worker facilitates the adherence process by ensuring that guideline materials are presented on a level understandable to the individual.

The person on PD is then referred back to the written guidelines whenever forgetfulness is evident. Identification of any barriers to the utilization of the written instructions is to be discussed collaboratively with the PD nurse for an individualized memory-enhancing approach that also meets proper peritonitis prevention techniques. Increased caregiver support may also be initiated to address the element of forgetfulness.

Expediency

Expediency is characterized in this paper with the mind-set: "I don't have time for this. I need to speed up the process." Life is busy. Individuals on PD are not exempt from the stresses of everyday life, which require effective time management. Nonadherence to peritonitis prevention techniques may actually increase the time related to PD, rather than lead to the desired goal of decreased time.

Expediency is best addressed by utilizing a two-step treatment method. The first step involves the person and interdisciplinary team exploring logistical issues related to timely implementation of each PD exchange. Which PD modality best serves the individual's needs: continuous ambulatory PD (CAPD) or continuous cyclical PD (CCPD)? For someone who leads a very busy daily schedule, incorporating three to four manual exchanges daily may lead to a temptation to skip infection control techniques in order to speed up the process. Such a person may be more suited to CCPD therapy, thereby freeing up his or her daytime hours, offering flexibility for a busy schedule, and reducing opportunities for contamination. Contamination risk is higher with CAPD due to the multiple connections needed to perform daily exchanges. For this reason, people on PD are frequently evaluated to go directly on CCPD, thereby reducing contamination risks.

The second step in addressing the issue of expediency involves patient education regarding the consequences of increased time needed to treat peritonitis. Nonadherence with peritonitis prevention techniques may lead to contamination of the PD catheter. Contamination of the PD catheter may lead to peritonitis. Once diagnosed with peritonitis, a person on PD must meet with the PD nurse for frequent visits until symptoms show improvement. Daily antibiotic therapy is the usual course of treatment for the next 2 to 3 weeks. The person undergoes additional infection prevention training with the PD nurse. A home visit from the PD nurse is also conducted. A more acute peritonitis may require hospitalization and possible abstraction of the PD catheter. Removal of the PD catheter requires a modality change to hemodialysis until the catheter can be reinserted and the person can return to PD (Shapiro, 2004).

Dispelling the myth that nonadherence to peritonitis prevention techniques will save time is an important element in addressing the issue of expediency. The clinical social worker works collaboratively with the person and the interdisciplinary team to ensure that patient education is presented on a level appropriate to the individual's understanding. The social worker then follows up with ongoing MI to address the element of expediency.

Caregiver Stress/Burnout

Caregiver stress/burnout is characterized in this paper with the mind-set: "I can't keep this up. This is more than what I bargained for." PD affects the family unit, not just the person who is sick. PD care partners must deal with their own issues of loss and change when partnering to care for people on PD. The decision to become a care partner in PD may be loaded; one made as a result of love and commitment, guilt and obligation, or a blend of these as well as

other motivations. Caregivers must find effective ways to deal with their own loss of freedom, aspects related to role change, increased stress, and communication issues within the partner relationship.

Although the main focus of treatment is centered on the PD patient, the Centers for Medicare & Medicaid Services have given a directive that "The social worker is expected to assist patients in achieving their psychosocial goals. Counseling services to patient and their families should be directed at helping the patient and family to cope with kidney failure and dialysis, follow the treatment plan, and achieve the patient's goals for rehabilitation" (2008).

The clinical social worker provides therapeutic intervention to the caregiver on topics such as adjustment and loss, stress identification and reduction, systems theory, relaxation techniques, support networks, successful communication, and reinforcement of effective coping skills. The social worker takes care to encourage self-care for the caregiver as well as enhanced communication techniques to help the patient and caregiver to understand each other's points of view.

The "Pet Factor"

The "pet factor" is characterized in this paper with the mindset: "My pets are my family. I want to have them around me." Pets are indeed members of the family. However, steps may be needed to prevent them from being a deterrent to safe PD. An individual who is comforted by sleeping with their dog or cat each night may need to consider daily manual exchanges rather than nightly cycler treatments in order to facilitate reduced infection risk. Although this may seem to be common sense to most people on PD and their interdisciplinary team, the "pet factor" cannot be overlooked. Someone who resides alone may value the comfort of their pet more than the importance of sound infection control practices.

While most documentation available today cites the positive relationship between pet ownership and the improved health of the owner, very little is written citing harmful implications between pet ownership and compromised health of the owner. According to Dan Gibbons, executive director of the Chicago Anti-Hunger Federation, some pet owners who are poor value their pet companionship to the point of choosing to feed their pets instead of feeding themselves (as cited in Trice, 2011).

The clinical social worker addresses the "pet factor" by exploring the relationship significance between the person and the pet. Implementation of the appropriate PD modality (CAPD versus CCPD) is first examined, followed by ongoing education and monitoring of safe infection control practices. The clinical social worker provides empathy and effective listening while reinforcing sound infection control practices with the person on PD. For those whose pet companionship compromises adherence to sound infection control practices, interdisciplinary reassessment of PD candidacy must be considered. The clinical social worker assists the person with physician-directed modality change to an alternate dialysis modality best fitting the person's needs, if warranted.

CONCLUSION

The key to correcting and changing a behavior is problem identification followed by behavior modification. The clinical social worker may take an active role in the prevention of peritonitis by providing education to the person on PD on psychosocial factors that may lead to peritonitis. PD programs have traditionally focused on the clinical skills of the nurse for addressing prevention and treatment of peritonitis. The time has come for the clinical social worker to impart education and therapeutic interventions in providing a true interdisciplinary approach to the prevention of peritonitis.

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