

## Preventing Burnout in Peritoneal Dialysis Patients

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*Burnout is a syndrome in which emotional depletion and detachment occur in response to prolonged stress. This pattern has been described in many high-intensity occupations, and the individuals at highest risk of developing burnout appear to be those in intense caregiving roles. Despite the wealth of information from examinations of burnout, there is a dearth of research on burnout in peritoneal dialysis (PD) patients. Little is known regarding the prevalence, treatment, or prevention of burnout in PD patients or their care-givers despite the fact that burnout is a phenomenon that has been anecdotally observed in the PD population for years. Burnout is a potentially significant contributor to technique failure and therefore to patient mortality. Health care providers caring for PD patients should identify the individuals most prone to burnout and assist them to develop coping techniques that enhance their quality of life and prolong their time on PD. This review seeks to apply research on burnout in other fields to the PD population and to aid providers in both preventing and coping with burnout.*

### Key words

Burnout, prevention

### Introduction

The term “burnout” was first coined in 1974 by Herbert Freudenberger with regard to his studies of dedicated mental health workers (1). The term refers to a pathologic syndrome in which emotional depletion and detachment occur in response to prolonged stress (2). Burnout has become a synonym in the popular vernacular for psychological symptoms resulting from a long-lasting workload that exceeds an individual’s capacity. Simply put, burnout is a response to overload.

The phenomenon of burnout has been described in many high-intensity occupations, including health care providers working in critical care, oncology health care providers, child care providers, and

medical residents (2). The individuals at highest risk of developing burnout appear to be those in intense caregiving roles (3).

Despite this wealth of information examining burnout in various other conditions, there is unfortunately a paucity of research on burnout in peritoneal dialysis (PD) patients. Little is known regarding the prevalence, treatment, or prevention of burnout in PD patients or their care-givers. This review seeks to apply research on burnout in other fields to the PD population.

### Discussion

The most commonly used method to document the presence of burnout is the Maslach Burnout Inventory (MBI). This 22-item questionnaire uses a 7-point Likert scale to indicate the frequency of characteristic symptoms (4). The MBI measures three core dimensions of burnout: emotional exhaustion, depersonalization and cynicism, and reduced feelings of efficacy (3).

Exhaustion is the most widely reported and analyzed aspect of burnout, but it does not capture the syndrome entirely. Exhaustion is not merely experienced: it prompts a response, meaning that it prompts individuals to distance themselves via depersonalization. Depersonalization is an attempt to put distance between oneself and one’s service requirements. It is consistently found in burnout research across a wide range of settings (5). The sense of reduced personal achievement or reduced efficacy is thought to be a result of exhaustion and depersonalization. A situation with chronic overwhelming demands that leads to exhaustion and depersonalization is likely to erode a person’s sense of effectiveness (6). It is difficult to feel a sense of accomplishment when exhausted and distanced from a situation.

A cycle of this kind can easily be imagined to occur in PD patients. Individuals performing PD are in “patient mode” 24 hours a day, 7 days a week, with no days off. They are constantly reminded that they are “sick,” given that extruding from their abdominal wall is a catheter that cannot be removed and that requires meticulous care and attention to

avoid infectious complications. Furthermore, they never feel truly “normal” again. Although dialysis provides life-sustaining therapy for patients with irreversible renal failure, it does not restore a normal quality of life. Patients continue to suffer from lethargy, poor appetite, occasional nausea and vomiting, and an inability to concentrate and function on their previous level (7).

It is not difficult to imagine the exhaustion that would occur in PD patients as a result both of their disease and of their constant requirement to perform life-sustaining dialysis. It is then not difficult to picture PD patients becoming cynical and distancing themselves from their situation. It is also not difficult to envisage PD patients or caregivers feeling a decreased sense of accomplishment as a result of all these factors: “Does it really matter what I do?” They are constantly performing dialysis, a task that they must continue in perpetuity (barring transplantation, of course), and this effort is not restoring them (or their patient) to a natural state of health. How can we, as dialysis providers, impugn them for feeling burnout?

The burnout syndrome has not been studied in PD patients, and therefore its prevalence and significance are not known. However, several studies examining PD technique failure refer to “psychosocial” or “other” as reasons for technique failure. Burnout is likely a contributor to these “psychosocial” and “other” categories.

#### *Burnout in the PD population*

An evaluation of trends in technique failure [transfer to hemodialysis (HD)] in the Canadian PD population has shown that approximately 3% of technique failure is a result of “inability to cope,” with another 8.8% the result of patient or family request (8). Inability to cope is likely in part, if not primarily, a result of burnout, meaning that burnout is a potentially significant contributor to technique failure in the PD population. If burnout is a significant contributor to technique failure, then it is also a significant contributor to patient mortality, because survival at 1 year after transfer to HD (for any cause) is only 61% (9). Therefore, understanding and preventing burnout could potentially improve technique survival in the PD patient population and perhaps lower mortality as well.

Other factors that have been demonstrated to contribute to technique failure in PD and transfer to HD

include “psychosocial factors,” which have been estimated to account for up to 26% of transfers in some cohorts (10). Patients in families with lower psychosocial scores transfer to HD more frequently than do patients in families with better psychosocial scores: 61% to 5% (11). These psychosocial factors may play a role in generating burnout in the PD population and may thereby contribute to transfer to HD. Family and home support systems that create a favorable home environment have been shown to be protective against burnout (12). Conversely, family situations can be a risk factor for burnout in stressful home environments (13). Given that difficult psychosocial home situations have been demonstrated to be directly correlated with increased rates of patient transfer to HD, the technique failures in these situations may be attributable, at least in part, to burnout.

#### *Who experiences burnout?*

Research examining burnout in occupational settings has demonstrated that certain individual factors are related to burnout. Age less than 40 years appears to be associated with higher levels of burnout. Unmarried individuals appear to be at a greater risk, with singles experiencing even higher levels than divorced individuals (3). There is also evidence that individuals with symptoms of a depressive disorder are at higher risk for burnout, registering especially high scores in the areas of emotional exhaustion and cynicism (14,15). The association of depression with ESRD patients is well established. The prevalence of depression in dialysis populations is as high as 25%, with a concomitant reduction in quality of life (16). Given that depression is common among dialysis patients, it would seem that this condition also puts them at higher risk for developing burnout.

Identifying patients at high risk for burnout would be ideal, because it would potentially allow for early intervention and perhaps avoidance of burnout in at least some individuals. The “gold standard” for identifying people suffering from burnout symptoms is the MBI, which has been validated for many occupations (4). The MBI characterizes three levels of burnout: low, moderate, and high. The MBI evaluates the three domains of burnout and is defined by a high score for depersonalization, a high score for emotional exhaustion, or a high total score (17). Screening all patients in a PD unit with an MBI questionnaire would be a simple, cost-effective way in which to

identify patients at risk for developing burnout and those currently suffering from burnout.

#### *Coping with burnout*

Once a patient has been identified as suffering from burnout, the provider should attempt to help the patient cope. Improved coping can be accomplished by changing either the person (person-directed interventions) or by changing the person's environment (work-directed interventions). Changing the person through education in coping techniques has demonstrated benefit, as shown by a lowering of MBI scores over time (3). However, interventions of this kind appear to benefit only exhaustion scores; they rarely have an effect on cynicism or feelings of inefficacy. Changing the person's environment—examined in the occupational literature as weekly group sessions designed to identify ways of reducing overload—has shown some success in reducing emotional exhaustion scores, but not in reducing the other two dimensions of burnout (18). It would therefore appear that making changes in the person alone or in the environment alone is ineffective.

A recent Cochrane review on preventing occupational stress in health care workers (4) suggested that, although the data regarding burnout are generally poor in quality, available evidence suggests that simply making an intervention is of benefit. In the PD setting, there is no way to change the disease: the PD patient will continue to have ESRD and to require lifelong therapy. There is therefore no major way to diminish the patient's burden. Rather, the focus must be on changing the patient's response to stress and overload. It is interesting to speculate that patients performing automated PD may experience burnout at a lower frequency than do those performing continuous ambulatory PD, but we have seen no data to this effect.

One simple person-directed method that has been suggested for coping with burnout involves creating an action plan (19). Adapting this approach to the PD setting, the following steps would be taken:

- Have the patient create a list of everything that is bothering him or her, and then have the patient rank the list from most bothersome to least bothersome thing.
- Next have the patient create an action plan for dealing with the top five frustrations. This process

should use brainstorming to generate as many potential solutions—however silly they may seem—as possible.

- After brainstorming has been exhausted, have the patient categorize the solutions: status quo solution (will not change outcome), fantasy solution (not possible), old solution (previously attempted without success), realistic solution (most desirable), and least desirable solution (in this case, transfer to HD). At this point, patients will have to engage in self-evaluation and use value judgments of risk versus benefit: “Is this worth it?” “Am I willing to accept the consequences to resolve this frustration?”
- After the choices for action have been made, have the patient set a timeline for change and commit to it, with no excuses. Patients must understand that choosing to do nothing about a situation for which a solution may be available—even if it is only a partial one—represents a decision (explicitly or through subsequent failure to carry out the plan of action) to go on living with the problem. As such, the patient forfeits the “right” to complain.

#### *Preventing burnout*

Preventing burnout in the PD population would be preferable to merely coping with it. Extrapolating from research in occupational fields to the PD population, prevention of burnout should start from the initiation of PD.

All patients should be informed of what being a PD patient entails, and they should be referred to speak with other patients on PD, both those with positive and those with negative experiences. Only by receiving information on the expectations and responsibilities of PD, as well as the benefits, can patients truly understand what they are undertaking. Additionally, patients should be informed of the goals and benchmarks that PD providers use as measures of success. These might include measures such as Kt/V, serum phosphorus, parathyroid hormone, and hemoglobin. Identifying goals can help patients to evaluate their progress accordingly. Also, when patients are subjectively feeling poorly (or not) at their baseline state of health, understanding these objective measures can be a potential source of feelings of accomplishment.

Patients should be actively encouraged to continue the activities and interests that bring meaning

to their lives. Continuing an active personal life is important in maintaining an identity separate from that of being a professional patient. Providers can assist by helping patients to maintain their freedom. For example, encouraging patients to travel and assisting them with the technical aspects of travel can add significant quality to their lives. When a patient's medical condition permits, health care professionals should allow for flexibility in the patient's regimen to accommodate desired activities. For example, we have prescribed "dry periods" (no PD fluid in the abdomen) so that patients can engage in activities such as golf, mountain biking, ballroom dancing, and weight lifting.

Most importantly, patients should be encouraged to build support systems within which they can discuss their problems and look for solutions. It is important to emphasize active solution-seeking, not just airing of grievances (19). It is also important to encourage individuals with burnout to seek help and counseling, either individual or group, that aims to motivate reflection on and acknowledgment of personal needs. Individual and group counseling have both been shown to reduce emotional exhaustion scores on the MBI (20). Encouraging patients to join support groups could potentially help in both the prevention and treatment of burnout.

### Summary

Burnout is a phenomenon that has been anecdotally observed in the PD population for years. It is a potentially significant contributor to both technique failure and mortality. Health care providers caring for PD patients should identify those most prone to burnout and assist them to develop coping techniques that enhance their quality of life and prolong their time utilizing this life-saving technique.

### References

- Freudenberger H. Staff burnout. *J Soc Issues* 1974;30:159–65.
- Tomas NK. Resident burnout. *JAMA* 2004;292:2880–9.
- Maslach C, Schaufeli W, Leiter M. Job burnout. *Annu Rev Psychol* 2001;52:397–422.
- Marine A, Ruotsalainen J, Serra C, Verbeek J. Preventing occupational stress in healthcare workers. *Cochrane Database Syst Rev* 2006;(4):CD002892.
- Maslach C, Schaufeli W, Leiter M, Goldberg J. Job burnout: new directions in research and intervention. *Curr Dir Psychol Sci* 2003;12:189–92.
- Byrne BM. Burnout: testing for the validity, replication, and invariance of causal structure across elementary, intermediate, and secondary teachers. *Am Educ Res J* 1994;31:645–73.
- Depner T. "Artificial" hemodialysis versus "natural" hemofiltration. *Am J Kidney Dis* 2008;52:403–6.
- Schaubel D, Blake P, Fenton S. Trends in CAPD technique failure: Canada, 1981–1997. *Perit Dial Int* 2001;21:365–71.
- Woodrow G, Turney J, Brownjohn A. Technique failure in peritoneal dialysis and its impact on patient survival. *Perit Dial Int* 1997;17:360–4.
- Finkelstein FO, Afolalu B, Wuerth D, Finkelstein SH. The elderly patient on CAPD: helping patients cope with peritoneal dialysis. *Perit Dial Int* 2008;8:449–51.
- Carey H, Finkelstein S, Santacroce S, *et al.* The impact of psychosocial factors and age on CAPD dropout. *Adv Perit Dial* 1990;6:26–9.
- Geurts S, Rutte C, Peeters M. Antecedents and consequences of work-home interference among medical residents. *Soc Sci Med* 1999;48:1135–48.
- Sargent M, Sotile W, Sotile M, Rubash H, Barrack R. Stress and coping among orthopaedic surgery residents and faculty. *J Bone Joint Surg Am* 2004;86A:1579–86.
- Lemkau J, Purdy R, Rafferty J, Rudisill J. Correlates of burnout among family practice residents. *J Med Educ* 1988;63:682–91.
- Collier V, McCue J, Markus A, Smith L. Stress in medical residency: status quo after a decade of reform? *Ann Intern Med* 2002;136:384–90.
- Son Y, Choi K, Park Y, Bae J, Lee J. Depression, symptoms, and the quality of life in patients on hemodialysis for end-stage renal disease. *Am J Nephrol* 2009;29:36–42.
- Embriaco N, Papazian L, Kentish-Barnes N, Pochard F, Azoulay E. Burnout syndrome among critical care healthcare workers. *Curr Opin Crit Care* 2007;13:482–8.
- Leiter M, Harvie P, Frizzell C. The correspondence of patient satisfaction and nurse burnout. *Soc Sci Med* 1998;47:1611–17.
- Messina JJ, ed. *Burnout and stress management handbook*. Lewisville, NC: Kaplan School Supply; 1982.
- Rø KE, Gude T, Tyssen R, Aasland OG. Counseling for burnout in Norwegian doctors: one year cohort study. *BMJ* 2008;337:a2004.

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