Expressions of Gratitude and Positive Emotion Among Hemodialysis Patients: Qualitative Findings

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The current qualitative inquiry solicited hemodialysis (HD) patients to identify events or incidences that have gone well in their day-to-day life and things they consider to be blessings, and to further reflect on the contributors to such events. Hemodialysis patients kept an electronic journal using investigator-purchased tablet computers. Multiple themes emerged for which HD patients expressed gratitude: 1) life itself, 2) positive or improving health, 3) family interactions and social support, 4) clinic resources, favorable treatment therapy, and staff, and 5) other small events. Clinicians are urged to explore the psychological assets that HD patients possess with a focus on how these might be further cultivated and whether their amplification leads to improved quality of life.

INTRODUCTION

Empirical evidence documents the widespread prevalence of psychological distress that hemodialysis patients routinely experience, along with the associated detrimental sequala that dramatically elevate the odds for premature death (Fischer et al., 2011; Hedayati et al., 2008). For instance, comorbid depression is associated with adverse kidney disease outcomes (Kop et al., 2011), greater risk of hospitalization, and decreased survival rates (Hedayati et al., 2010; Palmer et al., 2013). The literature to date, however, neglects to capture the positive emotions and experiences that hemodialysis (HD) patients encounter on a day-to-day basis, even in the midst of debilitating disease, and few researchers explore whether these positive states exert healthful effects. Although end-stage renal disease (ESRD) requiring hemodialysis represents a taxing condition, research on emotion contends that mixed-emotions conceivably co-occur and that positive emotions and psychological well-being are achievable states even during stressful life situations (Moskowitz, Hult, Bussolari, & Acree, 2009; Russell & Carroll, 1999). Yet, the research community has failed to document experiences of emotional well-being in this patient population, e.g., feelings of gratitude, happiness, life meaning and purpose, among others.

PURPOSE

Within the context of a single-arm pilot trial (Hernandez et al., 2018), we asked HD patients to identify events or incidences that have gone well in their day-to-day life, things they consider to be blessings, and to further reflect on the contributors to such events.

MATERIALS AND METHODS

Study Population and Data Source

We used data derived from *Joviality* $^{\text{TM}}$, a single-arm pre-post pilot trial testing the feasibility of an Internet-based positive psychological intervention with HD patients with elevated symptoms of depression. Details of the pilot trial have been published elsewhere (Hernandez et al., 2018). Briefly, patients were eligible for the trial if they met the following criteria: a) aged ≥ 18 years, b) on HD therapy for ≥ 3 months, c) elevated symptoms of depression defined by using the Center for Epidemiologic Studies Depression Scale (Radloff, 1977) (score ≥ 10), d) fluent in English, and e) absence of serious comorbid medical conditions, as per clinical staff, that might affect participation (e.g., blindness). The *Joviality* trial was approved by the Institutional Review Board of the University of Illinois and written informed consent was obtained from all enrolled participants.

A total of 14 patients were enrolled in the *Joviality*™ pilot trial. Patients attending regularly scheduled maintenance HD treatment completed our five-week, Internet-based positive psychological intervention using an investigator-purchased tablet computer (Apple iPad), where they learned empirically validated behavioral and cognitive skill sets known to boost positive affect and overall psychological well-being. Intervention content of our Internet-based curriculum focused on teaching the following skill sets: 1) identifying and using personal strengths, 2) noting positive events in daily life, 3) prolonged appreciation and relishing of positive events, 4) positive reappraisal of stressful events or situations, 5) gratitude, 6) regular practice of mindfulness/

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meditation, 7) setting and working toward pragmatic and achievable goals, and 8) planning and performing acts of kindness. During each HD treatment session, patients were handed an Apple iPad to visit our study website to access text, video, and audio curricula and to complete didactic exercise modules. Using a unique username and password, patients logged into the website three times per week to complete 20 30-minute sessions; that is, they accessed the site every time they were at the clinic for their regularly scheduled HD treatment.

Measurement of Positive Life Events

During Week 1 of the intervention, participants learned of the importance of noticing and acknowledging positive events that occur in day-to-day life. Positive life events are associated with increases in positive emotion (Murrell & Norris, 1984; Zautra & Reich, 1983) and scheduling of "pleasant events" is a central part of multiple types of psychotherapy for depression (Krause, 1998; Lewinsohn, Hoberman, & Clarke, 1989). Even in the midst of severe stress, most people spontaneously experience and note small positive events, and these events may help them cope with emergent stress (Folkman, 1997). After studying the curricula during Week 1, HD patients were asked to keep an electronic journal addressing the following questions: 1) Describe something good that happened in the past day, 2) What feelings or thoughts did you have while it was happening? How did your body feel? and 3) Did you do anything to amplify or savor it? Detailed journal entries were then analyzed qualitatively to extract overarching concepts identified by HD patients regarding the types of positive events experienced on a daily basis.

RESULTS

The mean age for participants was 57.4 years (SD = 12.12), 50% were female. All were born in the U.S., of which 50% were non-Hispanic White, 42.9% Black/African American, and 7.1% Hispanic/Latino. 42.9% reported an annual income below \$20,000 (see **Table 1**). The average duration of HD treatment across enrollees was 3.6 years. A total of 64.3% self-reported having a diagnosis of diabetes and 92.9% reported having high blood pressure (hypertension).

Table 1. Participant Characteristics at Baseline (N = 14)	
	Mean (SD)
Characteristics	or <i>n</i> (%)
Age	57.43 (12.12)
Female (%)	7 (50)
Race/Ethnicity	
Non-Hispanic White	7 (50)
Black or African American	6 (42.9)
Hispanic/Latino	1 (7.1)
Avg. time on dialysis (years)	3.6 (2.98)
BMI (kg/m²)	34.5 (18.86)
Married (%)	5 (35.7)
Currently employed	3 (21.4)
Years of education	13.29 (2.46)
U.S. born (%)	14 (100)
Annual household income (below \$20,000)	6 (42.9)
Has health insurance (%)	12 (85.7)
Self-reported hypertension	13 (92.9)
Self-reported hypercholesterolemia	10 (71.4)
Self-reported diabetes	9 (64.3)
Depressive symptoms	15.48 (5.52)

Multiple themes emerged identifying events or people toward which hemodialysis patients expressed gratitude, and included the following: 1) life itself, 2) positive or improving health, 3) family interactions and social support from family and friends, 4) dialysis treatment and staff, and 5) other small events.

Life Itself

A majority of patients expressed gratitude for the gift of life itself, as depicted in the following statements: "Just waking up this morning to a day that wasn't promised."; "I woke up this morning."; "To be alive."; and "To be alive and do things that I normally do." Amid a debilitating chronic condition that can greatly affect life expectancy, our participants expressed gratitude for morning awakenings, which allowed them the opportunity to attend treatment, engaging in usual activities or hobbies (e.g., continue playing in a music band), and interacting with family, friends, and loved ones.

Positive or Improving Health

Patients expressed gratitude toward subjective ratings of improved health despite having a progressively debilitating disease; typically, health and quality of life can slowly decline in HD patients without an eventual kidney transplant. Patients of the *Joviality™* trial, however, expressed gratitude, despite taxing treatment demands, because they experienced "good days" with little pain or disease-related health restrictions. Statements included the following: "That I feel good and I'm alive."; "That my health is better than a year ago...I am not in pain and I am doing more."; "...for my health..."; and "I felt pretty good when I got up today and also yesterday." Patients acknowledged and cherished the days where they felt in good spirits and when little-to-no disease-related ailments were evident.

Family Interactions and Social Support from Family and Friends

There was an overwhelming response of gratitude towards the patients' family members and friends for small gestures, including provision of transportation to and from the clinic site for dialysis treatment. Direct statements included: "My brother getting me to treatment."; "Having John bring me to dialysis."; "My wife giving me a ride to dialysis so I wouldn't have to drive. I didn't feel very good at the time and was very thankful."; and "Today, I'm thankful for the bus transportation to treatment." Patients also expressed gratitude for their social support system, as comprised of family, friends, and acquaintances, e.g., "My wife is my ROCK."; "My friend Bob took over the responsibility for getting me to surgery tomorrow."; "I'm thankful for my wife's help when I don't feel good. She doesn't even complain or ask questions."; and "Grateful for my church family for all the help." Family and friends were identified as important sources of emotional and physical support and were deemed as essential supports in meeting daily life needs—and, essential for positive emotion and psychological well-being.

Dialysis Treatment and Staff

Although HD treatment is a lifesaving procedure, it typically lasts 3–4 hours per treatment session and can cause negative side effects. Despite the inordinate amount of time in therapy, patients expressed gratitude for the clinic staff, their provision of excellent care rated as first-class, and for sessions free from complications, e.g., "For having excellent techs at dialysis and a chance to watch my granddaughter play basketball."; "I'm glad to have such good techs at my dialysis unit."; "My treatment is going well."; and "We got my treatment started without any trouble." Indeed, good-quality care at the dialysis center greatly contributed to feelings of positive emotion and gratitude.

Other Small Events

Participants of *Joviality™* also expressed gratitude for a variety of other life happenings, as depicted in the following statements: "That things are going smoothly and I use the things I've read about in this study."; "Thankful that I'm learning how to relax and not react to everything."; "I'm grateful for the spring weather."; and "That my furnace is working!"

DISCUSSION

Patients experiencing a chronic or terminal illness often experience frustration when others express condolences for their suffering and pain-centered life. But, as expressed by well-known public speaker, Claire Wineland, who had cystic fibrosis, "I'm okay. I'm just like everyone else. I'm having human experiences. I'm having pain, suffering, and joy." Similarly, hemodialysis patients have a life beyond the hemodialysis clinic where positive emotions are experienced in abundance, and positive events are happening on a daily basis. In the field of medicine, it is imperative that we move away from a strict disease-focused paradigm and instead shift to expand our view to include positive psychological assets that focus on human flourishing, resilience, and daily experiences of positive emotion. In a movement likened to a quiet revolution, the American Heart Association is embracing this shift, with a focus on the concept of cardiovascular health related to maintenance and promotion of favorable behavioral health practices and biological attributes. Likewise, the field of nephrology is urged to fully explore the psychological assets that HD patients possess, how these might be further cultivated, and whether their amplification leads to improved quality of life and survival.

Conflict of Interest and Funding

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. Rosalba Hernandez is funded by the National Heart, Lung, and Blood Institute (NHLBI) through award number 1K01HL130712. This research was additionally supported by the School of Social Work at the University of Illinois at Urbana-Champaign through the Research Incentive Program. This research was also supported by funding from the National Institute on Minority Health and Health Disparities (U54 MD012523).

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