The Journal of Nephrology Social Work

National Kidney Foundation®

30 East 33rd Street
New York, NY 10016
www.kidney.org

The Journal of Nephrology Social Work is published by the Council of Nephrology Social Workers (CNSW) of the National Kidney Foundation, Inc. Professional membership in the NKF-CNSW ($80.00 annually domestic and $90.00 international) includes subscriptions to *The Journal of Nephrology Social Work, RenaLink* and selected materials as they are published by the National Kidney Foundation, Inc. Further membership information is available from the National Kidney Foundation at 888.JOIN.NKF or from the NKF-CNSW website at **www.kidney.org/cnsw** or by contacting the CNSW Publications Chair, Camille M. Yuscak, LCSW-R, NSW-C, at **camille.yuscak@dciinc.org**

National Kidney Foundation

SCM12

NATIONAL KIDNEY FOUNDATION

2012 Spring Clinical Meetings

Gaylord National • Washington, D.C. • May 9–13, 2012

PROGRAM HIGHLIGHTS

Designed for seasoned and new nephrology social workers, this program integrates tools for interdisciplinary care models with clinical skill-building content in the context of a changing renal care landscape. It balances the nuts and bolts of daily practice with strategies for understanding and advocating social work roles.

PRE-CONFERENCE COURSES

Explore Transplant: Course instructors Amy Waterman, PhD, and Christina Goalby, MSW, will provide attendees with tools and information for assisting dialysis patients in exploring transplant as a treatment option. This course has yielded excellent reviews.

Symptom Targeted Intervention: Instructors Melissa McCool, LCSW, and Renata Sledge, LCSW, will provide training and education regarding this important clinical tool set.

GENERAL SESSIONS

For the New Nephrology Social Worker: Sessions on addressing the care needs of an aging population; coping and depressive symptoms in advanced kidney disease; using a strengths-based lens in the context of chronic disease adaptation; examining a model for connecting concrete work and clinical skills; and building effective patient education materials.

For the Seasoned Social Worker: Sessions include: managing challenging events as a team, with separate sessions on mental illness and critical incident debriefing; KDQOL goal setting; practicing clinical work in a business culture; advance medical directives as a tool for patient engagement and empowerment; mentoring the new nephrology social worker; and exploring the impact of ESRD on women's body image and sexual health.

Other Topics: Six hours of ethics sessions, transplant-specific topics, as well as pediatric sessions, and much more!

CALL FOR ABSTRACTS

ABSTRACT SUBMISSION DEADLINE:
DECEMBER 2, 2011

Submit your abstract online at:

www.nkfclinicalmeetings.org

Take this opportunity to showcase your latest research results. Accepted abstracts will be published in the *Journal of Nephrology Social Work* and posters will be presented at the NKF 2012 Spring Clinical Meetings. Prizes are awarded to the top poster presenters.

Benefits in the presentation of original science include:

- Online availability (NKF website)
- Publication in *JNSW**
- Exposure to 2,500-plus kidney healthcare professionals (via poster display)
- Compendium of accepted abstracts to be provided to all participants
- An opportunity to become one of the top poster presenters

**accepted abstracts only*

Additional abstract and general information can be found at **www.nkfclinicalmeetings.org** or call NKF at **212.889.2210**

National Kidney Foundation®

THE JOURNAL OF NEPHROLOGY SOCIAL WORK

The Council of Nephrology Social Workers (CNSW) of the National Kidney Foundation (NKF) is a professional membership organization of nearly 1,000 social workers dedicated to improving the quality of psychosocial services delivered to ESRD patients, as well as supporting the profession of nephrology social work.

The Council of Nephrology Social Workers of the National Kidney Foundation

Editors
NORMA KNOWLES, MSW, LCSW, Dialysis Clinics, Inc., Columbia, MO
STEVE BOGATZ, MBA, MSW, LCSW, Fresenius Medical Care Central CT Dialysis, Meriden, CT

Publications Chair
CAMILLE M. YUSCAK, LCSW-R, NSW-C, Dialysis Clinics, Inc. Bradhurst, Hawthorne, NY

Editorial Board
JOAN BEDER, DSW, LMSW, Yeshiva University Wurzweiler School of Social Work, New York, NY

TERI BROWNE, MSW, PhD, University of South Carolina College of Social Work, Columbia, SC

JESSICA CABNESS, PhD, LCSW, University of the District of Columbia, Washington, DC

MARY BETH CALLAHAN, ACSW, LCSW, Dialysis Transplant Institute, Dallas, TX

JEFF HARDER, MSW, LICSW, University of Washington Medical Center, Seattle, WA

STEVEN IACONO, LMSW, DaVita Northeast Columbia Dialysis, Columbia, SC

SURVEEN KLEIN, LCSW-BACS, MPH, Ochsner Multi-Organ Transplant Institute, New Orleans, LA

LISA RAIZ, PhD, The Ohio State University College of Social Work, Columbus, OH

SALLY RICE, LCSW, BCD, University of Louisville Kidney Disease Program, Louisville, KY

MARGIE RODRIGUEZ LESAGE, LMSW, PhD, Michigan State University School of Social Work, East Lansing, MI

RICK RUSSO, MSW, LSW, DaVita Riddle Dialysis Center, Media, PA

WENDY FUNK SCHRAG, LMSW, ACSW, Fresenius Medical Care North America, Newton, KS

EDWARD G. SILVERHARDT, MSW, LCSW (NV), LSCSW (KS), BCD, Center for Applied Behavioral Sciences, Reno, NV

RAMIRO VALDEZ, PhD, MSW, Valdez Seminars, Denton, TX

TIFFANY WASHINGTON, MSW, University of North Carolina School of Social Work, Chapel Hill, NC

© 2011 National Kidney Foundation, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means now or hereafter known, electronic or mechanical, including photocopy, recording or any information storage and retrieval system, without permission in writing from the publisher.

ISSN 1532-0863

THE JOURNAL OF NEPHROLOGY SOCIAL WORK Volume 35 Fall 2011

CONTENTS

JOIN THE *JNSW* EDITORIAL BOARD

The Journal of Nephrology Social Work is always interested in attracting CNSW members who will serve as Editorial Board members to help with the planning, solicitation, and review of articles for publication.

If you are interested in becoming a member of the Editorial Board, please contact Norma Knowles, MSW, LCSW, Dialysis Clinic, Inc., 3300 Lemone Industrial Boulevard, Columbia, MO 65201-8246. Email: **Norma.Knowles@dciinc.org**

CALL FOR MANUSCRIPTS

The Editorial Board of *The Journal of Nephrology Social Work* encourages the submission of original manuscripts. The *JNSW* contains articles addressing contemporary issues/topics relevant to nephrology social work. Authors may wish to address any of the following topics, which are listed as guidelines:

- Social Work Outcomes
- Kidney Transplant
- Pediatric Issues
- End-of-Life Concerns
- Sleep Disorders
- Sexual Functioning
- Aging and Gerontological Issues
- Disaster Preparedness
- Comorbid Illnesses
- Home Dialysis Modalities
- Professional Roles
- Rehabilitation
- HIV/AIDS
- Quality of Life
- Ethics

Please email manuscripts to: **Norma.Knowles@dciinc.org**. Alternatively, you may mail a hard copy to:
Norma Knowles, Dialysis Clinic Inc., 3300 Lemone Industrial Boulevard, Columbia, MO 65201-8246.

INSTRUCTIONS FOR AUTHORS

The Journal of Nephrology Social Work (JNSW) is the official publication of the Council of Nephrology Social Workers of the National Kidney Foundation, Inc. Its purpose is to stimulate interest and research in psychosocial issues pertaining to kidney and urologic diseases, hypertension, and transplantation, as well as to publish information concerning renal social work practices and policies. The goal of *JNSW* is to publish original communications and research that maintain high standards for the profession and that contribute significantly to the overall advancement of the field.

The *JNSW* is a peer-reviewed publication. Manuscripts are accepted for review with the understanding that the material has not been previously published, except in abstract form, and is not concurrently under review for publication elsewhere. Authors submitting a manuscript do so with the understanding that, if it is accepted for publication, the copyright for the article, including the right to reproduce the article in all forms and media, shall be assigned exclusively to the National Kidney Foundation. The publisher will not refuse any reasonable request by the author for permission to reproduce any of his or her contributions to the *Journal*.

Exclusive Publication**:** Articles are accepted for publication on the condition that they are contributed solely to *The Journal of Nephrology Social Work*. Authors should secure all necessary clearances and approvals prior to submission. All manuscripts are peer-reviewed by two reviewers. Receipt of manuscripts will be acknowledged within two weeks, and every effort will be made to advise contributors of the status of their submissions within eight weeks.

A submitted manuscript should be accompanied by a letter that contains the following language and is signed by each author: "In compliance with Copyright Revision Act of 1976, effective January 1, 1978, the undersigned author(s) transfers all copyright ownership of the manuscript entitled ______ to *The Journal of Nephrology Social Work* **in the event this material is published."**

To qualify as an original manuscript, the article or a version of the article must not have been published elsewhere. Author(s) must inform the editor if the manuscript is being reviewed for publication by any other journals. Once accepted for publication by the editor, the author(s) cannot make revisions on the manuscript.

TYPES OF ARTICLES BEING SOUGHT

Research and Review. The *JNSW* welcomes reports of original research on any topic related to renal social work. The editors will also consider articles that document the development of new concepts or that review and update topics in the social sciences that are relevant to professionals working in the field of renal social work.

Reports and Commentary. The *JNSW* welcomes articles that describe innovative and evaluated renal social work education programs, that report on viewpoints pertaining to current issues and controversies in the field, or that provide historical perspectives on renal social work. Commentaries are published with the following disclaimer: "The statements, comments or opinions expressed in this article are those of the author, who is solely responsible for them, and do not necessarily represent the views of the Council of Nephrology Social Workers or the National Kidney Foundation."

Reviews. Review articles—in traditional or meta-analysis style—are usually invited contributions; however, letters of interest are welcome.

Original Research. Full manuscript format should include: introduction, methods, results, and discussion of original research. Length usually should not exceed 15 double-spaced pages, including references.

Clinical/Research Briefs. Abbreviated manuscript format presents clinical practice experience, preliminary research findings (basic or clinical), or professional observations in a shortened report form. Length usually should not exceed six double-spaced pages.

Practical Aspects Section. Contributions to this section are detailed protocols, forms, or other such materials that are successfully utilized for delivery of outcomes-based clinical social work services.

Case Studies. These detailed scenarios should illustrate a patient care situation that benefited from clinical social work intervention. Typically, they should consist of a brief clinical and psychosocial history, and a detailed intervention plan with discussion of recommendations focused toward practical application.

Letters to the Editor. Letters should be restricted to scientific commentary about materials published in the JNSW or to topics of general interest to professionals working in the field of renal social work.

MANUSCRIPT SUBMISSION

Note: A sixth edition of the APA style guide has been published. However, there were errors in the first printing which were corrected in subsequent printings. For now, *JSNW* will adhere to the fifth edition.

Manuscript Format. Manuscripts should be formatted according to the rules laid out by the *Publication Manual of the American Psychological Association, Fifth Edition*. What follows is a brief synopsis of the broader style points used by the APA.

Paper and Type. Hard copy manuscripts should be submitted on standard-sized (8 1/2" x 11"), white paper. Both hard copy and electronic versions should conform to the following guidelines: Text should be double-spaced, set in 12-point type (preferably Times New Roman) and have 1-inch margins along all sides of every page. Starting with the title page, pages should be numbered in the upper, right-hand corner and should have a running head in the upper left-hand corner. The running head should be a shortened version of the manuscript's title and should be set in all uppercase letters. The first line of every paragraph in the manuscript should be indented, as should the first line of every footnote.

Order of the Manuscript Sections

- Title page
- Abstract
- Text
- References
- Appendixes
- Author note
- Footnotes
- Tables
- Figures
- Figure captions

Title Page. The manuscript's title page should contain the title of the manuscript and the name, degree, and current affiliation of each author. Authors are generally listed in order of their contribution to the manuscript (consult the *Publication Manual of the American Psychological Association, Fifth Edition,* the APA style guide, for exceptions). The title page should also contain the complete address of the institution at which the work was conducted and the contact information for the primary author. A running head (a shortened version of the manuscript's title) should be set in the upper left-hand corner of the page, in all uppercase letters. Page numbering should begin in the upper right-hand corner of this page. With the exception of the page numbers and running heads, all text on the title page should be centered.

Abstract. The manuscript's abstract should be set on its own page, with the word "Abstract" centered at the top of the page. The abstract itself should be a single paragraph with no indentation and should not exceed 120 words. All numbers—except for those that begin a sentence—should be typed as numerals. Running heads and page numbers should continue from the title page.

Text. The text (or body) of the manuscript should begin on a new page, after the abstract. The title of the manuscript should be set at the top of the first page, centered and double-spaced. Running heads and page numbers should continue from the abstract.

References. The reference list should begin on a new page, with the word "References" centered at the top of the page. Entries should be listed alphabetically, according to the primary author's last name, and should conform to APA style (see sample references provided). Running heads and page numbers should continue from the text. Do not use software functions that automatically format your references. This can cause the references to be lost when the manuscript is formatted for typesetting.

Appendices. Each appendix should begin on a new page and should be double-spaced. Running heads and page numbers should be continued from the text of the manuscript. The word "Appendix" and the identifying letter (A, B, C, etc.) should be centered at the top of the first page of each new appendix. Running heads and page numbers should continue from the references.

Author Note. If there is an author note, it should begin on a new page with the words "Author Note" centered at the top of the page. Each paragraph should be indented. Running heads and page numbers should continue from the last appendix. Consult the APA style guide for further details on the structure of an author note.

Footnotes. A footnote should be indicated in the text of the manuscript with a superscript Arabic numeral to the right of the pertinent material. The footnotes should be listed on a separate page with the word "Footnotes" centered at the top of the page. They should be listed sequentially, with the first line of each note indented. Running heads and page numbers should continue from the author note. Do not use software functions that automatically format your footnotes. This can cause the footnotes to be lost when the manuscript is formatted for typesetting.

Tables. All tables should be double-spaced and each should begin on a separate page. Tables are numbered sequentially according to the order in which they are first mentioned in the manuscript (*Table 1, Table 2*, etc.) and are given an appropriate title that is centered at the top of the page. Table Notes should be a single, double-spaced paragraph, set after the last line of data. The first line should be flush and begin with the word *Note*. Please submit all table files in black and white, high resolution format.

Table footnotes should be set in lowercase, superscript letters, immediately to the right of the pertinent data. The footnotes themselves should appear below the table, after the Table Notes (if any). Table footnotes should begin anew with each new table. If a table has been previously published, the author is required to submit a copy of a **letter of permission** from the copyright holder, and must acknowledge the source of the table in the manuscript's reference section. Running heads and page numbers should continue from the footnotes.

Figures. Figures are also numbered consecutively, according to the order in which they appear in the manuscript. The convention *Figure 1, Figure 2, Figure 3*, etc. should be followed. In cases where the orientation of the figure is not obvious, the word TOP should be placed on the page, well outside the image area, to indicate how the figure should be set. If any figure has been previously published, the author is required to submit a copy of a **letter of permission** from the copyright holder, and must acknowledge the source of the figure in the manuscript's reference section. Running heads and page numbers should continue from the tables. Please submit all figure files in black and white, high resolution format.

Figure Captions. Each figure in the manuscript must have a caption, formatted as follows:

Figure 1. Exemplary formatting for all figure captions.

All figure captions should be listed on a separate page, according to the order in which they appear in the manuscript. Multi-line captions should be double-spaced.

Note: All tables, figures, and graphs must be produced in black and white or grayscale.

Reference Examples

Journal Article, Two Authors

Wassner, S. J., & Holliday, M. A. (1989). Protein metabolism in chronic renal failure. *Seminar in Nephrology, 9*, 19–23.

Journal Article, Three to Six Authors

Gartner, J., Larson, D. B., & Allen, G. D. (1991). Religious commitment and mental health: A review of the empirical literature. *Journal of Psychology and Theology, 19*, 6–25.

Journal Article, More Than Six Authors

Larson, D. B., Sherrill, K. A., Lyons, J. S., Craigie, F. C., Thielman, S. B., Greenwold, M. A., et al. (1992). Associations between dimensions of religious commitment and mental health reported in the *American Journal of Psychiatry and Archives of General Psychiatry*: 1978–1989. *American Journal of Psychiatry, 149,* 557–559.

Journal Article in Press

Odaka, M. (in press). Mortality in chronic dialysis patients in Japan. *American Journal of Kidney Diseases.*

Complete Book, Edited

Levine, D. Z. (Ed.). (1983). *Care of the renal patient.* Philadelphia: Saunders.

Chapter of an Edited Book

Nixon, H. H. (1966). Intestinal obstruction in the newborn. In C. Rob & R. Smith (Eds.), *Clinical surgery* (pp. 168–172). London: Butterworth.

Article from a Journal Supplement

Paganini, E. P., Latham, D., & Abdulhadi, M. (1989). Practical considerations of recombinant human erythropoietin therapy. *American Journal of Kidney Diseases, 14*(Suppl. 1), 19–25.

Abstract

Bello, V. A. O., & Gitelman, H. J. (1990). High fluoride exposure in hemodialysis patients [Abstract]. *American Journal of Kidney Diseases, 15,* 320.

Editorial

Piantadosi, S. (1990). Hazards of small clinical trials [Editorial]. *Journal of Clinical Oncology, 8*, 1–3.

REVIEW PROCESS

Manuscripts submitted to *The Journal of Nephrology Social Work* are peer-reviewed, with the byline removed, by at least two professionals in the field of renal social work. The length of the review process will vary somewhat depending on the length of the manuscript, but generally takes two to three months. *The Journal of Nephrology Social Work* reserves the right to edit all manuscripts for clarity or length. Minor changes in style and clarity are made at the discretion of the reviewers and editorial staff. Substantial changes will only be made with the primary author's approval, prior to typesetting.

AFTER ACCEPTANCE

If a manuscript is accepted for publication, the author will be required to send the following to the editorial office:

- An electronic copy of the final version of the manuscript. All components of the manuscript must appear within a single word processing file, in the order listed previously. Any features that track or highlight edits should be turned off. Do not use automatic numbering functions, as these features will be lost during the file conversion process. Formatting such as Greek characters, italics, bold face, superscript and subscript, may be used; however, the use of such elements must conform to the rules set forth in the APA style guide and should be applied consistently throughout the manuscript.
- Most other file formats (PowerPoint, JPG, GIF, etc.) are not of sufficient resolution to be used in print. The resolution for all art must be at least 300 dpi. A hard copy of each figure should accompany the files. These images should be grayscale (black and white) only. They should be TIFF or EPS file formats only.
- In addition to the images that appear in your word processing file, it is important to send the images as individual files too. These images should be grayscale (black and white) only. They should be TIFF or EPS file formats only.

CRITICAL CONCERNS AND CHALLENGES IN NEPHROLOGY SOCIAL WORK PRACTICE: REACTIONS TO THE 2008 CONDITIONS FOR COVERAGE

Joseph R. Merighi, PhD, Associate Professor, Boston University School of Social Work, Boston, MA;
Kelli Collins, MSW, LICSW, Patient Services Director, National Kidney Foundation, New York, NY

This qualitative study examined the written comments provided by 406 nephrology social workers who responded to an online survey conducted in 2010 by the Council of Nephrology Social Workers (CNSW). Data were analyzed using a constant comparative method to identify themes that highlight concerns and challenges related to day-to-day practice in renal settings. Findings yielded four primary themes associated with the implementation of the 2008 Medicare and Medicaid Program Conditions for Coverage for End-Stage Renal Disease Facilities: increased paperwork expectations, loss of patient contact, workload demands, and job dissatisfaction. Implications for nephrology social work practice and research are discussed.

Nephrology social workers provide essential psychosocial services to patients with end-stage renal disease (Browne, 2006; Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2001; McKinley & Callahan, 1998; McKinley, Schrag, & Dobrof, 2000; Merighi & Ehlebracht, 2004a, 2004b, 2004c; Wolfe, 2011). These services include patient and family education, supportive counseling, crisis intervention, provision of information and community referrals, interdisciplinary care planning and collaboration, and patient advocacy (Dobrof et al., 2001; McKinley & Callahan, 1998; McKinley et al., 2000; Merighi & Ehlebracht, 2004a, 2004b, 2004c; Russo, 2002). For some patients, one debilitating consequence of end-stage renal disease is clinical depression (Cukor, Peterson, Cohen, & Kimmel, 2006), which in turn can affect treatment adherence and self-management (Browne & Merighi, 2010; Cukor, Rosenthal, Jindal, Brown, & Kimmel, 2009), quality of life (Mapes et al., 2004), and mortality and hospitalization (Lowrie, Curtin, LePain, & Schatell, 2003). Social work interventions are an important component of overall patient care, especially in regard to the identification and treatment of mental health issues that are often associated with end-stage renal disease. Studies have documented the positive effect that social work interventions such as counseling and education have on patients' psychological well-being and on their psychosocial adjustment (Beder, 1999; Dobrof et al., 2001). Recently, a study of nephrology social workers who implemented a brief symptom-targeted intervention (STI) to ameliorate depression in dialysis patients achieved a 72% improvement in patients' Center for Epidemiological Studies—Depression (CES-D) summary score between pre- and post-treatment (McCool et al., 2011; Sledge et al., 2011). Interventions such as the STI provide evidence of how nephrology social workers can be instrumental in treating their patients' mental health symptoms and improving their health outcomes.

To assist patients with end-stage renal disease effectively and skillfully, nephrology social workers must have adequate time and resources to provide those patients with mandated psychosocial support services. This has become particularly important since the implementation of the 2008 Medicare and Medicaid Program Conditions for Coverage for End-Stage Renal Disease Facilities (CfC) (Federal Register, 2008). Social work practitioners employed in nephrology settings possess specialized knowledge and skills that equip them to address the psychological and emotional aspects of the disease process (Browne, 2006). However, this specialized knowledge is not used to full advantage when their patient caseloads are high and their day-to-day responsibilities include an overemphasis on clerical duties, arranging patient transportation and travel, dealing with billing issues, and verifying patients' insurance. Previous research has documented the prevalence and burden associated with non-clinical tasks that are not commensurate with the formal training of master's level social workers (Merighi & Ehlebracht, 2002, 2004a, 2004b, 2004c, 2005). In particular, job-related emotional exhaustion was negatively associated with providing clinical counseling to patients and positively associated with performing clerical and insurance tasks (Merighi & Ehlebracht, 2005). High caseloads can prevent nephrology social workers from providing adequate clinical services to their patients (Merighi & Ehlebracht, 2002). Between 2007 and 2010, outpatient dialysis social workers in the United States experienced increases in mean caseload size from 73 to 79 (up 8.2%) for those employed 20 to 31 hours per week, 113 to 121 (up 7.1%) for those employed 32 to 40 hrs/wk, and 117 to 126 (up 7.7%) for those employed 40 hrs/wk (Merighi, Browne, & Bruder, 2010). These striking increases in patient caseloads and the burdens linked to performing a disproportionate amount of non-clinical tasks in nephrology settings underscore the need to examine the experiences of nephrology social workers since the implementation of the 2008 CfC.

Corresponding Author
Joseph R. Merighi, PhD, 264 Bay State Road, School of Social Work, Boston University, Boston, MA 02215; 617.353.7914, 617.353.5612; merighi@bu.edu

Study Aim

The aim of this study is to identify key issues that affect day-to-day practice in dialysis and transplant settings using narrative accounts obtained from a national sample of nephrology social workers.

METHOD

Study Design

A cross-sectional survey research design was used to assess salary, caseload, and other job-specific issues of nephrology social workers. For the purpose of this article, only narrative comments provided at the end of the survey were used to address the study aim.

Respondents

Twenty-seven percent (*n* = 406) of the 1,495 social workers who responded to the CNSW online survey provided narrative comments that were used for this qualitative investigation. The majority of survey respondents were women (90.6%) and worked in a dialysis-only setting (89.4%). The sample consisted of 88.1% whites, 6.4% Black/African Americans, 3.0% Asian Americans/Pacific Islanders, and 2.5% biracial individuals (Native American and white, African American and white). The respondents' mean age was 46.9 (standard deviation (SD) = 11.9) years and their mean length of nephrology social work practice experience was 8.9 (SD = 7.2) years. Most of the social workers were employed 32 to 40 hours per week (81.2%), with 61.6% working a standard 40-hour work week. See Table 1 for a demographic comparison between the subsample of respondents who provided narrative comments and the total sample. This study received Institutional Review Board (IRB) approval and was conducted in accord with the guidelines on evaluation and research described in the Code of Ethics of the National Association of Social Workers (NASW, 2008).

Table 1. *Sample Demographics*

	Narrative Responses *n*	**Total Sample** *N*
N	406	1495
Age (M, SD)	46.9 (11.9)	47.1 (11.6)
Nephrology practice experience (M, SD)	8.9 (7.2)	8.8 (7.4)
Female (%)	90.6	91.0
Race (%)		
White	88.1	85.7
Black/African American	6.4	9.6
Asian American/Pacific Islander	3.0	2.9
Biracial	2.5	1.8
Hispanic (%)	5.7	6.8
Primary work setting (%)		
Dialysis	89.4	92.3
Dialysis/Transplant	4.2	2.7
Transplant	3.9	2.9
Other	2.5	2.1
Hours worked per week (%)		
< 20 hrs/wk	3.7	4.0
20–31 hrs/wk	15.1	16.3
32–40 hrs/wk	81.2	79.7
40 hrs/wk exactly	61.6	62.9

Note: "40 hrs/wk exactly" represents a subset of the 32 to 40 hrs/wk category. Mean (M) and standard deviation (SD) are reported in years.

Measure

The 2010 CNSW Salary and Caseload Survey was comprised of 130 open- and closed-ended questions that assessed social work respondents in the following domains: demographic characteristics, work environment issues, caseloads, hourly wages, professional tasks, job satisfaction, emotional exhaustion, workload demands, and negative affectivity. The survey took approximately 25 minutes to complete.

Data Collection Procedure

The survey instrument was conducted online by the NKF between March 21 and June 21, 2010. NKF distributed announcements about the survey to its CNSW membership via a membership email listserv, which reaches the majority of CNSW members. The announcements included information about the study aims, instructions on how to access the surveys and requests to distribute the announcement to other nephrology social workers. Prospective respondents were informed of the confidential and voluntary nature of the survey and all participants received a summary of results as an incentive. All data were initially sent to NKF and housed on their secure server prior to their release for statistical analysis. Once the data were de-identified by NKF staff (i.e., by removing email addresses and other information that could potentially reveal the identity of an individual respondent), the first author (JRM) received them in an Excel spreadsheet. All the data sent to the authors are stored on a secure network at Boston University.

Data Analysis

Narrative data from written comments provided in an online survey were analyzed using a grounded theory methodology (Strauss & Corbin, 1990). This methodology consisted of a constant comparative approach to identify concepts and develop categories that provide a structured framework for organizing the data.

Open coding. Both authors read the narrative comments and independently developed a list of concepts and categories for the data. A line-by-line coding approach was used to examine the text, and the authors compared their lists in order to generate a comprehensive and unduplicated list of categories. This list was used for the second stage of coding.

Axial coding. After open coding was completed, categories were collapsed using axial coding. This coding procedure consists of specifying the causal and intervention conditions, context, action, and interaction during open coding (Strauss & Corbin, 1990). The authors identified four themes associated with the implementation of the 2008 Conditions for Coverage for End-Stage Renal Disease Facilities (Federal Register, 2008).

RESULTS

Implementation of the 2008 CfC, which ensure the health and safety of people who require dialysis or a kidney transplant as a life-saving intervention, to some degree has changed nephrology social workers' day-to-day responsibilities and priorities. The findings presented below describe four key themes that emerged from 406 narrative responses provided by social workers who responded to the 2010 CNSW Salary and Caseload Survey. Each of these themes is directly related to the new CfC in that they articulate personal accounts of how these regulations have influenced the priorities, organizational expectations, and ethos of the nephrology work environment.

Increased Paperwork Expectations

Respondents presented strong and compelling evidence of how the new 2008 CfC have substantially increased the amount of paperwork that is now required in order to meet federal regulations. According to some respondents, there seems to be a disconnect between the provider's wish to deliver excellent patient care and the decisions it makes to provide such care. One social work respondent express this disconnect as follows:

> [The] Conditions for Coverage have complicated the work environment. My company is now focused on the census of units rather than tasks that need to be performed, even cutting secretarial time based on census. This does not make sense to me. . . . They stress ultra care for patients but the patients receive less time than the paperwork needed to support the requirements for the Conditions for Coverage.

In some cases, social workers reflected on how priorities have changed over the course of their careers as nephrology social workers. One practitioner responded: "When I started this job (23 years ago), I spent 90% of my time with patients. Now, I probably spend 90% of my time with paperwork." The time-consuming nature of completing paperwork is clearly a concern for the respondents as evidenced in the following narrative:

> With an ever-increasing demand for numbers and productivity by my employer, I have less time to spend with my patients and meeting their needs. I already spend at least 80%+ on clerical and paperwork requirements, which is very trying for me as a professional. I do not see it getting any better!

Loss of Patient Contact

One significant and alarming consequence of spending more time on paperwork and less time on patient care is the lack of opportunities to cultivate supportive and therapeutic relationships with patients. Respondents often expressed frustration with their employers because they lack an understanding of the volume of work required of social workers to meet Centers for Medicare and Medicaid Services (CMS) expectations.

> I do not feel that my employer appreciates how much CMS requirements have added to my everyday tasks. The corporation also has other projects that always seem to fall on the social worker and dietitian to complete, in addition to usual tasks and responsibilities. I believe that tracking the transplant log monthly, reviewing records for incoming patients, being involved in insurance issues, completing applications for financial assistance programs, and [other] clerical tasks when the administrative assistant is too busy, keep me from spending quality clinical time, including meaningful care planning, with my patients.

In addition to a poor understanding on the part of employers of the enormity of mandated work that comes with the new CfC, social workers must contend with the burden of getting everything done and doing so with little public acknowledgment of their demanding work tasks. The following social worker describes the breakdown in how little time she spends with patients and how disclosing this problem does not seem to be an acceptable option.

> I feel that the workload and increased responsibility for insurance issues has really grown. Since [the] Conditions for Coverage [were implemented], I have not been able to spend time with my patients as I did in the past. I am drowning in paperwork. Since I do the insurance, travel, transportation, and other tasks required (“give it to the social worker”) and [have] a 1:135 ratio, the time to really get to know all the patients no longer exists. I used to love being a Nephrology Social Worker, but now sometimes it’s just a job that I can’t wait to retire from. I really miss just sitting down and talking with patients on a daily basis. Now it’s more about putting out fires and meeting the Conditions for Coverage. Most of the social workers I talk to feel the same way, but most of us would never admit it in public.

For years, increasing caseloads has been an area of much concern among nephrology social workers (Merighi & Ehlebracht, 2002, 2004a; Merighi et al., 2010). This concern is magnified given new CfC requirements, such as having to complete and score a Kidney Disease Quality of Life (KDQOL) survey for each patient on an annual basis. The narrative below highlights how increasing caseload size contributes to limited patient contact and opportunities to provide quality psychosocial services.

> Social work ratios were increased from 1:100 to 1:135 AT THE SAME TIME as the new Conditions for Coverage. [It was] very demoralizing to hear the LDOs [large dialysis organizations] talk quality publically at the very same time they are cutting clinical services to patients. Specifically, my caseload went from 1:110 @ 1 clinic to 1:160 @ 2 clinics. My charting and KDQOLs get done, but direct patient counseling time has gone down substantially. [It] feels to me sometimes that my LDO is in “a race to the bottom.”

Workload Demands

Social workers in nephrology settings experience many workload demands as a result of factors such as patient acuity, corporate expectations, federal regulations, and caseload size. One respondent summed up very well the demands of a nephrology social work career: “I love my job....there is just a little too much of it!” The range of responsibilities for social workers is vast and often complex, as described below:

> I find the enormous scope of the social work role to be the most challenging aspect of social work in a dialysis facility. We are asked to solve so many different kinds of problems in so many different spheres of patient care, some simple and some enormously complicated. Many problems referred to us are not simple to solve, and often require strong problem-solving skills. It often feels as if I am working on too many complex problems simultaneously, [along] with the more predictable tasks of dialysis social work. That creates the feeling of having to work “fast,” though not necessarily “too hard.”

In addition to the complexity of work that is expected of nephrology social workers, some expressed concern about how the demands of their job adversely affected the quality of their work. The two narratives below underscore how a demanding workload affects the quality of their service:

> "Since the Conditions for Coverage and in preparation for bundling, I feel that my work performance has gone down and my workload/expectations have increased. The Conditions for Coverage [are] meant to improve patient care, but … I believe it has actually caused it to decline. The demands are unrealistic, and we cannot keep up the pace. Something has to change before the whole industry is in crisis."
>
> "There should be a caseload limit of 75–100 patients per social worker. There are not enough hours in the day to adequately perform the duties of a dialysis social worker when the caseload exceeds that number. I have approximately 2 1/2 years experience working in a dialysis setting, including a 50-patient caseload and a 100-patient caseload. I currently have 135+ patients and am unable to do what CMS requires. It is impossible."

Finally, workloads that are demanding, due to caseload size or task complexity, make it difficult for social workers to complete all mandated assignments, thus increasing the likelihood that they will be out of compliance with CMS regulations when audited by CMS surveyors. As one respondent stated:

> Since the Conditions for Coverage became effective, I’ve been behind in psychosocial assessments and KDQOL surveys, thus [I am] fearing an audit of my documentation. Much of my time is spent on insurance issues that could be handled by an insurance specialist (no MSW skills needed) and some of which [are] purely clerical.

Job Dissatisfaction

There are many reasons social workers may elect to end their job or shift to another practice domain. Overall, a national study of dialysis social workers conducted in 2003 reported average-to-high levels of satisfaction for the majority of respondents (Merighi & Ehlebracht, 2004a). In the current study, however, the authors found some social workers cited the CfC as their reason to either terminate their positions or consider ending their work as nephrology social workers in the future. The three quotes below address the issue of the CfC as a motivating factor to end, or contemplate ending, their positions.

> "I have just resigned a year and a half before I planned to do so due to the increased workload from the Conditions for Coverage, increased census, reduced secretarial support, [and] inefficient processes that are redundant-to-ridiculous. The balance between the amount of counseling and clerical work I am required to do is very one-sided."

> "I am making plans to complete my LCSW and seek other employment. I believe this is an unhealthy environment to work in long-term. It is too much stress; the demand is too great with all of the corporate programs coupled with all of the clerical duties. The corporation is too devoted to the bottom line. I am not afforded enough time to adhere to the Conditions for Coverage and am in a constant battle to meet the demands."

> "I understand and appreciate what the Conditions for Coverage are and why [they exist], but management has to . . . give social workers the time to do quality work, rather than just do mediocre work to satisfy the auditors or meet number goals. Because I like the social work part of the job and the patients, I stay at my job, but should another position arise where I am given the opportunity to do social work elsewhere, I may take it."

Positive Views of Job and Work Environment

Although many of the social work responses highlighted concerns and challenges associated with the implementation of the new 2008 CfC, a minority of respondents offered favorable viewpoints regarding their jobs and work environments. Most of these positive responses indicated that managers/administrators were supportive, which helped the social workers handle the job-related challenges associated with CMS regulations. We offer three narratives that highlight how finding support in the workplace can assist nephrology social work practitioners in coping with a complex and demanding work environment and maintaining job satisfaction.

> "I absolutely love my job, my patients, my peers, my boss, and my company. I just feel that social work has been demeaned instead of esteemed since the [new] CMS Conditions for Coverage."

> "I am fortunate that I have worked in a clinic for 15 years that is generally well managed, and generally respects the role of the social worker. My caseload of 110 seems very reasonable, compared to some of my peers in other companies who have 150 to 175 patients [on their] caseloads. I also am in a clinic [where] patients are of the income level that their basic human needs are met, and patients that don't have extraordinary complex social problems. I know that this contributes to my long tenure in this clinic and in this social work role. I am satisfied with my position, my salary, and my work environment compared to many of my renal social work colleagues who seem to be miserable in their jobs. Yes, there are non-clinical tasks that I have to do, but I have minimized them over the years by good self-advocacy. My company took away our 401k two years ago but has a small profit sharing [plan]. Compared to others in renal social work, I think I have a very good work situation and am pleased with the opportunities given to me. But all that could change in one day and I would feel differently if that happened."

> "In general, I like my job and get pretty good support from my managers, which makes it easier to complete all that is required of me. I do sometimes feel overwhelmed with paper, and believe I could better serve the patients if the paperwork was more or less streamlined. For the most part, I have very few complaints about my job."

DISCUSSION

This article focused specifically on the effects of the 2008 CfC as they pertain to day-to-day nephrology social work practice—that is, increased paperwork expectations, loss of patient contact, workload demands, and job dissatisfaction. With regard to increased paperwork expectations, many respondents reported that this task now consumes the majority of their time and diminishes the overall quality of patient care. Although it is acknowledged that paperwork is a necessary component of the social worker's role in the nephrology care setting, the new CfC seem to have created an exponential increase in clerical tasks and jeopardized important opportunities for social workers to develop supportive or therapeutic relationships with their patients. These relationships are an essential part of quality social work practice because they provide the foundation to improving their patients' health outcomes and quality of life. They help patients: adjust to an intensive treatment regimen; engage in effective self-management and self-care; and cope with the social, vocational, and mental health challenges that result from kidney disease. The overemphasis on non-clinical tasks, such as paperwork, ultimately results in less-than-optimal care for ESRD patients because there is little opportunity for social workers to address their complex psychosocial needs.

One major consequence of spending a disproportionate amount of time completing paperwork is a loss of patient contact. The survey responses expressed the social workers' concern that limited time with patients feels like an erosion of their practices. Coupled with increased caseload ratios, many social workers commented on how they feel their social work role is poorly understood or unrecognized by their employers, and some believe that they need to perform tasks that support the financial goals of the organization. As one social worker stated, "[It] feels to me sometimes that my LDO is in a 'race to the bottom.'"

Because of the new mandates outlined in the 2008 CfC, social workers are challenged to strike a balance between the fulfillment of these CMS regulations and addressing the complex psychosocial needs of their patients. Limited communication between social workers and patients comes at a cost. For instance, patients may need supportive counseling to address symptoms of depression or other mental health concerns. If the social worker has little contact with a patient or is not aware of changes in a patient's mental health status, the result may be poor adherence to a treatment regimen, a decline in physical well-being, or compromised health outcomes for the patient. Research has demonstrated how nephrology social work interventions can help improve patients' psychological well-being and their psychosocial adjustment (Beder, 1999; Dobrof et al., 2001; McCool et al., 2011; Sledge et al., 2011). It is clear that efforts are needed to educate both employers and patients about the importance and purview of the social worker in nephrology care, and to take positive steps so that comprehensive psychosocial services can be provided in the best interest of the patient.

Workload demands continue to be a major concern for nephrology social workers. Research by Merighi and colleagues has reported on the workload demands of dialysis (Merighi & Ehlebracht, 2005) and transplant social workers (Merighi, Browne, & Keenan, 2009). The narrative findings presented in this article corroborate the quantitative assessment of workload in these specific practitioner populations. What is noteworthy in the current analysis is that the CfC seem to make it very challenging for social workers to satisfy CMS requirements, given that their workloads were already demanding prior to the new federal regulations. Specifically, the frequency of citations by State surveyors for ESRD V tag 552 (V552; psychosocial counseling/referrals/assessment tool; "The interdisciplinary team must provide necessary monitoring and social work interventions. . . .") has risen from 21st place in fiscal year 2010 to 11th place as of February 24 in fiscal year 2011 (Witten, 2011). This increase in the number of citations for V552 is likely indicative of the difficulties associated with social workers trying to complete all CfC mandates. More work is needed to understand how increasing demands from the new CfC and social worker-to-patient staffing ratios (Wolfe, 2011) affect patients' quality of care and health outcomes.

Increased clerical demands, loss of patient contact, and mounting workloads can manifest in job dissatisfaction for social workers in nephrology settings. It is evident from the narratives offered that some social workers have reached a limit with regard to the changes that are taking place in nephrology care. It is their perception that limited support and resources available to them make it difficult to sustain a career as a nephrology social worker. Although research on dialysis social workers prior to the 2008 CfC indicated that the majority of social workers reported average-to-high levels of job satisfaction (Merighi & Ehlebracht, 2004a), it is unclear if these levels of satisfaction have been maintained in the new climate of CMS regulations.

In order to provide an evenhanded presentation of the social work respondents' comments, we included a section that articulates positive views of their job roles and work environments. Although we found compelling evidence for the four themes described previously, not all social workers in nephrology settings experience burdens associated with their employer's expectations or the 2008 CfC mandates. It appears that social workers who have positive relations with their management and caseloads that do not exceed the national average tend to have a positive outlook with regard to their job roles and work environments. In particular, support from management seems to buffer the burdens associated with a demanding and fast-paced nephrology care environment.

Study limitations include the cross-sectional research design, low response rate for narrative comments, and selection bias. This investigation used a cross-sectional design, which is common in survey research studies; unfortunately, it obtained information at one point in time and did not capture social processes or change. Social workers may have responded to items based on how they felt on the particular day they completed the survey, and these feelings may not be reflective of how they generally feel. The low response rate for written comments (27%) prevents us from making generalizations to the total study sample or the CNSW membership. However, the demographic profile of the respondents who included written comments is strikingly similar to the total sample (see Table 1). Finally, obtaining participation from only one professional organization limits the external validity of our findings. Also, there may be selection bias with our sample because data on non-respondents are not available. Despite these limitations, this is an important national study of the current concerns and challenges of nephrology social workers in the United States. As such, this study provides important data for future investigations.

Additional research is needed to quantify, in a detailed manner, how the 2008 CfC affect nephrology social workers' day-to-day practices in dialysis and transplant settings. For example, the findings reported in this study point to how perceptions of management may be an important variable in social workers' overall assessment of their job satisfaction and roles, despite having much paperwork to complete and a high caseload. Future investigations should test the degree to which attitudes about management mediate the relationship between job-specific factors such as workload demands or caseload and job satisfaction. Clearly, national advocacy efforts are needed to persuade administrators and corporate employers to allocate more time and resources to social workers so that they can provide much-needed counseling services to their patients. Establishing a healthy balance between meeting federal mandates, employer requirements, and patient needs will take us one step closer to providing optimal care to people with kidney disease.

ACKNOWLEDGMENT

The authors thank the nephrology social workers who participated in the 2010 Council of Nephrology Social Workers Salary and Caseload Survey.

REFERENCES

Beder, J. (1999). Evaluation research on the effectiveness of social work intervention on dialysis patients: The first three months. *Social Work in Health Care, 30*(1), 15–30.

Browne, T. A. (2006). Nephrology social work. In S. Gehlert & T. A. Browne (Eds.), *Handbook of health social work* (pp. 471–506). Hoboken, NJ: John Wiley & Sons.

Browne, T., & Merighi, J. R. (2010). Barriers to adult hemodialysis patients' self-management of oral medications. *American Journal of Kidney Diseases, 56*(3), 547–557.

Cukor, D., Peterson, R. A., Cohen, S. D., & Kimmel, P. L. (2006). Depression in end-stage renal disease hemodialysis patients. *Nature Reviews Nephrology, 2*, 678–687.

Cukor, D., Rosenthal, D. S., Jindal, R. M., Brown, C. D., & Kimmel, P. L. (2009). Depression is an important contributor to low medication adherence in hemodialyzed patients and transplant recipients. *Kidney International, 75*(11), 1223–1229.

Dobrof, J., Dolinko, A., Lichtiger, E., Uribarri, J., & Epstein, I. (2001). Dialysis patient characteristics and outcomes: The complexity of social work practice with the end-stage renal disease population. *Social Work in Health Care, 33*, 105–128.

Federal Register. (2008). Medicare and Medicaid Programs; Conditions for Coverage for End-Stage Renal Disease Facilities; Final Rule. 42 CFR Parts 405, 410, 413 et al. 73 Fed. Reg. 20369 (April 15, 2008). Retrieved from **http://www.cms.gov/CFCsAndCoPs/downloads/ESRDfinalrule0415.pdf**

Lowrie, E. G., Curtin, R. B., LePain, N., & Schatell, D. (2003). Medical Outcomes Study Short Form-36: A consistent and powerful predictor of morbidity and mortality in dialysis patients. *American Journal of Kidney Diseases, 41*(6), 1286–1292.

Mapes, D. L., Bragg-Gresham, J. L., Bommer, J., Fukuhara, S., McKevitt, P., Wikstrom, B., & Lopes, A. A. (2004). Health-related quality of life in the Dialysis Outcomes and Practice Patterns Study (DOPPS). *American Journal of Kidney Diseases, 44*(Suppl. 2), 54–60.

McCool, M., Johnstone, S., Sledge, R., Witten, B., Contillo, M., Aebel-Groesch, K., & Hafner, J. (2011). The promise of symptom-targeted intervention to manage depression in dialysis patients: Improving mood and quality of life outcomes. *Nephrology News and Issues, 25*(7), 24–28, 30–31.

McKinley, M., & Callahan, M. B. (1998). Utilizing the case management skills of the nephrology social worker in a managed care environment. *Journal of Nephrology Social Work, 18*, 35–42.

McKinley, M., Schrag, W. F., & Dobrof, J. (2000). The nephrology social worker as clinician. *Nephrology News and Issues, 14*(3), 38–39.

Merighi, J. R., Browne, T., & Bruder, K. (2010). Caseloads and salaries of nephrology social workers by state, ESRD network, and National Kidney Foundation region: Summary findings for 2007 and 2010. *Journal of Nephrology Social Work, 34,* 9–51.

Merighi, J. R., Browne, T., & Keenan, S. (2009). Emotional exhaustion and workload demands of kidney transplant social workers. *Journal of Nephrology Social Work, 32,* 32–36.

Merighi, J. R., & Ehlebracht, K. (2002). Advocating for change in nephrology social work practice. *Nephrology News and Issues, 16*(7), 28–32.

Merighi, J. R., & Ehlebracht, K. (2004a). Issues for social workers in dialysis clinics in the United States. *Nephrology News and Issues, 18*(6), 67–68, 71–75.

Merighi, J. R., & Ehlebracht, K. (2004b). Unit-based patient services and supportive counseling provided by renal social workers in the United States. *Nephrology News and Issues, 18*(7), 55, 59–63.

Merighi, J. R., & Ehlebracht, K. (2004c). Workplace resources, patient caseloads, and job satisfaction of renal social workers in the United States. *Nephrology News and Issues, 18*(5), 58, 60, 62, 64, 66, 68.

Merighi, J. R., & Ehlebracht, K. (2005). Emotional exhaustion and workload demands in renal social work practice. *Journal of Nephrology Social Work, 24*, 14–20.

National Association of Social Workers. (2008). *Code of ethics of the National Association of Social Workers*. Washington, DC: Author.

Russo, R. (2002). The role of the renal social worker in the 21st century. *Nephrology News and Issues, 16*(3), 38, 40.

Sledge, R., Aebel-Groesch, K., McCool, M., Johnstone, S., Witten, B., Contillo, M., & Hafner, J. (2011). The promise of symptom-targeted intervention to manage depression in dialysis patients. *Nephrology News and Issues, 25*(6), 32–37.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Witten, B. (2011, February 24). Re. [CNSW] Citations for psychosocial status under plan of care [Online forum comment]. Retrieved from **http://www.kidney.org/professionals/CNSW/listserv.cfm.**

Wolfe, W. A. (2011). Adequacy of dialysis clinic staffing and quality of care: A review of evidence and areas of needed research. *American Journal of Kidney Diseases, 58*(2), 166–176.

TREATING DEPRESSION AMONG END-STAGE RENAL DISEASE PATIENTS: LESSONS LEARNED FROM COGNITIVE BEHAVIORAL THERAPY CLASSES

Jana Wardian, MSW; Fei Sun, MSW, PhD, Arizona State University, Phoenix, AZ

This study tested the feasibility and effectiveness of cognitive behavioral therapy (CBT) in alleviating symptoms of depression and improving quality of life for patients with end-stage renal disease (ESRD). Four ESRD patients in the experimental group attended four weeks of classes using CDs and group discussion to gain CBT skills, and six patients in the control group listened to the same CDs. While there were no significant changes in participants' depression or quality of life scores, patients expressed personal benefits from group interaction and from the information they received. Due to the many barriers to attending group classes for this population, it may be more advantageous to listen to the information while at dialysis and discuss with a social worker.

About 354,000 Americans are undergoing hemodialysis in clinics across the country (USRDS, 2010) to treat end-stage renal disease (ESRD). Chronic kidney disease brings a challenging regimen of dietary restrictions, fluid limitations, and a rigorous dialyzing treatment schedule three days every week. Depression is known as the most common psychological problem among patients with ESRD (Finkelstein & Finkelstein, 2000). Yet, depression has been underdiagnosed and left untreated in many ESRD patients (Kimmel & Peterson, 2005).

Depression can prevent patients from reaching treatment goals. The complex dietary needs of ESRD patients are difficult for patients to understand and to comply with under the best of circumstances. Patients with ESRD who suffer from depression often have increased difficulty adhering to the medication requirements to achieve optimal outcomes (Cukor, Rosenthal, Jindal, Brown, & Kimmel, 2009). Many studies found increased mortality among ESRD patients suffering from depression (Kimmel et al., 2001; Knight, Ofsthun, Teng, Lazarus, & Curhan, 2003).

While several studies have documented the prevalence of depression among patients with ESRD, few studies have been done to evaluate treatment options for depression in this population. Kutner (2001) suggests that effectively caring for depression is the very first thing that needs to be addressed when attempting to improve compliance in all other areas of dialysis treatment. The failure to alleviate depression could result in substandard compliance for patients.

Cognitive behavioral therapy (CBT) has been widely accepted as a successful treatment for people suffering from clinical depression (e.g., Cukor, 2007; Duarte, Miyazaki, Blay, & Sesso, 2009; Kutner, 2001). The principles of CBT include bringing into people's awareness the particular thoughts, beliefs, and misconceptions that are creating dysfunctional emotions and behaviors in their lives. Some researchers have applied CBT to individual counseling with success (Cukor, 2007). CBT training can benefit people as they are empowered to challenge negative thinking patterns, apply the skills to new situations, and adopt more positive coping behaviors.

Social workers are equipped to educate and support patients as they learn CBT skills in order to better cope with the many challenges of dialysis and ESRD (Callahan, 1998). Evaluation of individual progress can be done in the context of the relationship social workers develop with the patient, family, and clinical staff as a part of their work in the clinic. Roberts and Johnstone (2006) report that patients with ESRD prefer to receive depression treatment from their nephrology social workers because rapport has already been established. Nephrology social workers who provided CBT treatment designed to combat negative thinking reported improvement in patients' moods and increased patient satisfaction (Johnstone, 2005). Johnstone explored the feasibility and effectiveness of applying CBT treatment to alleviate depression and improve quality of life for patients with ESRD.

LITERATURE REVIEW

Depression is documented as the most common psychological problem in patients with ESRD (Cukor, Peterson, Cohen, & Kimmel, 2006; Finkelstein & Finkelstein, 2000). Drayer et al. (2006) estimate the rate of depression to be somewhere between 6% and 34%, depending upon the assessment tools used. It has been difficult to accurately estimate the prevalence of depression because many symptoms frequently present in ESRD often confound with symptoms also associated with depression.

Cohen, Norris, Acquaviva, Peterson, and Kimmel (2007) suggest "compound depression" is more difficult to treat

---

Author Note

Jana Wardian is a doctoral student at the School of Social Work at Arizona State University.

Fei Sun is an assistant professor at the School of Social Work at Arizona State University. Email: fei.sun.1@asu.edu.

Jana Wardian is the corresponding author of this article. Email: jwardian@asu.edu.

and can occur when depression is diagnosed along with another medical or psychiatric condition. Many of the more common symptoms associated with uremia in ESRD patients can mimic depressive disorders. Those symptoms commonly seen in both depression and ESRD include irritability, various cognitive dysfunctions, anorexia, insomnia, and fatigue (Cukor et al., 2006). This overlapping of symptoms produces a challenge for mental health professionals and often results in underdiagnosing depression in patients on dialysis.

Cohen et al. (2007) posit that some level of depression may be predicted by a change in roles and levels of physical functioning, along with the difficulty of coping with the challenges and demands of dialysis treatments. It is important to note that not all dialysis patients are depressed. Bombardier, D'Amico, and Jordan (1990) suggest that physical and psychological functioning of individuals with chronic illness varies widely. For many conditions, medical factors alone do not adequately account for the extent of illness-related dysfunction. Bombardier et al. (1990) further suggest that how patients cope with the stress and management of their disease may affect their level of adaptation to the chronic illness. Cukor and Friedman (2005) assert that there is a "bidirectional relationship between depression and various medical illnesses" (p. 2). It is not always apparent how the individual's perceptions contribute to the presence of depression. Cohen et al. (2007) make a strong case that screening for depression in ESRD patients is necessary to provide basic quality care.

Medical effects of depression in this population result in lower immune defenses, malnutrition, and lack of medication adherence (Cukor et al., 2006; Cukor et al., 2009). The effects of untreated depression can result in more hospitalizations (Unruh, Weisbord, & Kimmel, 2005) and higher mortality rates (Drayer et al., 2006; Lopes et al., 2004). McDade-Montez, Christensen, Cvengros, and Lawton (2006) demonstrated a relationship between higher levels of depression and withdrawal from dialysis treatment which is the most common cause of death among ESRD patients (Drayer et al., 2006). Cohen et al. (2007) assert that the effective treatment of depression has the ability to improve compliance with medical treatment plans and has an impact on mortality rates. Kutner (2001) reports that compliance is "one of the least understood yet most guessed-about topics in healthcare" (p. 326).

Drayer et al. (2006) demonstrated that depressed patients had lower quality of life scores than those who were not depressed. The effective treatment of depression in ESRD patients is likely to improve quality of life and increase longevity (Kimmel & Peterson, 2006; Unruh et al., 2005). Because psychological factors are important predictors of health issues, the treatment of depression can have a powerful impact on medical outcomes as well as psychosocial determinants that influence perceived quality of life.

There is much evidence regarding effective treatment for depression. Yet, only a limited number of studies have examined these interventions for the treatment of depression in dialysis patients. Patients who utilize dialysis may be reluctant to take medication for depression because they are often taking a number of pharmaceuticals and fear medications may impair kidney function. For many people who suffer from depressive symptoms, antidepressant medication may not be necessary to provide effective treatment. Cukor and Friedman (2005) report strong evidence that CBT may be valuable in treating depression with or without medication. Cohen et al. (2007) suggest that research should be done to evaluate the effectiveness of CBT in treating depression in people with ESRD.

Several studies suggest CBT can be used effectively to treat depressive symptoms in ESRD patients (Cohen et al., 2007; Cukor et al., 2006; Feldman, 2007; Kimmel et al., 2007). Feldman (2007) asserts that CBT is at least as effective as antidepressants, and better at preventing a relapse of depressive symptoms. A recent study in Brazil sought to determine the effectiveness of group CBT classes for patients with ESRD (Duarte et al., 2009). The intervention group consisted of 41 patients, while the control group of 44 patients received the usual treatment. Duarte et al. (2009) found a significant improvement in the patients' perception of quality of life after group CBT classes, compared to the control group.

CBT is a problem-focused approach which teaches skills necessary to battle depression and other unwanted negative thoughts. Once people learn the skills associated with changing negative thought patterns, they can apply the techniques to a variety of situations and experience empowerment over troubling emotions and thoughts. People often experience relief of depressive symptoms in as little as four to six weeks (Feldman, 2007).

STUDY PURPOSES

Given that little research has been conducted on applying CBT to depression treatment among ESRD patients in the United States, we did this pilot study by applying CBT in short-term, group classes and with individuals receiving dialysis. The purpose of this pilot study is twofold: 1) we wanted to test whether the patients would experience relief from depressive symptoms and improved quality of life after receiving short-term CBT; and 2) we intended to reveal and discuss the issues during the implementation of CBT among ESRD patients.

METHOD

This pilot study adopted a quasi-experimental design with 4 patients in the experimental group and 6 in the control group. Random assignment of research patients was not possible in that ESRD patients would be more likely to consistently attend classes if they were allowed to choose the group that best fit their schedules. Both experimental and control groups were provided with the Stepping Back into Life (SBIL) audio educational material developed by the National Kidney Foundation (NKF) (National Kidney Foundation, 2011; Weiner, Kutner, Bowles, & Johnstone, 2010).

The research protocol was approved by the Arizona State University's Internal Review Board and the human subject offices for the dialysis clinics. Study participants were recruited from 3 Southwest area hemodialysis clinics. The opportunity to attend CBT classes was discussed at patient support groups for 3 months prior to when the first classes were offered; names and contact information were voluntarily provided by 21 patients who expressed interest (see Figure 1).

Eligible participants were given the opportunity to choose which day and time to attend classes. It was believed that this would result in more consistent attendance. Three days and times were selected for CBT classes, but only 13 participants, with 6 in intervention group and 7 in control group, participated the first week. Participants signed an informed consent form which explained the purpose and expectations of the study, along with their rights as participants. The second week, all 6 participants continued, however 2 intervention group members stated that they would have forgotten to come if they had not been reminded. During the third week, 2 participants in the intervention group dropped out of the study. One patient in the control group was excluded, based on a professional intervention in the form of a referral to a psychiatrist as part of his transplant protocol. This left 4 participants in the intervention group and 6 patients in the control group who were able to complete assessments. Our analysis was based upon the data from the 10 participants.

As seen in Table 1, the intervention group consisted of 2 men and 2 women. Participants ranged in age from 50 to 62 years old. This group of patients listened to all three NKF Stepping Back into Life CDs and completed the assessments. Three members had a diagnosis of diabetes mellitus in addition to ESRD. The intervention group patients had all been on dialysis treatment 4 years or less with an average of 2 years of receiving dialysis treatment. The control group consisted of 6 ESRD patients (2 men and 4 women) who had been identified as experiencing depressive symptoms. Participants' ages ranged from 43 to 78 years old. The control group had an average of 2.25 years on dialysis. The control group listened to the same CDs during treatment at the hemodialysis clinic, but did not participate in the group classes. Participants in these groups were provided the same care by the clinic that other patients received.

The classes consisted of four sessions for one hour each week. The facilitator of the classes used the CDs to impart information to the class and to provide consistent presentations from one group to another. The classes were designed to help patients to be more aware of their thought processes and to be able to change dysfunctional thinking patterns. Homework was assigned at the end of each class, and was reviewed at the beginning of the next class.

Classes were held at the hemodialysis clinic. In the first class, participants learned about the importance of "belongingness" and interacting with others to help prevent and overcome depression. In the second class, participants learned how to use problem-solving skills and communication tools to empower themselves. They were encouraged to educate their loved ones about their disease and need for increased support. The third class helped participants get in touch with their "self-talk" in order to reduce negative thought patterns that interfere with treatment goals. Participants were encouraged to focus on more positive ways of perceiving themselves in order to combat the effects of depression. The final class included a summary of the first three classes. Participants reviewed the skills they learned, and were encouraged to express what had been helpful, and how they planned to continue developing the skills, and problem-solving techniques they had learned.

All participants were asked to complete demographic information, including gender, age, presence/absence of diabetes, and length of time on hemodialysis. The CES-D 10 was used to measure each patient's level of depression. It asked participants to rate each statement on a 4–point scale from "0 = Rarely or none of the time (less than 1 day a week)" to "3 = All of the time (5 to 7 days a week)" (Irwin, Artin, & Oxman, 1999). The total score ranged from 0 to 30, with high scores indicating higher levels of depression. The Cronbach alpha of this scale obtained on this sample was .77 at baseline and .76 at post-intervention. Quality of life in patients with ESRD was measured by the Kidney Disease Quality of Life (KDQOL) survey, which is a multidimensional assessment instrument (Lopes et al., 2004). KDQOL provides a breakdown of the patient's assessment in five areas: physical symptoms, mental functioning, burden of kidney disease, symptoms and problems, and the effects of kidney disease on everyday life. The score ranges from 0 to 100, with higher scores indicating better coping and perception of quality of life.

FINDINGS

The effectiveness of the classes was examined by comparing the observed scores before patients participated in classes and two weeks from the conclusion of treatment. Scores from the control group were compared to the scores from the intervention group to determine if group classes had an impact on the effectiveness of the treatment. The small sample size in this study prevented us from drawing meaningful conclusions from statistical analyses. We limited our discussions to the observed changes in CES-D scores and KDQOL scores among the participants (see Table 2).

CES-D score changes were not significant in either group. The control group experienced an overall 2-point decrease in depression scores. The patients in the intervention group had higher scores after the intervention which indicates a higher level of depression than before the intervention. This may be more a result of denial before engaging in the group classes, as opposed to actually becoming more depressed.

One patient, whose score at baseline was 12 and at post-test was 22, explained that he became aware of his feelings and believed that he needed an antidepressant at that point in his life. He was grateful for the group interaction and information from the classes for helping him come to this conclusion.

The higher a KDQOL score, the better the patient coped in that particular area. Quality of life was not changed in a significant way either. Both groups remained constant on their quality of life scores over the 6 weeks, except that the intervention group seemed to experience improvement in the burden of kidney disease score, from 42.19 at baseline to 57.81 at post-test. This implies that the patients may have decreased their frustration with the demands of kidney disease due to the intervention.

DISCUSSION

This pilot study represents an initial effort to test a CBT intervention on depression for ESRD patients. Listening to the CDs during dialysis may be a better approach with this population, as there are many barriers preventing patients with ESRD from coming to a class. The barriers included lack of transportation, conflict with medical appointments or dialysis times, hospitalizations, and illness. Those who may benefit from the information the most may be unable to overcome these barriers. Also, a great deal of time was spent recruiting, organizing, and reminding patients to attend classes. A social worker's time may be better spent working individually with patients who are identified as experiencing depressive symptoms or who have low mental functioning or burden of kidney disease scores on the KDQOL.

While quantitative data may not reflect significant benefits from participating in CBT classes, patients' comments and experiences may indicate otherwise. Participants integrated the information from the program into their lives and expressed that it helped to learn new coping skills. One woman decided that she had enjoyed playing chess in the past and could enjoy it again, even though she had kidney disease; she bought a chess set and began playing chess with her husband. Another woman decided she wanted to volunteer at a local hospital, and pursued that as a goal. Two men who met in the class exchanged phone numbers and continued their friendship. Another woman was encouraged to ask questions about dialysis treatment, and found new understanding about the time necessary for her to be on dialysis.

Similar reports were expressed by the individuals in the control group. One man used the information to foster better communication with his wife. Another woman expressed that she would like to listen to the CDs again to retain more information. One participant gave her family permission to push her to get out of the house more often, because she now understood the value of social connections and activities in counteracting depressive symptoms.

IMPLICATIONS AND CONCLUSIONS

In light of the outcomes of this study, we would like to share a few lessons learned. Since this population is burdened with long hours in dialysis treatment and a variety of other medical appointments, group classes may not be practical. Recruiting for classes was time consuming and yielded few participants. Nephrology social workers may consider using this type of material for monthly support groups instead of organizing four consecutive weeks of classes. The group benefits include social support and connection with others who understand living with kidney disease, as well as hearing how others apply their coping skills.

Patients were very willing to listen to the CDs during dialysis treatment. It may be better to suggest patients listen to the information while at treatment, and process the information chairside with a social worker. Social workers may provide individual CBT to help improve depressive symptoms and increase patients' perceptions of quality of life. When patients have low scores on the KDQOL, especially in mental functioning or burden of kidney disease, teaching patients CBT skills may be a valuable intervention.

Relative to the prevalence of depression in patients with ESRD, evaluation of valid treatment options for this vulnerable population has been limited. The personal application of this knowledge can have a profound effect on empowering patients and relieving depressive symptoms in those with ESRD. Although our pilot study has not fully discovered the benefits of CBT, it remains promising that CBT allows patients with ESRD to regain control during a crucial time in their life. The benefits of learning CBT may not be measurable in a few weeks. Future research should use a long-term research design to assess the impact of learning and applying CBT skills in groups and one-on-one with a social worker.

AKNOWLEDGEMENT

The authors would like to acknowledge the assistance of Stephanie Johnstone in providing guidance and expertise for this research. Her devotion to helping people with ESRD is admirable and contagious.

REFERENCES

Bombardier, C. H., D'Amico C., & Jordan, J. S. (1990). The relationship of appraisal and coping to chronic illness adjustment. *Behaviour Research and Therapy*, *28*(4), 297–305.

Callahan, M. B. (1998). The role of the nephrology social worker in optimizing treatment outcomes for end-stage renal disease patients. *Dialysis and Transplantation*, *27*(10), 630–642.

Cohen, S., Norris, L., Acquaviva, K., Peterson, R., & Kimmel, P. (2007). Screening, diagnosis, and treatment of depression in patients with end-stage renal disease. *Clinical Journal of the American Society of Nephrology*, *2*, 1332–1342.

Cukor, D. (2007). Use of CBT to treat depression among patients on hemodialysis. *Psychiatric Services*, *58*(5), 711–712.

Cukor, D., & Friedman, S. (2005). Towards the psychosocial treatment of depressed patients on dialysis. *The Internet Journal of Nephrology*. *2*(2).

Cukor, D., Peterson, R., Cohen, S., & Kimmel, P. (2006). Depression in end-stage renal disease hemodialysis patients. *Nature Clinical Practice Nephrology*, *2*(12), 678–687.

Cukor, D., Rosenthal, D. S., Jindal, R. M., Brown, C. D., & Kimmel, P. L. (2009). Depression is an important contributor to low medication adherence in hemodialyzed patients and transplant recipients. *Kidney International* *75*(11), 1223–1229.

Drayer, R., Piraino, B., Reynolds, C., Houck, P., Mazumdar, S., Bernardini, J., Shear, M. K., & Rollman, B. (2006). Characteristics of depression in hemodialysis patients: Symptoms, quality of life and mortality risk. *General Hospital Psychiatry*, *28*, 306–312.

Duarte, P. S., Miyazaki, M. C., Blay, S. L., & Sesso, R. (2009). Cognitive behavioral group therapy is an effective treatment for major depression in hemodialysis patients. *Kidney International*, *76*(4), 414–421.

Feldman, G. (2007). Cognitive and behavioral therapies for depression: Overview, new directions, and practical recommendations for dissemination. *Psychiatric Clinics of North America*, *30*(1), 39–50.

Finkelstein, F. O., & Finkelstein, S. H. (2000). Depression in chronic dialysis patients: Assessment and treatment. *Nephrology Dialysis Transplantation*, *15*, 1911–1913.

Irwin, M., Artin, K. H., & Oxman, M. (1999). Screening for depression in the older adult: Criterion validity of the 10-item Center for Epidemiological Studies Depression Scale (CES-D). *Archives of Internal Medicine*, *159*, 1701–1704.

Johnstone, S. (2005). Wellness programming: Nephrology social work expands its role in renal disease management. *Nephrology News and Issues*, *19*(120), 59–71.

Kimmel, P., Cukor, D., Cohen, S., & Peterson, R. (2007). Depression in end-stage renal disease patients: A critical review. *Advances in Chronic Kidney Disease*, *14*(4), 328–334.

Kimmel, P. L., & Peterson, R. A. (2005). Depression in end-stage renal disease patients treated with hemodialysis; Tools, correlates, outcomes, and needs. *Seminars in Dialysis*, *18*(2), 91–97.

Kimmel, P., & Peterson, R. (2006). Depression in ESRD: Has time arrived to treat? *Clinical Journal of American Society of Nephrology*, *1*, 349–352.

Kimmel, P., Peterson, R., Weihs, K., Simmens, S., Alleyne, S., Cruz, I., & Veis, J. H. (2001). Multiple measurements of depression predict mortality in a longitudinal study of chronic hemodialysis patients. *Kidney International*, *57*(5), 2093–2098.

Knight, E. L., Ofsthun, N., Teng, M., Lazarus, J. M., & Curhan, G. C. (2003). The association between mental health, physical function, and hemodialysis mortality. *Kidney International*, *63*, 1843–1851.

Kutner, N. (2001). Improving compliance in dialysis patients: Does anything work? *Seminars in Dialysis*, *14*(5), 324–327.

Lopes, A., Alberto, A., Justin, M., Young, E. W., Satayathum, S., Pisoni, R. L., Andreucci, V. E., Mapes, D. L., Mason, N. A., Fukuhara, S., Wikström, B., Saito, A., & Port, F. K. (2004). Screening for depression in hemodialysis patients: Associations with diagnosis, treatment, and outcomes in the DOPPS. *Kidney International*, *66*, 2047–2053.

McDade-Montez, E., Christensen, A., Cvengros, J., & Lawton, W. (2006). The role of depression symptoms in dialysis withdrawal. *Health Psychology*, *25*(2), 198–204.

National Kidney Foundation. NKF initiatives in dialysis. *Stepping back into life*. Retrieved July 5, 2011, from **http://www.kidney.org/patients/dialysis.cfm**.

Roberts, J., & Johnstone, S. (2006). Screening and treating depression: Patient preferences and implications for social workers. *Nephrology News and Issues*, *20*, 43–49.

Unruh, M., Weisbord, S., & Kimmel, P. (2005). Health-related quality of life in nephrology research and clinical practice. *Seminars in Dialysis*, *18*(2), 82–90.

U.S. Renal Data System. (2010). *USRDS 2010 annual data report: Atlas of chronic kidney disease and end-stage renal disease in the United States*. Bethesda, MD: National Institute of Diabetes and Digestive and Kidney Diseases.

Weiner, S., Kutner, N., Bowles, T., & Johnstone, S. (2010). Improving psychosocial health in hemodialysis patients after a disaster. *Social Work in Health Care*, *49*(6), 513–525.

Figure 1. *Flow Chart of Study Participants*

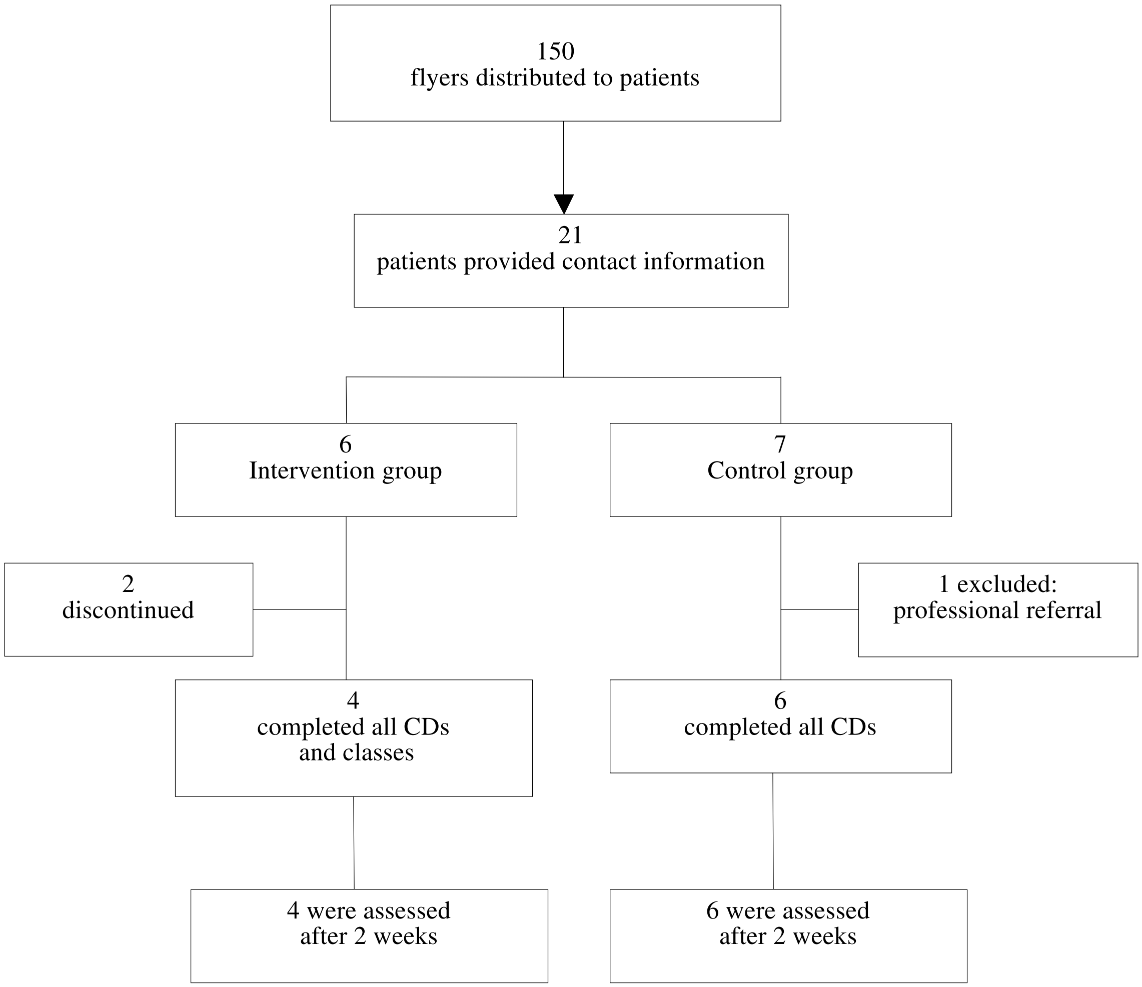


Table 1. *Baseline Characteristics of Study Participants*

Characteristics	**Intervention Group (*n* = 4)**	**Control Group (*n* = 6)**
Gender		
Males	2	2
Females	2	4
Age range (years)	50–62	43–78
Race		
Caucasian	1	3
African/American	0	2
Latino	2	1
American Indian	1	0
Average time on dialysis (years)	2	2.25
Presence of diabetes	3 patients	3 patients

Table 2. *Observed Mean Values of the CES-D 10 and KDQOL According to Time of Study Evaluation and Group*

Characteristics	Intervention Group (*n* = 4)	Control Group (*n* = 6)
CES-D 10 score		
Baseline	12.25	18.50
After 6 weeks	18.00	16.50
Symptom/problem score		
Baseline	80.21	62.15
After 6 weeks	75.00	62.50
Effects of kidney disease		
Baseline	56.25	48.96
After 6 weeks	54.69	42.71
Burden of kidney disease		
Baseline	42.19	33.33
After 6 weeks	57.81	26.04
Physical component summary		
Baseline	38.15	32.58
After 6 weeks	38.30	34.04
Mental component summary		
Baseline	42.29	33.70
After 6 weeks	40.51	37.17

EFFECT OF PEER MENTORS ON KIDNEY TRANSPLANT CANDIDATES

Susan S. Walker, LMSW, Transplant Clinic, Beaumont Hospitals, Royal Oak, MI;
Adam Ellis, BS, Research Institute, Beaumont Hospitals, Royal Oak, MI;
Renautta Wojtylo, RN, BSN, CNN, Transplant Clinic, Beaumont Hospitals, Royal Oak, MI;
Kelly Hendrix, RN, BSN, CNN, Transplant Clinic, Beaumont Hospitals, Royal Oak, MI;
Victoria C. Lucia, PhD, Research Institute, Beaumont Hospitals, Royal Oak, MI

Patients with chronic kidney disease can experience a range of emotions and issues associated with the treatment of their disease. This two-part study investigated the effects of a hospital-based peer mentoring program on time to listing and quality of life for kidney transplant candidates. No significant differences between patients with and without peer mentors were found regarding time to listing or quality of life. It was discovered that race played a role in willingness to accept a peer mentor when offered by the transplant social worker, with more minorities assigned a peer mentor than whites ($p = 0.01$). However, no significant difference between patients with and without a peer mentor was found in time to listing when controlled for race ($p = 0.42$).

INTRODUCTION

Patients who have experienced chronic kidney disease can empathize with the range of emotions and issues that confront newly diagnosed patients. The National Kidney Foundation of Michigan (NKFM) Peer Mentoring Program was developed to assist patients with decision making and coping, and to empower patients to take control of their lives and healthcare (National Kidney Foundation of Michigan, 2010). Prospective peer mentoring candidates undergo a one-day training program, focusing on communication skills, empathic listening, values clarification, problem solving, and assertiveness. The peer mentor can then share personal experiences with newly diagnosed patients to help explore their options, as well as deal with the complex psychosocial issues they may encounter. This program has enjoyed remarkable success and has been adopted throughout the United States.

To address the unique needs and issues of prospective kidney transplant patients at Beaumont Hospital's Kidney Transplant Program in Royal Oak, MI, the transplant social worker, in conjunction with the leadership of the NKFM, developed a similar targeted peer mentoring program of their own to assist patients who are in the early evaluation stage of being listed for a kidney transplant or for those who have recently had a kidney transplant. The Beaumont Peer Mentoring Program differs from the state program in that only post-transplant patients are eligible to become peer mentors. The social worker asks pre- and post-transplant nurses to carefully select post-transplant patients they believe are committed to self-management of their chronic illness and transplant, and are capable of being role models and supporting others facing similar medical concerns. These individuals need to be knowledgeable, open, attentive, and active listeners. They must also understand that they cannot give medical advice to others, since others may not have the same experience with transplant or any other treatment. Potential peer mentors are people who can comfortably share their own experiences so that patients facing life with chronic kidney disease will not be so fearful and overwhelmed.

Mentors for the Beaumont program attend a one-day training session. The training is interactive and audience participation is highly encouraged. After completion of their final role play, they are given a certificate of completion and a peer mentor name badge. Subsequently, their names are added to the transplant clinic's peer mentor directory. The transplant social worker uses discretion in matching patients who request peer mentors with people in the directory with similar histories and psychosocial demographics. Mentors are also expected to provide feedback to their transplant social worker.

The primary purpose of this study was to assess the effectiveness of the Beaumont Peer Mentoring Program in helping patients through the pre-transplant listing process. Specifically, it was hypothesized that patients with a peer mentor would be listed sooner than patients without one. Secondary questions of interest were also investigated: 1) Is there a difference in the quality of life of patients with peer mentors compared to patients without peer mentors?; 2) Is there agreement between patients and peer mentors regarding perceptions of the nature of their relationship?

Corresponding Author
Susan S. Walker, LMSW, Beaumont Hospitals, 3535 W. 13 Mile Rd., Ste. 644, Royal Oak, MI, 48073; 248.551.9897;
swalker@beaumont.edu

METHOD

Sample and Design

The sample consisted of adult pre-transplant patients ($\geq$ 18 years) from a single, large, academic community hospital's kidney transplant clinic who had initial social work evaluation visits between August 2007 and December 2008. A December 2008 cutoff allowed all patients included in the sample sufficient opportunity (minimum 8 months from initial social work evaluation to start of data collection in August 2009) to fulfill requirements to be listed for transplant. Any patients subsequently found not to be kidney transplant candidates by the Transplant Team Committee, or patients who never returned to the transplant clinic for their follow-up evaluation visit, were excluded from the study. In addition, peer mentors who were assigned to any of the study patients were also included in this study.

The study was a two-phase project. The first phase was a retrospective chart review of the identified patient sample designed to answer the primary research hypothesis. The second phase was a prospective data collection study in which living patients from Phase I were contacted by mail and asked to complete a short research survey. A second request was mailed to patients not returning the survey within three weeks. A self-addressed postage-paid envelope was included in each mailing for the patient to return the survey. Out of respect for the patients and the severity of their illness, a maximum of two requests were sent to each patient. In addition, peer mentors assigned to patients included in Phase I were contacted by phone to complete a short survey.

This study was approved by the participating hospital's Institutional Review Board.

Measures

Phase I collected data intended to identify length of time from initial evaluation to listing date (if applicable). Other variables of interest such as comorbidities, demographics, and whether or not a peer mentor was assigned to the patient were also collected.

Phase II included both patients and peer mentors. Patients were asked to complete the Kidney Disease Quality of Life Survey-36 (KDQOL-36) (Hays et al., 1995). This questionnaire was originally developed for use with chronic kidney disease and dialysis patients. However its use has been extended to transplant patients (Fiebiger, Mitterbauer, & Oberbauer, 2004). The KDQOL-36 consists of five content areas, including the SF-12 general mental health and physical health quality of life scales, in addition to burden of kidney disease, symptoms and problems, and effects of kidney disease on daily life subscales. Each of the five content areas is scored on a 0 to100 point scale, with higher values indicating better quality of life. This survey is an accepted way to measure disease-specific quality of life, and has been shown to be a valid and reliable measure of quality of life for kidney disease patients (Barotfi et al., 2006). Research has shown that conducting the KDQOL-36 over the phone may lead to higher physical health scores, suggesting a response bias (Unruh et al., 2003). Thus, only survey mailings were attempted.

In addition to the KDQOL-36, the patient mailing also included a short survey developed to assess the patient's experience and perceptions of the relationship with the assigned peer mentor, if applicable. Specifically, to assess the nature of the patient/peer mentor relationship the following question was asked of patients with a peer mentor: "How close do/did you feel to your peer mentor before your transplant?" Similarly, peer mentors were asked to complete a short phone survey regarding each of their assigned patients included in Phase I of the study, including the following question: "How close do/did you feel to the patient before transplant?" Patients and peer mentors could choose from the following responses: "No relationship," "Acquaintance/Casual," "Friendship," "Other."

Statistical Analysis

Categorical variables were examined using a χ^2 test when appropriate (expected frequency > 5); otherwise, Fisher's exact test was used. Continuous variables were examined using Wilcoxon rank test, as none of the variables were normally distributed. Median and interquartile range (IQR) were reported. Kaplan-Meier estimates were performed for time to listing, stratified by peer mentor status (assigned vs. not assigned). Diabetes and risk factors that were found to be significant in the univariate analysis were possible confounders, so the Kaplan-Meier analysis was repeated, stratified by each. Race was found to be significant in the stratified analysis, so a race-adjusted Cox proportional hazards model was examined.

A probability value of less than 0.05 was considered statistically significant. SAS version 9.2 (SAS Institute, 2010) was used for all analyses.

RESULTS

The study consisted of two parts. Phase I of the study (retrospective chart review) included 177 patients. There was no statistically significant difference in the number of patients with (n = 85) and without (n = 92) peer mentors (p = 0.60). Phase I sample demographics are included in Table 1. Phase II of the study (prospective survey) included 161 patients, as 16 patients were identified as being deceased prior to the survey mailing. A total of 35 peer mentors were assigned to 85 patients from the Phase I sample. Eight peer mentors were excluded from the study because they were either deceased or contact information was unavailable. Therefore, a total of 27 peer mentors were invited to participate in Phase II. Figure 1 depicts the study sampling structure.

A total of 93 (52.5%) patients in the Phase I sample were listed for transplant through August 2009. Kaplan-Meier estimates were performed to identify differences in the time to transplant listing in patients with and without a peer mentor. At 3 months, 28% of patients with a peer mentor versus 44% of patients without a peer mentor were listed, and at 6 months, 34% of patients with a peer mentor versus 52% of patients without a peer mentor were listed. There was no statistically significant difference in time to listing for patients with and without a peer mentor ($p = 0.14$). Even after controlling for diabetes, a variable thought to contribute to extending time to listing, there was no significant difference in time to listing for patients with and without a peer mentor (diabetes: $p = 0.39$; no diabetes: $p = 0.38$). Univariate analyses found significant differences in sex and race between patients with and without a peer mentor. Kaplan-Meier stratified analysis found no significant difference in time to listing by sex ($p = 0.95$); however, there was a significant difference in time to listing by race ($p = 0.001$). At 3 months, 48% of white patients vs. 23% of nonwhite patients were listed, and at 6 months, 54% of white patients vs. 30% of nonwhite patients were listed. Cox proportional-hazards, controlling for patient race, found no significant differences in time to listing between patients with a peer mentor and patients without a peer mentor ($p = 0.42$).

Surveys were mailed to 161 patients for Phase II of the study (16 were identified as deceased prior to mailing). The return rate, after two total mailing attempts, was 46% (74 returned surveys). Of the 74 returned surveys, 13 declined to participate, and 4 indicated that the patient was deceased. Therefore, the survey completion rate was 36% (57/157). No significant differences were found between responders and nonresponders with respect to peer mentor status (assigned vs. not assigned), gender, race, employment status, hypertension, or diabetes. There was a significant difference ($p = 0.02$) in median age, with responders being older (median = 58.3 years) than non-responders (median = 55.4 years). There was no significant difference in the number of patients with and without peer mentors, among the 57 patients who completed and returned the survey ($p = 0.15$).

Telephone surveys were completed with 20 (74%) of 27 peer mentors. The 20 peer mentors reported experiences with a total of 47 patients.

Preliminary analysis was conducted on time from initial evaluation to survey completion between patients with a peer mentor and patients without a peer mentor to ensure that varying lengths of time from the beginning of the pre-transplant process to survey completion was not a potential confounder for quality of life. There was no significant difference in time from initial evaluation to survey completion between patients with a peer mentor (median = 20.5 months) and patients without a peer mentor (22.3 months) ($p = 0.21$). Wilcoxon rank test found that patients with a peer mentor did not have significantly different quality of life scores compared to patients without a peer mentor in all five quality of life domains (Table 2).

The nature of the patient/peer mentor relationship could only be evaluated on 12 patient/peer mentor pairs, as we only had complete data from both respondents on this small subsample. The weighted kappa was 0.41.

DISCUSSION

Prospective kidney transplant patients face an overload of information, responsibilities, and emotions during the initial stages of the process to transplant listing. In order to provide hope, encouragement, and understanding to them, the Beaumont Hospital Transplant Clinic initiated the Beaumont Peer Mentoring Program, a variation on the National Kidney Foundation of Michigan Peer Mentoring Program. While decreasing time to patient listing was not an objective of the program, it was believed that having a support system, which included someone who had experienced the listing and transplant process, could decrease time to listing. However, the data from this study does not support this hypothesis. Patients with a peer mentor were not listed more quickly than patients without a peer mentor. The data also did not support any differences in the quality of life of patients with a peer mentor compared to patients without a peer mentor. There was moderate agreement between patients and peer mentors regarding the nature of the patient-peer mentor relationship, though this finding should be interpreted cautiously, as it was based on a very small sample size.

Several limitations of the study merit attention. First, and perhaps most importantly, we cannot be sure that our variable reflecting that the patient had a peer mentor is pure. It is accurate to the extent that a Beaumont Hospital peer mentor was assigned. However, some patients may have had informal peer mentors available to them; specifically, a family member who has undergone kidney transplant who was utilized as a resource of support. This was not systematically documented in patient records, so the investigators had no way of knowing how many patients who refused a Beaumont Hospital peer mentor fall into this category. For purposes of analyses, these patients were included in the “Peer Mentor Not Assigned” category, which may have attenuated the analyses and contributed to the lack of significant findings. Similarly, once a patient agreed to being assigned a peer mentor, there was no guarantee that they would actually utilize the peer mentor as a resource. Of the 47 patients that the 20 peer mentors were surveyed about, it was reported that there was no contact with 8 (17.0%) patients and an initial contact with no subsequent interactions with 10 (21.3%) patients. Reasons given for this limited contact varied (e.g. patient too tired, left messages and patient never called back). There was no formal documentation from the peer mentors on patients not following through with the assigned peer mentors as a resource. For purposes of analyses, these patients were included in the “Peer Mentor Assigned” category, but they may not have actually benefited from a peer mentor. A more accurate variable for future research might be “Peer Mentor Utilized.”

Second, some patients may have had a living donor, which may make them different from a sample of patients who were placed on the formal transplant list and must wait for a deceased donor. Again, this information was not systematically available during the chart review phase of this project, so we were unable to determine if patients with a living donor were likely to be listed more quickly than patients without a living donor.

Third, as with any survey-based research study, especially mail-based surveys, response rate and nonresponder bias is an issue (Asch, Jedrziewski, & Christakis, 1997; Brennan & Hoek, 1992; Groves, Cialdini, & Couper, 1992). As a result, generalizability and reliability of the data may be compromised. However, it was determined early in the design phase that no more than two mailings would be attempted for Phase II.

Despite these limitations, the study has provided important information and an invaluable experience to the transplant team running and supporting the Beaumont Peer Mentoring Program. It is important to remember that the program was not designed to decrease the time to listing for potential transplant patients. While this would have been an added by-product, this was not the program's primary objective. There are several factors that contribute to the success of the program. Some of these factors are controllable (e.g. selection of peer mentor candidates, training), whereas others are not (e.g. other, informal sources of support, whether patients utilize peer mentors as a resource). These factors must be carefully considered and systematically documented in order to show a statistically significant effect. Informal assessments have provided tremendous positive feedback from patients and peer mentors, and the program continues to gain popularity.

In addition, it was interesting to discover how race played a role in the assignment of peer mentors and in time to listing. It has been documented that minorities are distrustful of the healthcare system (Armstrong et al., 2008; Boulware, Cooper, Ratner, LaVeist, & Powe, 2003; Doescher, Saver, Franks, & Fiscella, 2000). However, in our sample there was a significant difference by race in patients with and without a peer mentor. Specifically, minorities (predominantly African-American, 89% in our sample) were more likely to accept a peer mentor than to decline when mentors were offered as a resource by the transplant social worker. Unfortunately, it was also found that minorities took significantly longer than whites to complete the requirements to be listed for transplant. However, there were no significant differences in time to listing between patients with and without a peer mentor, when controlling for race.

Further research in this area is needed. While a randomized controlled trial would provide the strongest data in determining the effectiveness of the program, this may not be the most ideal study design for a program that was developed as a voluntary resource for patients. There could be diminished benefit to the patient and the peer mentor if the patient was required to participate in such a program. More complete documentation about potential confounders would strengthen a retrospective study.

AKNOWLEDGEMENT

The authors would like to thank Erica Perry from the National Kidney Foundation of Michigan and The University of Michigan, for her invaluable encouragement and review of the study concept and design, as well as review of the manuscript. In addition, heartfelt gratitude to the following: The Beaumont Research Institute for their expertise; the Beaumont transplant team members for their contributions in assisting with locating patient charts, gathering data, and offering valuable feedback; and Dr. Dilip Samar, Medical Director of Multi-Organ Transplant, for his belief in this project and his letter of support. Also, a special thank you to Aaron Goff for assisting with the editing of this manuscript. Lastly, we recognize the peer mentors who participated in this project and continually amaze us with their endless acts of giving.

REFERENCES

Armstrong, K., McMurphy, S., Dean, L. T., Micco, E., Putt, M., Halbert, C. H., et al. (2008). Differences in the patterns of health care system distrust between blacks and whites. *Journal of General Internal Medicine*, *23*(6), 827–833.

Asch, D. A., Jedrziewski, M. K., & Christakis, N.A. (1997). Response rates to mail surveys published in medical journals. *Journal of Clinical Epidemiology*, *50*, 1129–1136.

Barotfi, S., Molnar, M. Z., Almasi, C., Kovacs, A. Z., Remport, A., Szeifert, L., et al. (2006). Validation of the Kidney Disease Quality of Life-–Short Form questionnaire in kidney transplant patients. *Journal of Psychosomatic Research*, *60*, 495–504.

Boulware, L. E., Cooper, L. A., Ratner, L. E., LaVeist, T. A., & Powe, N. R. (2003). Race and trust in the health care system. *Public Health Reports*, *118*, 358–365.

Brennan, M., & Hoek, J. (1992). The behavior of respondents, nonrespondents, and refusers across mail surveys. *The Public Opinion Quarterly*, *56*, 530–535.

Doescher, M. P., Saver, B. G., Franks, P., & Fiscella, K. (2000). Racial and ethnic disparities in perceptions of physician style and trust. *Archives of Family Medicine*, *9*, 1156–1163.

Fiebiger, W., Mitterbauer, C., & Oberbauer, R. (2004). Health-related quality of life outcomes after kidney transplantation. *Health and Quality of Life Outcomes*, *2*, 2. Available from: **http://www.hqlo.com/content/2/1/2.**

Groves, R. M., Cialdini, R. B., & Couper, M. P. (1992). Understanding the decision to participate in a survey. *The Public Opinion Quarterly*, *56*, 475–495.

Hays, R. D., Kallich, J. D., Mapes, D. L., Coons, S. J., Amin, N., & Carter, W. B. (1995). Kidney Disease Quality of Life-–Short Form (KDQOL-SF™), Version 1.3: A manual for use and scoring. Santa Monica, CA: RAND [P-7994].

National Kidney Foundation of Michigan. (2010). *Peer mentoring*. Retrieved December 2, 2010 from **http://www.kidney.org/site/306/peerMentoring.cfm?ch=306**

SAS Institute, Inc. (2010). The SAS® System for Windows (Version 9.2). [Computer software]. Cary, NC.

Unruh, M., Yan, G., Radeva, M., Hays, R. D., Benz, R., Athienites, N. C., et al. (2003). HEMO Study Group. Bias in assessment of health-related quality of life in a hemodialysis population: A comparison of self-administered and interviewer-administered surveys in the HEMO study. *Journal of the American Society of Nephrology*, *14*, 2132–2141.

Table 1. *Patient Characteristics (N = 177)*

	Total Sample *N* = 177 *n* (%)	**Peer Mentor Assigned *n* = 85 *n* (%)**	**Peer Mentor Not Assigned *n* = 92 *n* (%)**	***p* value**
Sex:				
Male	113 (63.8)	47 (55.3)	66 (71.7)	0.02
Female	64 (36.2)	38 (44.7)	26 (28.3)	
Race:				
White	82 (49.4)	33 (39.8)	49 (59.0)	0.01
Nonwhite	84 (50.6)	50 (60.2)	34 (41.0)	
Comorbidities:				
Diabetes Mellitus	75 (42.6)	40 (47.6)	35 (38.0)	0.20
Hypertension	137 (77.8)	66 (78.6)	71 (77.2)	0.82
Employment Status:				
Working Full Time	37 (31.1)	17 (29.3)	20 (32.8)	0.22
Working Part Time	4 (3.4)	3 (5.2)	1 (1.6)	
Disabled	19 (16.0)	13 (22.4)	6 (9.8)	
Retired	40 (33.6)	19 (32.8)	21 (34.4)	
Student	1 (0.8)	0 (0.0)	1 (1.6)	
Not Working	18 (15.1)	6 (10.3)	12 (19.7)	
Age at Evaluation (Years)	57.2	57.8	56.4	0.36
Median (IQR)	(46.8, 62.6)	(48.9, 62.6)	(46.1, 62.2)	

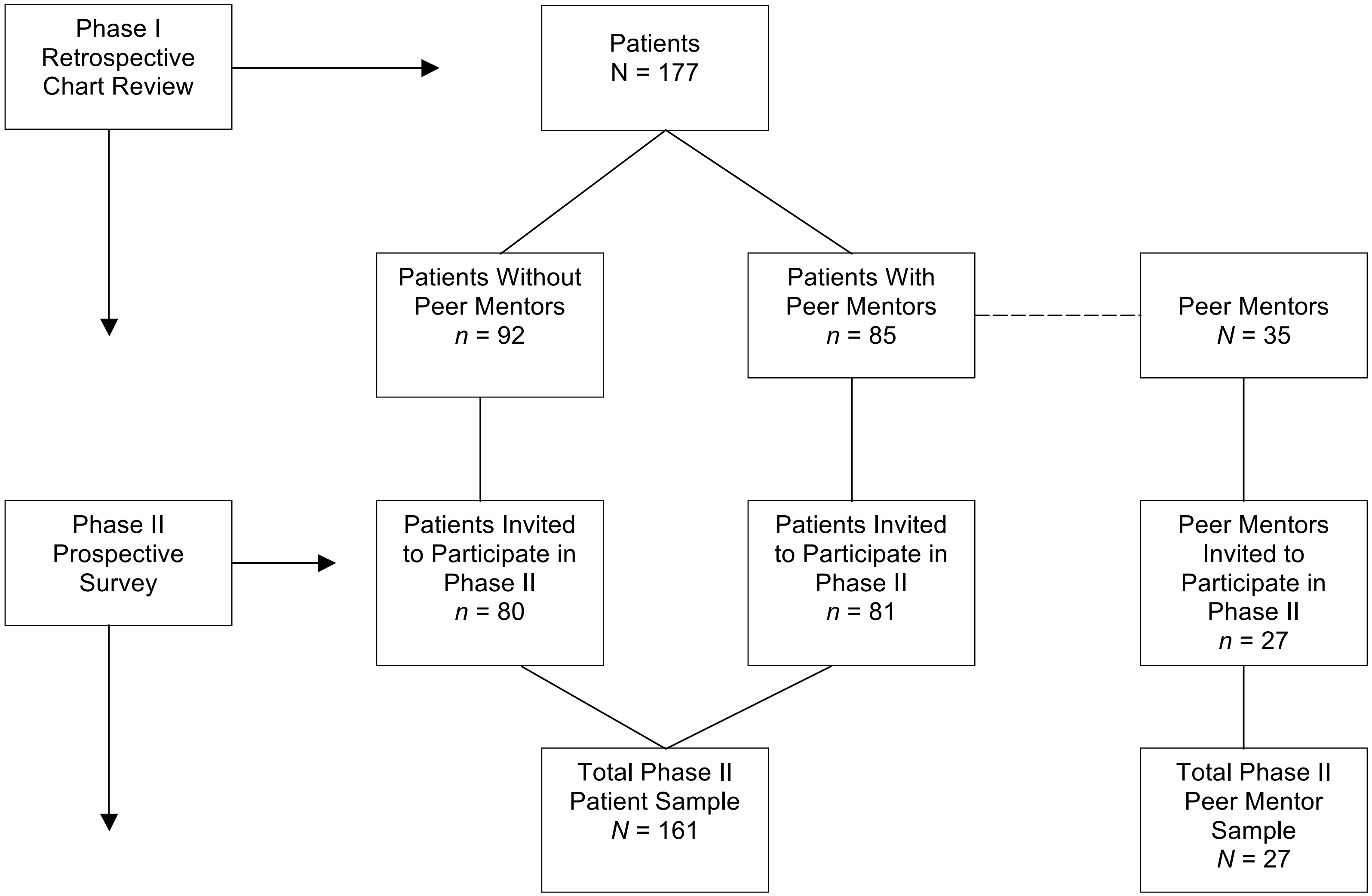
Note: IQR = interquartile range

Table 2. *Kidney Disease Quality of Life by Peer Mentor Status (N = 57)*

	Total *N* **= 57** **Median (IQR)**	**Peer Mentor Assigned** *n* **= 23** **Median (IQR)**	**Peer Mentor Not Assigned** *n* **= 34** **Median (IQR)**	*p* **value**
Mental Health Quality of Life	53.7 (44.5, 56.3)	52.2 (45.7, 56.0)	54.4 (44.5, 56.8)	0.53
Physical Health Quality of Life	39.0 (30.4, 52.0)	38.2 (32.6, 52.3)	39.8 (29.1, 52.0)	0.76
Burden of Kidney Disease	62.5 (31.2, 87.5)	56.2 (25.0, 87.5)	65.6 (37.5, 87.5)	0.30
Symptoms and Problems	81.2 (72.2, 91.7)	77.3 (60.4, 87.5)	83.3 (77.1, 93.2)	0.10
Effects of Kidney Disease on Daily Life	81.2 (56.2, 89.3)	75.0 (43.8, 87.5)	81.2 (59.4, 93.8)	0.20

Note: IQR = interquartile range

Figue 1. *Study Sampling Structure*



COMMENTARY: MINDFULNESS AND ITS INFLUENCE ON THE NEPHROLOGY SOCIAL WORKER AND CIRCLE OF CARE

Gary P. Petingola, RSW, Nephrology Social Worker,
Hôpital régional de Sudbury Regional Hospital, Nephrology Program, Sudbury, ON, Canada

Nephrology social workers in major medical centers often respond in haste, are quick to react, and consequently miss the "sacred moment" within the therapeutic relationship. Professional and personal awareness and clarity can be cultivated through the practice of mind-body interventions. This paper examines how mindfulness meditation and other techniques within the realm of relaxation therapy enhance self-awareness, compassion, and non-judgmental practice for the nephrology social worker. This study highlights the experience of a nephrology social worker who has utilized mind-body interventions as a component of reflective practice. As a result, patient dignity and engagement with family members and healthcare providers, as part of the circle of care in a hospital-based nephrology program, are strengthened.

REACTING IN A DISTORTED REALITY

We are more connected in our society by the use of technology than we have ever been, in that we have the ability to instantly communicate with Internet and mobile devices at the touch of a button. This is indeed both marvelous and ironic. I believe that in this time of instant communication, we as human beings collectively feel more isolated and lonely than we ever have. Sadly, there is a parallel, underlying desperation to find happiness, solace, and a sense of belonging in an ever-changing, faster-paced world.

This paper will explore and understand more deeply how the cultivation of mindfulness positively contributes to increased nephrology social worker clarity, equitable care, resilience, and compassion. I will also touch on my own professional and personal journey of acquiring enhanced awareness through mindfulness. In doing so, I will describe some of the opportunities that I have had in fostering mindfulness, along with other complementary mind-body interventions, within the nephrology circle of care in a hospital-based nephrology program. Mindfulness offers hope not only for patients, but also for nephrology social workers struggling to provide essential psychosocial services while attempting to take care of themselves amid caseloads that often exceed the Council of Nephrology Social Workers (CNSW) standards (Merighi, 2004).

As a frontline nephrology social worker in a busy regional hospital, I bear witness to this desperation in the behavior of the clients who I have the privilege to serve daily. Additionally, I also witness this desire for solace in colleagues who come to my office frustrated, angry, and lacking clarity. This is exacerbated by radical changes in roles and responsibilities in healthcare and heightened consumer expectations over the past decade (Galantino, Baime, Maguire, Szapary, & Farrar, 2005, p. 256).

> Approximately 40 million working-age Americans suffer from psychological disorders and, according to the National Institute for Occupational Safety and Health, stress-related disorders are fast becoming the most prevalent reason for worker disability. In a sample of 46,026 employed persons, medical care costs were 70% higher for those who where reported being depressed, and 46% higher for those who reported being stressed. (Goetzel et al., 1998, p. 843)

In our struggle to cope with these present-day demands that are raw and expose our vulnerability, we frequently react based on our "misconstrued reality" (Gyatso & Ekman, 2008). Riskin (2004) defines "misconstrued reality" or "mindlessness" as the equivalent of functioning as if the "lights are on but nobody's home."

Consequently, we function on "auto pilot" (Allen et al., 2006, p. 286) and have misconceptions of others and situations even though we may make conscious efforts to be nonjudgmental. "Preconceived judgments fuel automatic, scripted reactions, impulsive actions, and more chaos" (Gyatso & Ekman, 2008, p. 41). We become volatile by reacting rather than being emotionally aware and intelligent in our responses (Gyatso & Ekman, 2008, p. 38). "Being judgmental of one's experiences is seen as having a tendency to amplify their effects. Rather than evaluating our cognitive and emotional experiences, mindfulness teaches us to simply notice them" (Allen et al., 2006, p. 288).

This scenario is particularly relevant for nephrology social workers in the United States who are frequently struggling to validate their service in a medically based model of care, now accountable to stringent mandated Conditions for Coverage. Nephrology social workers, increasingly more accountable to the public eye, must frequently demonstrate adherence to the evidence and strive for favorable patient outcome measures.

> This unrelenting stress has negative repercussions for healthcare professionals with increased depression, decreased job satisfaction, disrupted personal relationships, psychological distress, and self-harm. Stress negatively affects [healthcare professionals'] ability to concentrate, their decision-making abilities, their ability to foster healthy professional relationships and, ultimately, the therapeutic relationship becomes devoid off empathy, awareness, objectivity, and compassion. (Shapiro, Astin, Bishop, & Cordova, 2005, p. 165)

The dilemma is that many frontline nephrology social workers become exhausted and victims of burnout or compassion fatigue. Unfortunately, in their quest for quality patient care and favorable patient outcomes, nephrology social workers frequently neglect themselves. Nurses are notorious for taking care of others but lack the capacity and wherewithal to practice self-care (Raingruber & Robinson 2007, p. 1142).

> Taking care of ourselves is intrinsically related to caring for our patients. When we are well rested and happy we can better listen to the people we serve and act from a personal store of empathy and compassion. Becoming more sensitized to our own emotional and psychospiritual issues attunes us to patients' needs and allows us to serve them and their families better—and potentially saves healthcare dollars. (Firth, 2001)

Tenzin Gyatso (the Dalai Lama) and Dr. Paul Ekman, authors of the book *Emotional Awareness: Overcoming the Obstacles to Psychological Balance and Compassion* (2008), refer to the concept of "emotional intelligence." This concept refers to being "in sync" with our emotional existence. These authors argue that emotional intelligence is derived from increased awareness and equips us with more skill to handle emotional challenges, to be more responsive to the struggles of others, and to have more compassion (Gyatso & Ekman, 2008, p. 1). Mindfulness increases awareness.

> There is great opportunity, and perhaps even a responsibility, for us to reduce unnecessary suffering in the world, and quite ironically, it can be done with tools that we and our clients already and always have had—our minds, our bodies, and our breath. (Wisniewski, 2008, p. 19)

WHAT IS MINDFULNESS?

Derived from Buddhist roots, mindfulness cultivates awareness and acceptance. Bell (2009) uses the analogy of "trying to explain the Zen of a meditation experience as being similar to trying to explain color to someone who is color blind." (p. 128)

A tentative definition of mindfulness is "fully being into the present moment without judgement or evaluating that experience" (J. Kabat-Zinn, 1990). The practice of mindfulness focuses on "being" as opposed to "doing," and "observing one's experience without trying to change" (Shapiro, Brown, & Biegel, 2007, p. 106). Mindfulness helps us wake up from this sleep of automaticity and unconsciousness, thereby making it possible for us to live our lives with access to the full spectrum of our conscious and unconscious possibilities (Lord, 2010, p. 273). Mindfulness is simply seeing "what is" (Rock, 2006, p. 350).

I believe that mindfulness can be a cornerstone for increased self-awareness, empathy, and self-healing. It is presumed that, ultimately, the nephrology social worker and all persons that they interact with will thereafter benefit when the social worker has increased clarity and awareness derived through the practice of mindfulness.

> Mindfulness is paramount to effective social work practice, as it allows the therapist the opportunity to be attentive to the moment and, by doing so, the client feels more connected, less judged, and on common ground with the therapist. Mindfulness prevents the therapist from reacting in scripted, preconceived ways in favor of reserving judgment and reaction so that the patient, ultimately, feels more freedom to govern their own actions. (Wisniewski, 2008, p. 18)

More specifically, mindfulness facilitates a "fuller awareness" that promotes more "flexible, adaptive responses to events, and helps to minimize automatic, habitual, or impulsive reactions" (Bishop, 2004, p. 230).

MINDFULNESS-BASED STRESS REDUCTION (MBSR) AND SOCIAL COGNITIVE THEORY

The Mindfulness-Based Stress Reduction (MBSR) program, as promoted by Jon Kabat-Zinn, falls under the realm of social cognitive theory, focusing on interventions geared towards modification of behavior.

> This theory contains a number of constructs that are important for understanding human behavior and how it can be changed. These include reciprocal determinism (in which there is a dynamic interplay between the environment and the person's cognitions and behaviors), the importance of the person's perception of the environment, behavioral capability (an index of the person's knowledge and skill to perform a given behavior), anticipated outcomes of behaviour and the value a person places on the outcome,

> self-control, observational learning, reinforcement, self-efficacy, and emotional coping responses. (Baer, 2006, p. 363)

MINDFULNESS AND ITS APPROPRIATENESS TO PHYSICAL AND PSYCHOLOGICAL DISTRESS

Research to date supports the benefits of mindfulness for the client population with regards to amelioration of illness symptomatology, including "assessment of Mindfulness-Based Stress Reduction (MBSR) for chronic pain, rheumatoid arthritis, type 2 diabetes, chronic fatigue syndrome, multiple chemical sensitivity, and cardiovascular diagnoses" (Merkes, 2010, p. 200). Mindfulness is also gaining much attention in the area of oncology care, and further contributes to other mind-body interventions that have been successfully utilized under the umbrella of supportive care in oncology (Mackenzie, Carlson, Munoz, & Speca, 2007, p. 60; Foley, Huxter, Baillie, Price, & Sinclair, 2010, p. 72). In oncology care mindfulness is validated in the literature for "reductions in stress and improvements in mood, quality of life, and sleep problems" (Carlson & Bultz, 2008, p. 127). Mindfulness has also demonstrated efficacy in the treatment of depression and anxiety (Williams, Teasdale, Segal, & Kabat-Zinn, 2007). The literature suggests that mindfulness is a beneficial therapy for a whole myriad of physical and psychological health challenges.

MINDFULNESS AND THE NEPHROLOGY SOCIAL WORKER

More recently, there has been an interest in how mindfulness is of assistance to the healthcare professionals who provide frontline service to patients on a day-to-day basis. Hence, amongst the chaos and impact of stress on healthcare professionals is the hope that mindfulness may foster resilience, clarity, and a moment-by-moment appreciation within the therapeutic relationship (Schure, Christopher, & Christopher, 2008). This may be considered a reciprocal benefit in practice for both nephrology patient and nephrology social worker.

Wong challenges social workers who work in healthcare to "leave their comfort zone in order to nurture, as mindfulness unsettles old beliefs and challenges preconceived ideas" (Wong, 2004, p. 5). Mindfulness necessitates a metamorphosis. "This constant influx of stress on healthcare professionals often contributes to burnout exhibited by decreased attention, reduced concentration, compromised decision-making skills, and suboptimal relationships with patients" (Shapiro, Brown, & Biegel, 2007, p. 105).

Bell validates the practice of mindfulness as an adjunct requirement for the enhanced therapist's well-being, highlighting reciprocal benefits to the client during the psychotherapy encounter (2009, p. 140). Bell maintains that psychotherapists who practiced mindfulness techniques became more in touch with their essence, more reflective, less judgmental, less reactive, more creative, more compassionate, and clearer in their thinking (p.140). Further, Bell suggests that this enlightenment allows the psychotherapist to have a more heightened "therapeutic presence" with the client (p. 141).

Mindfulness enhances awareness and helps the therapist to appreciate and celebrate "interconnectedness" in the therapeutic relationship, with enhanced awareness of all senses (Kabat-Zinn, 1994, p. 213). Hence, mindfulness dovetails nicely to also promote increased professional fulfillment.

O'Driscoll reports how numerous qualitative and quantitative research studies have demonstrated that counseling psychologists who are engaged in mindfulness have more enhanced therapeutic interventions with clients (2009, p. 16). O'Driscoll paints an emerging theme that increased mindfulness parallels with positive patient clinical outcomes due to the therapist's enhanced objectivity, comfort with silence in the therapeutic process, and comfort in a sacred space that the therapist and patient share (p. 17). The literature confirms that counseling psychologists who are exposed to mindfulness attest to more satisfaction and less rigidity in the therapeutic encounter and more positive outcomes reported by clients (O'Driscoll, 2009, p. 17; Brown & Ryan, 2003).

McCollum and Gehart examine the effects of mindfulness on beginning therapists, and conclude that mindfulness is a useful addition to clinical training, as it instills a calming effect, heightens therapeutic presence, and enhances compassion (2010, p. 357).

Chan, Ng, Ho, and Chow (2006) addressed the ramifications of repeated traumatization specific to healthcare workers, and promoted the embracement of a "mind-body-spirit holistic model of care to assist both patients and healthcare workers in today's specialized, compartmentalized, and heavily bureaucratic hospital settings" (p. 823). The authors acknowledged the burden carried by many of today's healthcare workers who are repeatedly exposed to patients who are frightened, suffering, and dying. This accumulation of work-related distress leads healthcare workers to look for a deeper meaning of pain and suffering in the lives of their patients, as well as their own. The mind-body-spirit approach to care promotes the concepts of appreciation of the moment, immersion of body in movement, acceptance of pain and suffering, appreciation of life as a part of nature, and the ability to demonstrate compassion (p.826).

O'Donovan and May sought to validate that "mindful" therapists (e.g., social workers, psychologists and counsellors) have the advantages of enhanced well-being, job satisfaction, diminished burnout and, as a result, enhance patient intervention and have better outcomes (2007, p. 52). The authors maintain that both therapist and client benefit when the practitioner has more clarity and an appreciation of the moment in a non-judgmental fashion. O'Donovan and May confirm that a mindful therapist is more compassionate and more present. Hence, the practice of mindfulness can only benefit the nephrology social worker.

A MEANDERING JOURNEY TO MINDFULNESS APPRECIATION AND AWARENESS

As a nephrology social worker, I provide frontline counseling and support to patients and families affected by chronic kidney disease. I employ mind-body interventions that include relaxation, visualization, autogenics, progressive muscle relaxation, guided imagery, and mindfulness as therapeutic interventions across the nephrology patient trajectory (Petingola, 2010). These interventions are beneficial for my patients, for caregivers, and for nephrology health team members. As a proponent of reflective practice, I am aware of my professional and personal growth while employing mind-body interventions in my busy practice. As a result, I am more insightful, more present with my patients, less judgmental, and more compassionate; I appreciate more and complain less.

Additionally, I have come to realize that both relaxation methods and mindfulness are distinct, yet equally significant, therapeutic modalities that benefit the entire nephrology circle of care. Interestingly, the process that initially entailed the acquirement of relaxation techniques to assist patients logically unfolded to include mindfulness as a mechanism for self-care as a nephrology social worker.

> Inherent in the practice of non-judgmental awareness is observing one's experience without trying to change it, e.g., just noticing the tension of a muscle, as opposed to trying to relax a tense muscle; just noticing a thought as it arises, as opposed to trying actively to change the thought. Traditional relaxation methods vary in their approaches, but all differ from mindfulness meditation in that there is an intentional focus to relax during the practice, either through specific exercises or through imagery techniques. (Jain et al., 2007, p. 11)

My meandering journey into increased clarity and mindfulness commenced in 2005. At that time, our nephrology program hired counsellors from a private counseling agency to assist many of our new hemodialysis patients with needle phobia issues. Needle phobia is "a fear or aversion to needles, pins, or other sharp objects, which may cause psychological and/or physical symptoms" (Munson, 2002, p. 2). Our program consisted of two full-time nephrology social workers who had already established longstanding relationships with the patients. It was suggested that we receive appropriate training to begin instituting deep breathing and safe place visualization techniques in the nephrology program. As a professional, I had issues with fear and lack of confidence in the area of mind-body interventions until one of the nephrologists summoned me, with no notice or preparation, to help a patient to get through femoral dialysis access. I held this big burley gentleman's hand, played my relaxation music disc, and guided this patient with deep breathing and safe place visualization through the invasive and painful procedure. In the end the patient, nephrologist, nurse, and I were calm, connected, present, and in unison. It was an extraordinary happening.

My exposure to relaxation therapy cultivated a keen interest in the application of these techniques for persons afflicted with chronic kidney disease. Nephrology patients have distress due to illness effects, family dynamics, dietary constraints, time restrictions, functional limitations, expenses, changes in employment, complex relationships with staff, role changes, changes in self-perception, changes in sexual functioning, medication effects, and awareness of impending death (Cukor, Cohen, Peterson, & Kimmel, 2007, p. 3042). Dialysis patients experience profound loss related to alteration in financial status, lifestyle, hobbies or interests, dignity, autonomy, self-esteem, independence, and self-determination (Bargiel-Matusiewicz, 2006, p. 33). "Patients are not only coping with end-stage renal disease (ESRD) but also with the ramifications of comorbidities, diminished quality of life, body image issues, and numerous losses" (Gehlert & Browne, 2006, p. 474).

Depression is thought to be the most common psychiatric abnormality in patients with ESRD treated with hemodialysis, with rates as high as 30% in some dialysis centers (Kimmel, Cohen, & Peterson, 2008, p. 99). Depression may be associated with worse medical outcomes, including increased mortality (Cukor, Cohen, Peterson, & Kimmel, 2007, p. 3042). Additionally, studies have demonstrated that ESRD patients receiving dialysis treatment have a lower quality of life than people in the general population. This may contribute to reduced adherence to treatment (Mukadder, 2004).

The harnessing of relaxation therapy skills as a clinical intervention to assist nephrology patients at the Hôpital régional de Sudbury Regional Hospital (HRSRH) introduced patients, families, and staff to tangible skills that they could master and use independently, facilitating autonomy, and control. Relaxation therapy cultivated profound life-altering adaptation, affirmation, and empowerment. Immersion in relaxation therapy as part of my therapeutic practice was a precursor to my own fascination with mindfulness.

While implementing relaxation and visualization interventions in our nephrology program, my nephrology social work colleague and I were inundated with testimonials by patients who were very pleased with the effects of these learned techniques. This positive feedback, however, was purely anecdotal; therefore, we felt compelled to complete a research study that might validate our "gut" instincts. Hence, two surveys were developed and provided to participants in the nephrology program at the HRSRH from May 2005 until October 2006. Neither of these surveys utilized validated survey tools. Survey results suggested that utilization of relaxation and visualization might be promising for those afflicted with chronic kidney disease.

The first study sought to examine the effectiveness of relaxation techniques with nephrology patients (of various dialysis treatment modalities) and caregivers, and examine the clients' independent use of relaxation therapy over an extended period of time (6-month duration). We sought to determine if the relaxation techniques continued to be utilized, effective, and recommended by clients to others. This sample consisted of 25 participants of whom 84% were nephrology patients of all treatment modalities, 12% were family members, and 4% were staff. Staff members requested relaxation therapy in an effort to manage their own professional self-care. Hence, they were included in this initial sample. Respondents were asked to complete a survey with nine multiple-choice questions and one open-ended question. All participants finished one to five relaxation therapy sessions over a 6-month duration, from May to November 2005 (Petingola & Spence, 2007).

All respondents agreed that relaxation therapy was "helpful," and 48% found relaxation therapy to be "very helpful" to "extremely helpful." After the initial 6 months of implementing the therapy, 83% of survey participants "continued to utilize relaxation skills," and 50% of survey participants utilized relaxation skills "frequently" and "very frequently." Of the initial 25, 92%, favored individual therapy as a treatment choice, while only 8% were receptive to relaxation training in a group venue. All participants "would recommend" relaxation therapy to others, and 72% would "strongly recommend" relaxation therapy (Petingola & Spence, 2007).

The second study commenced in October 2006 with 21 randomly selected participants who had completed relaxation therapy training (standard training usually consists of five sessions minimally). Of this sample, 85% were prerenal insufficient patients (stage 4-plus) and hemodialysis patients, 9.5% were family members, and 4.8% were renal staff. Four multiple-choice questions and one open-ended question were completed. Of those respondents 76% completed relaxation therapy more than 6 months previously. The remaining 24% completed relaxation therapy within the 3 months following their training. Of the 21 study participants, 90.5% indicated that they were "continuing to practice the relaxation skills" taught to them, 38% "would recommend this therapy to others," and 61.9% "would strongly recommend this therapy to others." Results demonstrated that respondents were overwhelmingly pleased with relaxation therapy as an effective technique for anxiety, sleep disturbance, fear of needles, difficulty coping, fear of dialysis, pain control, and caregiver stress. Relaxation techniques continued to be credible and practiced by most respondents beyond 6 months after training officially ended (Petingola, 2009).

> "After three sessions with my renal social worker, I was able to relax more on my own and am sleeping better and longer now. The deep breathing and visualizations help to ease the stress I build up from worrying and caregiving." [dialysis patient]
>
> "I practice relaxation very frequently…every time I come to dialysis I get into my space…that's what my renal social worker taught me…I'm still nervous but I've come along way." [dialysis patient]
>
> "You save me." [nephrology staff member]
>
> "People that have a problem with dialysis…it does help…I use it without thinking now…I close my eyes and hold my arm out." [dialysis patient] (Petingola, 2009)

I have now had the opportunity to provide relaxation therapy to nephrology patients awaiting surgical intervention, undergoing femoral insertion for hemodialysis, with needle phobia, with anxiety due to fear of dialysis or transplantation, in the surgery suite undergoing angiogram and angioplasty, and with palliative patients who have discontinued dialysis. This has all been very rewarding, and I have had the opportunity share my work with nephrology colleagues nationally and internationally. In addition to my work in the nephrology setting, while working for Wellsprings Canada (a network of community-based centers that offer programs providing support, coping skills, and education to cancer patients and their families), I have also provided relaxation and visualization sessions to patients affected with cancer.

During the course of providing relaxation sessions, I began to recognize the benefits experienced in the actual facilitation of relaxation. I began to sense a connectedness and an intimacy during therapeutic encounters. I became more comfortable with silence in the therapeutic relationship, and began to sense a bond between nephrology social worker and client. "With compassionate silence there is a shift from the 'doing' (purposely laying the foundation for silence to occur), which is sometimes awkward and uncomfortable, to an 'inviting' silence, with qualities of warmth and healing" (Back, Bauer-Wu, Rushton, & Halifax, 2009, p. 1113). I began to encounter "a silence that resonates healing, invokes compassion, and facilitates a common bond" (Back et al., 2009, p. 1113). I became humbled by the impact of these sessions on nephrology patients. Additionally, members of the nephrology team began to request sessions to assist with their levels of anxiety, anger, grief, and stress. I began to receive correspondence from nephrology social workers who had a keen interest in developing their relaxation therapy skills, and a zest for sharing their successes with their implementation. All of this piqued my interest in mind-body interventions, namely mindfulness meditation.

In 2009 and 2010, I completed two intensive mindfulness meditation training courses with the Centre for Mindfulness, through the University of Massachusetts and the Omega Institute in Rhinebeck, NY. The most recent was a 7-day, intensive mindfulness meditation course comprising 250 medical health professionals from all parts of the world, all struggling with the same issues, all striving to learn how to be more aware. Ironically, although I was there to learn how to implement mindfulness meditation to assist my nephrology clients, this immersion transformed my personal attitude about mindfulness. Most proponents of mindfulness suggest that you must practice it to teach it, and I agree with this thinking (Baer, 2006, p. 6). As a nephrology social worker practicing and teaching mindfulness techniques, I am more aware, less impulsive and more impartial.

DOES ELEVATED AWARENESS DERIVED FROM MINDFULNESS MEDITATION HEIGHTEN ALERTNESS TO THE CHAOS IN HEALTHCARE?

I believe that heightened clarity derived from mindfulness does make one more aware of the toxicity of the healthcare environment that we work in. The unfortunate concern is that those who are not aware continue to live an opaque existence and inadvertently contribute to workplace chaos by reacting rather than by making a choice about how to respond.

> A large part of mindfulness training is geared toward changing a stress reaction into a stress response, in which emotional arousal is effectively managed. Emotional arousal decreases present-moment awareness, and inhibits the ability to see the whole context of the situation and the options available. (Baer, 2006, p. 363)

I understand the emotional and practical turmoil in which nephrology social workers practice. I also understand the accompanying vulnerability, as I face it daily in frontline practice. I am assaulted by sirens, overhead pages, and angry, vulnerable, and very sick patients with multiple comorbidities, as well as worried healthcare team members trying to stay afloat amongst workload demands. Even as I write this, the headline of our local newspaper reads “Gun-Wielding Man Demanded Drugs,” about a 47-year-old man entering our hospital scared, vulnerable and highly reactive (Mulligan, 2010, p. A1).

GETTING THE WORD OUT

As a nephrology social worker, I have had the opportunity to begin to reframe my practice to include mindfulness. In June 2009, I facilitated a special “walk on the labyrinth” for persons afflicted with cancer in Sudbury, Ontario. Walking the labyrinth is a powerful opportunity for “mindful walking.” The labyrinth is a useful metaphor for many of life’s passages. No matter how lost you feel in the *true* labyrinth you never feel lost when you walk this type of labyrinth. A labyrinth is distinct from a maze in that it is comprised of a safe passage in and out, and its focus is on healing rather than trickery. When walking a labyrinth, one must be cognizant that the journey is comprised of three parts including a pathway into the centre, the centre of the labyrinth itself, and the pathway back out. Walking a labyrinth is done in a mindful, meditative state that allows one to transcend excess worries and baggage, emerging empowered for life’s challenges.

> The labyrinth is an ancient symbol that works well as a therapeutic tool to encourage mental focus through meditation or prayer, which can be instrumental in releasing mental and physical tension. Many recognize the labyrinth as a metaphor for the path we walk through life, and as an appropriate symbol that creates sacred space for enhancing psychological and spiritual growth. As a therapeutic tool, the labyrinth provides willing clients an opportunity to examine problems, questions, or issues from various perspectives, while also affording time and space for personal reflection before making a decision. (Peel, 2004, p. 287)

In April 2010 and 2011, I facilitated mindfulness walking, sitting meditation, and mindfulness eating sessions for nephrology social work colleagues at the National Kidney Foundation Spring Clinical Meetings in Orlando, FL, and Las Vegas, NV, respectively. I also facilitated similar sessions in October 2011 with my Canadian nephrology social work colleagues at the Canadian Association of Nephrology Social Workers Annual Conference in Halifax, Nova Scotia. Mindfulness walking is an exercise that consists of walking methodically at a slow pace, with a forward gaze, cognizant of your breathing, heartbeat, and every associated movement that the function of walking necessitates. Walking mindfully means walking with no agenda, no destination and no expectations. Eating mindfully helps to anchor one to be truly cognizant of the entire dining experience, using all senses and aware of the texture, smell, appearance, and taste of every bite. Sitting mindfully usually entails zeroing in on breathing, and truly focusing on the moment. It implies acceptance of all feelings and thoughts that emerge and just “letting go.” I continue to receive correspondence from participants who report that the mindful walk part of the session has impacted their lives and practices. Feedback from workshop participants inspires my work in this area.

> I just wanted to give you some feedback regarding your relaxation training, and especially the meditational walk exercise at the National Kidney Foundation annual meeting. I would like to thank you for this experience and to let you know how refreshing and inspirational my experience was with this [technique] during our vacation at Glacier National Park in U.S. and, especially, in Canada at Watterton. It was our first visit to both and I cannot tell you how moving it was to take in the majesty of the scenery and beauty. To add [those locations] to the grounding experiences from the meditation was truly spiritual. I was able to obtain a Native American flute to learn to play and share with others….I hope your influence on others in this area provides great benefits and fulfillment. [NKF mindfulness walk participant; received 6 months post-conference]

I have utilized mindfulness and loving kindness techniques with nephrology nursing staff after the death of a longstanding hemodialysis patient by incorporating these techniques into a special debriefing session.

> The Buddhist sense of compassion (karuna) is distinguished by a focus on those who are suffering by suspending a sense of self; furthermore, it encompasses wise action to relieve such suffering, similar to altruism. (Kristeller & Johnson, 2005, p. 393)

In November 2010, I organized another "walk on the labyrinth," this time for frontline nephrology healthcare professionals, where a group of staff, comprised mostly of nephrology nurses, and I shared a silent mindfulness walk in the midst of a winter storm for over two hours, which was followed by sunshine, color and clarity.

"Walking a labyrinth together, client and therapist, can be a powerful activity as the movement itself around the circular path provides a connection, and can lead to a deeper relationship" (La Torre, 2004, p. 121). "We came together again in the center and then walked out slowly, saying very little but feeling a quiet connection" (La Torre, p. 122).

I have also implemented a weekly relaxation and visualization group for patients and caregivers with mindfulness breath and relaxation techniques that have had great success.

> Group delivery is potentially a more cost-effective approach than individual instruction alone. As in other group therapy techniques, group delivery of mindfulness techniques provides the participant with advantages, such as learning from other's insights, increased motivation to practice through peer support, and assistance with the isolation common to many illnesses. (Allen et al., 2006, p. 292)

But the most salient experience that has occurred so far in my journey also occurred in November 2010. I was preparing for my nephrology relaxation group and had posted many signs in the unit inviting attendance. In my haste, I ran by a very full waiting room with hemodialysis patients sitting anxiously, waiting for notification that their dialysis treatment spot was ready for them. During these long waits, patients are very talkative, sometimes argumentative, and sometimes quiet and removed. Several patients at that point asked "How come your relaxation groups always occur when we can't make it and have to be on dialysis?" We discussed alternate times, and this will be taken into account for the next commencement of sessions. I then asked this large and curious group if they would like to experience a feeling of peace and tranquility with a meditation and they demonstrated eagerness to try. I then proceeded to lead the group through mindfulness breathing and body scan meditation techniques. Mindfulness breathing exercise allows one to simply experience the sensation of each breath, not trying to change it but to be with it. Body scan is an exercise whereby the participant will lie down or sit with eyes closed, just noticing or breathing into various parts of the body in a methodical manner. Participants seemed to enjoy the experience, and indicated a desire to do this again.

Perhaps the winter storm at the labyrinth walk was symbolic of a new awareness and clarity that is spreading throughout the healthcare community in the nephrology program at Sudbury Regional Hospital. Perhaps this new awareness will offer solace and peace, while fostering resilience and hope for both nephrology patients and staff. My next goal….mindfulness meditation for all healthcare professionals throughout our organization and the construction of a permanent labyrinth?

REFERENCES

Allen, N., Chambers, R., Knight, W., Blashki, G., Ciechomski, L., Hassed, C., et al. (2006). Mindfulness-based psychotherapies: A review of conceptual foundations, empirical evidence, and practical considerations. *Australian and New Zealand Journal of Psychiatry*, *40*(4), 285. doi:10.1111/j.1440–1614.2006.01794.x

Back, A. L., Bauer-Wu, S., Rushton, C. H., & Halifax, J. (2009). Compassionate silence in the patient-clinician encounter: A contemplative approach. *Journal of Palliative Medicine*, *12*(12), 1113–1117. doi:10.1089/jpm.2009.0175

Baer, R. (2006). *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications*. London, UK: Academic Press.

Bargiel-Matusiewicz, K. (2006). Psychological influence on the psychical state of hemodialysis patients. *Journal of Physiology and Pharmacology*, September, *57* (Suppl 4), 33–38.

Bell, L. G. (2009). Mindful psychotherapy. *Journal of Spirituality in Mental Health*, *11*(1), 126–144. doi:10.1080/19349630902864275

Bishop, S. R. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, *11*(3), 230–241. Retrieved from EBSCO*host*.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822–848. doi:10.1037/0022-3514.84.4.822

Browne, T. A. Nephrology Social Work. In: Gehart, S., & Browne, T. A. (Eds.) (2006). *Handbook of health social work* (pp. 471–506). Hoboken, NJ: John Wiley & Sons, Inc.

Cacioppo, J., Fowler, J., & Christakis, N. (2009). Alone in the crowd: The structure and spread of loneliness in a large social network. *Journal of Personality and Social Psychology*, *97*(6), 977.

Carlson, L. E., & Bultz, B. D. (2008). Mind-body interventions in oncology. *Current Treatment Options in Oncology*, *9*, 127.

Chan, C. L. W., Ng, S. M., Ho, R. T. H., & Chow, A. Y. M. (2006). East meets West: Applying Eastern spirituality in clinical practice. *Journal of Clinical Nursing*, *15*(7), 822–832. doi:10.1111/j.1365-2702.2006.01649.x

Cukor, D., Cohen, S., Peterson, R., & Kimmel, P. (2007). Psychosocial aspects of chronic disease: ESRD as a paradigmatic illness. *Journal of the American Society of Nephrology*, *18*, 3042. doi:10.1681/ASN.2007030345

Firth, J. C. (2001). Interventions to improve physicians' well-being and patient care. *Soc Sci Me*, *52*, 215–222.

Foley, E., Huxter, M., Baillie, A., Price, M., & Sinclair, E. (2010). Mindfulness-based cognitive therapy for individuals whose lives have been affected by cancer: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, *78*(1), 72. doi: 10.1037/a0017566

Galantino, M., Baime, M., Maguire, M., Szapary, P., & Farrar, J. (2005). Association of psychological and physiological measures of stress in health-care professionals during an 8-week mindfulness meditation program: Mindfulness in practice. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *21*(4), 255.

Goetzel, R. Z., Anderson, D. R., Whitmer, R. W., Ozminkowski, R. J., Dunn, R. L., & Wasserman, J. The Health Enhancement Research Organization (HERO) Research Committee. (1998). The relationship between modifiable health risks and healthcare expenditures. An analysis of the multi-employer HERO health risk and cost database. *Journal of Occupational and Environmental Medicine*, *40*, 843.

Gyatso, T., & Ekman, P. (2008). *Emotional awareness: Overcoming the obstacles to psychological balance and compassion*. New York, NY: Times Books, Henry Holt and Company.

Jain, S., Shapiro, S. L., Swanick, S., Roesch, S. C., Mills, P. J., Bell, I., & Schwartz, G. R. (2007). A randomized controlled trial of mindfulness meditation versus relaxation training: Effects on distress, positive states of mind, rumination, and distraction. *Annals of Behavioral Medicine*, *33*(1), 11–21. doi:10.1207/s15324796abm3301_2

Kabat-Zinn, J. (1990). *Full catastrophe living*. New York, NY: Delta.

Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York, NY: Hyperion.

Kimmel, P. L., Cohen, S. D., & Peterson, R. A. (2008). Depression in patients with chronic renal disease: Where are we going? *Journal of Renal Nutrition*, *18*(1), 99–103.

Kristeller, J. L., & Johnson, T. (2005). Cultivating loving kindness: A two-stage model of the effects of meditation on empathy, compassion, and altruism. *Zygon: Journal of Religion and Science*, *40*(2), 391–407. doi:10.1111/j.1467-9744.2005.00671.x

La Torre, M. (2004). Integrated perspectives. *Perspectives in Psychiatric Care*, *40*(3), 120.

Lord, S. (2010). Meditative dialogue: Cultivating sacred space in psychotherapy—An intersubjective fourth? *Smith College Studies in Social Work*, *80*, 269.

Mackenzie, M., Carlson, L., Munoz, M., & Speca, M. (2007). A qualitative study of self-perceived effects of mindfulness-based stress reduction (MBSR) in a psychosocial oncology setting. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *23*(1), 59. doi:10.1002/smi.1120

McCollum, E. E., & Gehart, D. R. (2010). Using mindfulness meditation to teach beginning therapists therapeutic presence: A qualitative study. *Journal of Marital and Family Therapy*, *36*(3), 347–360. doi:10.1111/j.1752-0606.2010.00214.x

Merighi, J. (2004). Workplace resources, patient caseloads, and job satisfaction of renal social workers in the United States. *Nephrology News and Issues*, *18*(5), 58.

Merkes, M. (2010). Mindfulness-based stress reduction for people with chronic diseases. *Australian Journal of Primary Health*, *16*(3), 200.

Mukadder, M. (2004). Depression and health-related quality of life in hemodialysis patients. *Dialysis and Transplantation*, *33*(September), 544.

Mulligan, C. (2010, November 20). Gun-wielding man demanded drugs. *The Sudbury Star*, pp. A1, A4.

Munson, M. (August 2002). Just a little prick—Dealing with needle anxiety. [FORGE.] Retrieved July 23, 2011 from **http://www.forge-forward.org/handouts/Needle-anxiety.pdf**.

O'Donovan, A., & May, S. (2007). The advantages of the mindful therapist. *Psychotherapy in Australia*, *13*, 46.

O'Driscoll, A. (2009). The growing influence of mindfulness on the work of the counselling psychologist; A review. *Counselling Psychology Review*, *24*(3), 16–23. Retrieved from **http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=44921246&site=ehost-live.**

Peel, J. M. (2004). The labyrinth: An innovative therapeutic tool for problem-solving or achieving mental focus. *Family Journal*, *12*(3), 287–291. doi:10.1 177/10664807042M349

Petingola, G. (2009, March). Relaxation therapy in the nephrology setting: Implications for practice. Presented at National Kidney Foundation Spring Clinical Meetings, Nashville, TN.

Petingola, G. (2010, April). Fistulas, fluid restrictions, frustrations, and phobias unleashing relaxation therapy—Applications within the CKD trajectory. Symposia presented at National Kidney Foundation Spring Clinical Meetings, Orlando, FL.

Petingola, G., & Spence, M. (2007, April). Relaxation therapy in the nephrology setting: Implications for practice. Poster presented at National Kidney Foundation Spring Clinical Meetings, Orlando, FL.

Raingruber, B., & Robinson, C. (2007). The effectiveness of tai chi, yoga, meditation, and reiki healing sessions in promoting health and enhancing problem-solving abilities of registered nurses. *Issues in Mental Health Nursing*, *28*(10), 1141–1155. doi: 10.1080/01612840701581255

Riskin, L. (2004). Mindfulness: Foundational training for dispute resolution. *Journal of Legal Education*, *54*, 9–91. Available at SSRN: **http://ssrn.com/abstract=1465210**

Rock, E. (2006). Mindfulness meditation, the cultivation of awareness, mediator neutrality, and the possibility of justice. 6 Cardozo *Journal of Conflict Resolution*, 347-350. [LEXIS]

Schure, M.B., Christopher, J., & Christopher, S. (2008). Mind-body medicine and the art of self-care: Teaching mindfulness to counseling students through yoga, meditation, and qigong. *Journal of Counseling and Development*, *86*, 47–56.

Shapiro, S., Astin, J., Bishop, S., & Cordova, M. (2005). Mindfulness-based stress reduction and healthcare professionals: Results from a randomized, controlled trial. *International Journal of Stress Management*, *12*, 164–176.

Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). *The mindful way through depression*. New York, NY: The Guilford Press.

Wisniewski, C. (2008). Applying complementary and alternative medicine practices in a social work context: A focus on mindfulness mediation. *PRAXIS*, *8*, 13–22. Retrieved July 23, 2011 from **http://www3.luc.edu/socialwork/praxis/pdfs/praxis83.pdf**.

Wong, Y. R. (2004). Knowing through discomfort: Mindfulness-based critical social work pedagogy. *Critical Social Work*, *5*, 2–10.