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Nephrology Social Work: History in the Making

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LITERATURE REVIEW: Nephrology Social Work: History in the Making

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This literature review also includes content written over the years by the Council of Nephrology Social Workers.

January 28, 2005 was a landmark day for the nephrology community, as it was the day that the Draft Conditions for Coverage (COC) for End Stage Renal Disease (ESRD) Facilities were released by Medicare. These are the regulations that dictate policies and procedures in all dialysis and transplant facilities. This occasion is a landmark for a few reasons. Foremost, this document is what sets nephrology social workers apart from social workers in any other medical setting—it dictates that every dialysis and kidney transplant center must have a master's-level social worker on its interdisciplinary medical team. This is very unique to the nephrology field only, and is the sole Medicare provision of its kind that recognizes that an illness like CKD carries with it such psychosocial issues that only a master's-level social worker can competently address with patients and their families.

This date is also notable because it is very rare—there have not been significant changes in these conditions since the 1970s. As the title of this article implies, nephrology social work history is being made with the revision of these conditions, as they will set the policies for patient care for the foreseeable future. This article briefly reviews the Council of Nephrology Social Work (CNSW) response to the conditions, and provides a compilation of empirical data used to create CNSW's position papers to the COC.

CNSW'S RESPONSE TO THE COC

CNSW (along with the other NKF professional councils) had been waiting for these draft conditions to be released for almost a decade, and had an anticipatory response ready to go as soon as they came out. CNSW Membership Chair, Rita-An Kiely, kept in close touch with CMS and was the first to “break the news” that the draft conditions were available. This was followed by a whirlwind of CNSW membership and Executive Committee listserv activity; the creation of the Executive Committee's “suggestions for comments” for members to use to draft their own responses; the creation of a CNSW official response to the dialysis and transplant COCs (many elements of which were used in the National Kidney Foundation's position paper about the COC); and encouragement of all members to make their voices heard about this document. This went as far

as having 44 social workers attending the NKF 2005 Spring Clinical Meetings, who had not yet sent in their responses, go to a social worker's hotel room at the meetings and submit a response before the deadline. Ultimately, many social workers contributed suggestions about the COC. The final revisions are not due until a few years from now, at which point they will become the policies and procedures in all dialysis and transplant facilities.

A COMPILATION OF RESEARCH USED TO CREATE THE CNSW RESPONSE

Recognizing that individual responses were strengthened by the use of empirical data to support member opinions, an exhaustive literature review was conducted, itemized and distributed to the CNSW membership for use in creating individual responses to the COC. This review includes a summary of research about: general psychosocial ramifications of CKD and its treatment regimes; unique psychosocial needs of pediatric and older patients; psychosocial influence of comorbid issues common with ESRD; as well as psychosocial issues common in ESRD, such as: sexuality and fertility issues, functional status, economic concerns, quality of life, families and support networks, anxiety, depression, rehabilitation, transplantation specific issues, sleeping problems, body image concerns, failed transplant, nonadherence to treatment regime, end-of-life issues, suicide and the ramifications of psychosocial issues related to ESRD.

The review then summarizes evidence of the efficacy of nephrology social work interventions including: CNSW background material; why nephrology social work interventions are recommended; why CKD multidisciplinary team care (including an MSW) is recommended; nephrology social work assessment considerations; why social workers have been shown to be an important part of the transplant team; support for appropriate nephrology social work tasks and evidence of misutilization of master's-level social workers; support for nephrology social worker/patient ratios; and CNSW support for master's-level social workers service provision.

PSYCHOSOCIAL RAMIFICATIONS OF CKD AND ITS TREATMENT REGIMES

General Information

End Stage Renal Disease (ESRD) is a chronic illness that requires lifestyle changes and accommodation that affect all spheres of living: medical, dietary, social, financial, psychological and rehabilitative. The lifetime course of the ESRD patient's treatment may include multiple renal transplants and different treatment modalities; vascular and peritoneal access problems; life-threatening infections; amputations; severe bone disease; family dysfunction; changes in functional status and issues of palliative care; and dying. 89% of ESRD patients reported that the disease caused many changes in their lifestyles (Kaitelidou, Maniadakis, Liaropoulou, Ziroyanis, Theodorou & Siskou, 2005). The chronicity of ESRD and the intrusiveness of required treatment provide renal patients with multiple psychosocial stressors including: cognitive losses, social isolation, bereavement, coping with chronic illness, concern about mortality and morbidity, depression, anxiety, psycho-organic disorders, somatic symptoms, lifestyle disruption attributable to intrusive treatment regime and schedule (length, frequency), economic pressures, insurance and prescription issues, employment and rehabilitation barriers, mood changes, body image issues, concerns about pain, numerous losses (income, financial security, health, libido, strength, independence, mobility, schedule flexibility, sleep, appetite and freedom with diet and fluid), social role disturbance (familial, social and vocational), dependency issues, and diminished quality of life (DeOreo, 1997; Gudes, 1995; Katon & Schulberg, 1997; Kimmel et al., 2000; Levenson, 1991; Mapes, 1991; Rabin, 1983; Rosen, 1999; Soskolne & Kaplan-DeNour, 1989; Vourlekis & Rivera-Mizoni, 1997).

Unique Psychosocial Needs of Pediatric Patients

Children and adolescents with ESRD may be especially concerned about body image issues related to required vascular accesses (Fielding, Moore, Dewey, Ashley, McKendrick, & Pinkerton 1985). 59% of ESRD adolescents had poor adherence with recommended medical regime (Kurtin, Landgraf, & Abetz, 1994). Infants born with ESRD require frequent hospitalization and medical appointments, have diminished development, may need supplemental nourishment or a feeding tube, and are usually precluded from transplant their first two years (Brady & Lawry, 2000).

Unique Psychosocial Needs of Older Patients

The demographics of the renal patient population have drastically changed, from younger heads of families to an increasingly high percentage of elderly patients with numerous co-morbidities and social problems. Individuals 65 years and older, with numerous additional co-morbidities and social problems, comprise the fastest-increasing population among ESRD patients (Kutner, 1994; Mold & Holt, 1993). Older adults with ESRD have more somatic complaints (Chen, Wu, Wang, & Jaw, 2003).

Psychosocial Influence of Comorbid Issues Common with ESRD

ESRD is often secondary to chronic illnesses such as hypertension and diabetes, which provide ESRD patients with additional psychosocial issues, and predispose the ESRD patient to frequently access health services from many community providers (Merighi & Ehlbrecht, 2004). Low albumin and co-morbidities in ESRD patients can independently decrease patient quality of life (QOL) (Frank, Auslander & Weissgarten, 2003). Coronary artery disease in menopausal women with chronic kidney disease (CKD) is associated with cognitive impairment (Kurella, Yaffe, Shlipak, Wenger, & Chertow, 2005). Diabetic ESRD patients have higher depression scores and affective change scores than those without diabetes (Chen, Wu, Wang, & Jaw, 2003). ESRD patients commonly have pain, which is very intrusive and decreases quality of life (Devins et al. 1990). Anemia is common in ESRD patients, which prohibits activities of daily living, diminishes quality of life, decreases energy, and increases fatigue (Schatell & Witten, 2004). Anemia is associated with lower quality of life in CKD adolescents (Gerson et al. 2004). Restless leg syndrome is common in ESRD patients, which is significantly related to increased anxiety (Takaki, et al. 2003).

Psychosocial Issues Related to ESRD: Sexuality and Fertility Issues

Sexual functioning may be diminished due to ESRD, comorbidities and medication regimes, and are found to be very important concerns for dialysis patients (Wu et al., 2001). ESRD female patients have a low fertility rate due to their abnormal reproductive endocrine function and numerous pregnancy complications. Women on daily home hemodialysis may be more likely to have successful pregnancies (Holley & Reddy, 2003).

Psychosocial Issues Related to ESRD: Functional Status and Economic Concerns

ESRD patients have a lower functional status than the general population and are likely to need assistance with activities of daily living (Dobrof, Dolinko, Lichtiger, Uribarri & Epstein, 2000; Kimmel, 2000). ESRD can lead to financial loss, which is a very important concern for patients (Wu et al., 2001).

Psychosocial Issues Related to ESRD: Quality of Life

ESRD commonly results in diminished patient quality of life (Frank, Auslander & Weissgarten, 2003; House, 1987; Kimmel, 2000). Social workers can intervene to improve ESRD patient quality of life and address psychosocial issues impacting it. Poor quality of life in ESRD is significantly linked to patient outcomes: decreased functional status, decreased well-being, increased hospitalizations, increased morbidity and higher mortality (quality of life has been found to be as important a mortality marker as albumin level) (DeOreo, 1997; Kutner, 1994; Mapes, 2004; McClellan, Anson, Birkeli, & Tuttle, 1991; Parkerson, Broadhead, & Tse, 1995). Psychosocial status may be more important than physical status in predicting ESRD patient quality of life (*Promoting Excellence in End-of-Life Care*, 2002).

Psychosocial Issues of Patients' Families and Support Networks

ESRD has significant psychosocial ramifications for patients' families and social support networks, and social support can have influence on ESRD outcomes. Social workers can assist patients' support networks in coping with the stress and losses resulting from ESRD, and assist in helping patients build social support, which can lead to better patient outcomes (Kimmel, 1990; Benik, Chowanec, & Devins, 1990). Patients' spouses and partners cope with role reversal and more responsibilities (Gudex, 1995). 51% of ESRD family members reported absences from work related to the patient's illness (Kaitelidou, Maniadakis, Liaropoulos, Ziroyanis, Theodorou & Siskou, 2005). Parents of pediatric ESRD patients have financial burdens and may be unable to work due to the illness and treatment regime (Brady & Lawry, 2000; Nicholas, 1999). Parents of pediatric ESRD patients are more likely to have anxiety, depression, and coping problems (Fukunishi & Honda, 1995). Families of ESRD patients are insufficiently knowledgeable about the illness and its trajectories, medical complications and comorbidities, treatment

options and their impact on lifestyles (MacDonald, 1995). ESRD patients' family members have increased stress and coping issues (Pelletier-Hibbert & Sohi, 2001). Positive social support, particularly from the patient's family, has been found to be related to better patient outcomes, including improved adherence to the treatment regime, lower levels of depression, increased activity levels, improved psychological well-being, and morbidity and mortality (Burton, Kline, Lindsay, & Heidenheim, 1986; Cohen & Syme, 1985; Kimmel et al., 2000; Kutner, 1990; McClellan, Stanwyck, & Anson, 1993). It has been shown that dialysis patients' partners experience significant concern and coping issues regarding ESRD and treatment modalities in addition to the patient (Nichols & Springford, 1984; White & Greyner, 1999).

Psychosocial Issues Related to ESRD: Depression

ESRD can result in patient anxiety. 52% of patients have been found to have anxiety (Auslander, Dobrof, & Epstein, 2001; Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2000). Depression is very common in ESRD. ESRD patients are more likely to be depressed than the general population, with depression incidence as high as 49% (Auslander, Dobrof, & Epstein, 2001; Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2000; Finkelstein & Finkelstein, 1999; Hedayati et al., 2004; Wuerth, Finkelstein, Ciarcia, Peterson, Kliger, & Finkelstein, 2001). Depression is a serious problem in ESRD patients.

Depression is significantly related to malnutrition and poor nutritional outcomes (Kimmel, et al., 2000; Koo et al., 2003).

Depression has been found to be independently linked to ESRD patient mortality (Hedayati et al., 2004; Kimmel et al., 2000; Paniagua, Amato, Vonesh, Guo, & Mujais, 2005; Shulman, Price, & Spinelli, 1989).

Depression is linked to greater hospitalizations of ESRD patients (Paniagua, Amato, Vonesh, Guo, & Mujais, 2005).

Depressed CAPD patients have greater incidence of peritonitis (Wuerth et al., 1997).

Depression can diminish ESRD patient quality of life (Kalantar-Zadeh, Kopple, Block, & Humphreys, 2001; Mollaoglu, 2004). This is important because poor quality of life in ESRD is significantly linked to patient outcomes: decreased functional status, decreased well-

being; increased hospitalizations; increased morbidity and higher mortality (DeOreo, 1997; Kutner, 1994; Mapes, 2004; McClellan, Anson, Birkeli, & Tuttle, 1991; Parkerson, Broadhead, & Tse, 1995).

Psychosocial Issues Related to ESRD: Rehabilitation

ESRD can have a significant impact on patients' rehabilitation status due to diminished physical status and intrusive treatment schedule issues. Social workers can assist patients in maximizing their rehabilitative status. One study found that only 13% of ESRD patients were able to resume employment after starting dialysis (Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2000). Kaitelidou, Maniadakis, Liaropouls, Ziroyanis, Theodorou, & Siskou (2005) found in a study of Greek patients that 60% of hemodialysis patients had to change professions or retire due to treatment requirements; only 40% kept their original profession; 7% of agricultural and 6% of blue collar workers kept the same profession; 55% of white-collar workers were able to keep their jobs; 37% retired before the official retirement age; 64% had absences from work; 39% reported working with ESRD symptoms an average of five days per month on which they were 62% productive. Working patients have been found to be more likely to miss a dialysis treatment (Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2000). Working patients have been found to be less depressed (Chen, Wu, Wang, & Jaw, 2003). Patients with the best rehabilitation status have a better quality of life (Mollaoglu, 2004). Low activity levels in ESRD patients are related to higher mortality (Husebye, Westle, Styrvoky, & Kjellstrand, 1987).

Psychosocial Issues Related to ESRD: Transplantation-Specific

Psychosocial factors such as finances, depression, relationship changes and employment lead to transplant immunosuppressant noncompliance (Russell & Ashbaugh, 2004). It has been demonstrated that kidney transplant patients, compared to dialysis patients, have overall improved physical and mental health, lower mortality, greater social functioning and enhanced quality of life (Dew, Goycoolea, Switzer, and Allen, 2000; Evans et al. 1985; Gokal, 1993; Simmons and Abress, 1990). ESRD patients may have significant difficulty transitioning from dialysis patient to transplant patient (due to uncertainty, unpredictability, redesigning goals) (Levine, 1999).

Psychosocial Issues Related to ESRD: Sleeping Problems and Body Image Concerns

ESRD patients often have sleeping problems (Valdez, 1997). ESRD patients have body image issues related to vascular and peritoneal access and medication side effects (especially immunosuppressants) (Beer, 1995; Sloan & Rice, 2000).

Psychosocial Issues Related to ESRD: Nonadherence to Treatment Regime

Nonadherence to the hemodialysis treatment schedule has significant ramifications for patients. Missing treatments and high interdialytic weight gains are associated with increased mortality (Husebye, Westle, Styrvoky, & Kjellstrand, 1987; Saran, 2003). In one study, 27-31% of patients missed one dialysis treatment per month; 35-41% signed off of dialysis early; 76-85% of patients had problems with diet; 75% of patients who were coping poorly were likely to miss treatments; 50% of patients who were coping poorly were not adherent with fluid gains (Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2000). 30-60% of dialysis patients do not adhere to recommended diet, medication or fluid recommendations (Bame, Peterson, & Wray, 1993; Friend, Hatchett, Schneider, & Wadhwa, 1997; Christensen & Raichle, 2002).

Psychosocial Issues Related to ESRD: End-of-Life Issues

Two percent of patients had marked psychosocial problems and concerns prior to their death (Woods et al., 1999).

Psychosocial Issues Related to ESRD: Suicide

It has been found that ESRD patients may be significantly more likely to commit suicide than persons in the general population (Kurella, Kimmel, Young, & Chertow, 2005).

Ramifications of Psychosocial Issues Related to ESRD

ESRD patients with a poor psychological status are more likely to be nonadherent to the treatment regime, have greater hospitalizations and higher mortality rates (DeOreo, 1997). ESRD patients who feel they are more in control of their treatment tend to cope better, be better adjusted and have better quality of life (Mapes, 1991; Bremer, 1995). ESRD patients with psychosocial problems and less understanding of the illness and treatment regime are more likely to have high interdialytic

weight gains, and missed treatments. Patient psychosocial strengths, backgrounds and problems are related to dialysis outcomes (Auslander, Dobrof, & Epstein, 2001). Psychosocial issues (social support levels, adherence to dialysis regime, coping) related to ESRD are as important as medical issues in association with increased mortality (Kimmel et al., 1998). ESRD patient function status, depression, quality of life and activity level influence treatment regime outcomes, including morbidity and mortality (Burton, Kline, Lindsay, & Heidenheim, 1986; Gutman, 1983; Port, 1990). Serum albumin is accepted as a predictor of mortality (Lowrie & Lew, 1990). Many psychosocial risk factors (such as socioeconomic status, need for dentures, assistance needed to purchase groceries, decreased appetite due to depression or anxiety, decreased cognitive capability, management of diet, education, literacy, ethnicity, culture, household composition, insurance and social supports) can negatively contribute to albumin management (Calkins, 1993; Ellstrom-Calder & Banning, 1992; Oldenburg, Macdonald, & Perkins, 1988; Vourlekis & Rivera-Mizzoni, 1997). ESRD treatment outcomes are significantly impacted by a patient's psychosocial status (Burrows-Hudson, 1995; Burton, Kline, Lindsay, & Heidenheim, 1986).

EVIDENCE OF EFFICACY OF NEPHROLOGY SOCIAL WORK INTERVENTIONS

CNSW Background Material

ESRD patients require comprehensive psychosocial interventions at various stages throughout the course of their illness due to the multiple losses and psychosocial risks associated with their diagnosis and treatment. Socioeconomic and biopsychosocial barriers exist that negatively impact patient treatment outcomes such as morbidity and mortality. The identification of these barriers through a skilled biopsychosocial assessment is critical to maximizing patient outcomes. Providing skilled psychosocial interventions based on this assessment can ameliorate biopsychosocial risk factors, thus improving treatment outcomes for the ESRD patient.

The recognized role of the nephrology social worker is to: provide initial and continuous patient evaluation and assessment, including patients' social, psychological, financial, cultural and environmental barriers to coping with ESRD and their treatment regime; provide patients and their support networks with emotional support, encouragement and supportive counseling; provide assistance with adjustment to and coping with CKD,

comorbidities and treatment regimes; patient and family education; crisis intervention; provision of information and community referrals; assistance with advance directives and self-determination issues; facilitate group work, including support groups and patient advocacy groups; case management with community resources, state agencies and federal programs; assisting patients with obtaining maximum rehabilitative status (including: ongoing assessment of barriers to patient goals of rehabilitation; providing patients with education and encouragement regarding rehabilitation; providing case management with local or state vocational rehabilitation agencies); providing staff in-service education regarding ESRD psychosocial issues; participate in the facility's quality assurance program; mediate conflicts between patients, families and staff; participate in interdisciplinary care planning and collaboration; and patient advocacy (Beder, 1999; Beer, 1995; Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2001; Fortner-Frazier, 1981; Kimmel et al. 1995; McKinley & Callahan, 1998; McKinley, Schrag, & Dobrof, 2000; Merighi & Ehlebracht, 2004c; Nichols & Springford, 1984; Oldenburg, Macdonald, & Perkins, 1988; Petrie, 1989; Russo, 2002). The scope of these tasks is congruent with those traditionally related to medical social work in the realms of prevention, palliation, treatment and advocacy efforts directed at making health care more patient-centered (Dhooper, 1994).

Due to the complex nature of the renal patient's needs and issues, interdisciplinary collaboration of care for renal patients by the team has been found to be necessary for optimal delivery of services. A multidisciplinary approach (including a master's-level social worker) to CKD care has been shown to be effective in improving patient outcomes, and is the recommended method of providing CKD patient care (Corsini & Hoffman, 1996; Dunn & Janata, 1987; Gitlin, Lyons, & Kolodner, 1994; Goldstein, Yassa, Dacouris, & McFarlane, 2004; Houle, Cyphert, & Boggs, 1987; Warady, Alexander, Watkins, Kohaut, & Harmon, 1999). The severe psychosocial issues facing ESRD patients necessitate master's-level social work interventions, and research has shown that these interventions are vital to ameliorate the psychosocial barriers to ESRD treatment regime.

It is recommended that "a good psychosocial support program should be incorporated into the treatment of patients with chronic renal failure to reduce the possibility and severity of depression" (Chen, Wu, Wang & Jaw, 2003, p. 124). Research indicates that a decrease in

depression correlates positively to increased adherence to the ESRD treatment regime which has a direct impact on decreasing morbidity and mortality (DeOreo, 1997). 76% of depressed dialysis patients indicate that they prefer to seek counseling from the nephrology social worker on their treatment team, rather than pursue care from an outside mental health practitioner (Johnstone & LeSage, 1998). Nephrology social work has been shown to effectively lower patient depression (Beder, 1999; Estrada & Hunt, 1998).

Renal social workers are the “natural source of health policy information for patients as well as other professionals” (Berkman et al. 1990), and they provide information to patients and their families about sources of information that are unknown to the family (Berkman et al; McKinley and Callahan, 1998). Arthur, Zalemki, Giermek, & Lamb (2000) have shown that nonrenal medical professionals (such as home care or nursing home care providers) are mostly unfamiliar with the psychosocial issues attributable to ESRD, such as patient eligibility for Medicare, patient ability to work and travel, patient self determination issues involving discontinuing treatment, and patients' sexual and reproductive problems. Renal social workers are key in assisting patients in navigating the service provision of their multiple medical needs, and advocating for patients with such community providers that are not attuned to such special needs.

Nephrology social work interventions have been shown to successfully: enhance/facilitate social support networks of patients and their families (Brady & Lawry, 2000; Johnstone, 2003; Spira, 1996); help patients and their families cope with ESRD and the treatment regime (Brady & Lawry, 2000; Frank, Auslander, & Weissgarten, 2003); help patients improve dialysis adequacy (Callahan, Moncrief, Wittman, & Maceda, 1998); help improve patient outcomes, including anemia status (Spira, 1996; Vourlekis & Rivera-Mizzoni, 1997); and help patients minimize nonadherence to ESRD treatment regime (Beder, Mason, Johnstone, Callahan, & LeSage, 2003; Callahan, Moncrief, Wittman, & Maceda, 1998; Johnstone, 2003). Social work education and counseling have been shown to reduce missed patient treatments by 50% (Medical Education Institute, 2004).

Social work intervention have also been shown to successfully: help patients reduce their interdialytic weight gains between dialysis treatments (Auslander & Buchs, 2002; Root, 2005). Clinical social work intervention

was found to: be responsible for up to a 48% improvement in fluid adherence (Johnstone & Halshaw, 2003); improve ESRD patients' blood pressure (Beder, Mason, Johnstone, Callahan, & LeSage, 2003); increase ESRD patients' medication compliance (Beder, Mason, Johnstone, Callahan, & LeSage, 2003); reduce anxiety in CKD patients (Iacono, 2005; Sikon, 2000); improve ESRD patient quality of life (Callahan, Moncrief, Wittman, & Maceda, 1998; Chang, Winsett, Gaber, & Hathaway, 2004; Christensen, Smith, Turner, Holman, Gregory, & Rich, 1992; Frank, Auslander, & Weissgarten, 2003; Fukunishi, 1990; Johnstone, 2003; MacKinnon & MacRae, 1996; Sloan & Rice, 2000; Spira, 1996); improve patient activity level and rehabilitation status (Beder, Mason, Johnstone, Callahan, & LeSage, 2003; Callahan, Moncrief, Wittman, & Maceda, 1998; Ericson & Riordan, 1993; Institute on Rehabilitation Issues, 2001; Raiz, 1999); decrease patient morbidity and mortality via: increasing dietary adherence, enhancing patient coping and adaptation to ESRD and its treatment regimes, decreasing depression, increasing ESRD patient satisfaction and increasing patients' rehabilitation potential (Cummings, Kirscht, & Levin, 1981; Erickson, LeSage, Johnstone, & Parsonnet, 1991; Evans, 1990; Korniewicz & O'Brien, 1994; Lenart, 1998; LeSage, 1998; Parsonnet, 1991); reduce patient hospitalizations and emergency room visits (Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2000); improve patient adherence; improve functional status; assist the patient and family in coping with and adapting to changes brought about by ESRD and its treatment regimes (Berkman, Bonander, Rutchik, Silverman, Marcus, & Isaacson-Rubinger, 1990; Parsonnet 1991); and mediate conflicts in dialysis settings (Johnstone, Seamon, Halshaw, Molinair, & Longknife, 1997). Social work intervention and education increase advance directives completion by 51% (Yusack, 1999). Social work assessment and counseling can encourage patients to get a kidney transplant (Rosen, 2002) and may decrease racial disparity in transplantation (Wolfe, 2003 & Wolfe & Toomey, 2004). Psychosocial education and support can help patients stay employed and reduce hospitalizations that may inhibit employment (Raiz, 1996, Grumke & King, 1994, Rasgon, Schwankovsky, James-Rogers, Widrow, Glick, & Butts, 1993). ESRD psychosocial services enhance coping, encourage patient participation in their care and increase adherence (McKinley & Callahan, 1998).

Nephrology Social Work Interventions are Recommended

Psychosocial assessment can identify suicidal ESRD patients for counseling and other interventions (Kurella, Kimmel, Young, & Chertow, 2005). Witten (1998) recommends that social workers can assist with dialysis adequacy, anemia, and access, encouraging rehabilitation, exercise, and employment. Nephrology social workers can help enable patients to identify and maximize their resources and develop effective coping mechanisms (Moores, 1983).

CKD Multidisciplinary Team Care (Including an MSW) is Recommended

Multidisciplinary CKD care is associated with fewer hospitalizations and lower mortality (Goldstein, Yassa, Dacourisn, & McFarlane, 2004), and can be used to educate nonrenal community care providers on the unique issues related to CKD patient care (Arthur, Zalemski, Giermek & Lamb, 2000). Social work participation in multidisciplinary patient education has been shown to be important in increasing the number of early dialysis access placements (Lindber, et al., 2005). Successful vascular access leads to better dialysis outcomes, lower morbidity and hospitalizations.

Nephrology Social Work Assessment and Intervention Considerations

It is recommended that comprehensive individual psychosocial assessment of ESRD patients is conducted to maximize patient outcomes (Fox & Swazey, 1979). Dialysis patients have been found to have the greatest adjustment concerns in the first three months of treatment (Dobrof, Dolinko, Lichtiger, Uribarri, & Epstein, 2000, 2001). Renal social work tasks are focused on 'improving the patient's ability to adjust to and cope with chronic illness and the health care system's ability to meet the needs of the patient' (McKinley & Callahan, 1998).

Social Workers Have Been Shown to Be an Important Part of the Transplant Team

Living donor kidney transplants are increasingly popular. Social workers must assess: the donor and recipient in order to gauge any normative pressures on the donor that may influence the decision to donate a kidney, their motivation for donation, their ability to make informed consent, the nature of the relationship between the donor and recipient, psychosocial status, developmental history, possible substance use, and mental health status (Fisher, 2003; Fox & Swazey, 1979; Leo, Smith, & Mori, 2003).

The Following Findings Indicate that Nephrology Social Work Interventions are Valued and Desired by the Patients Whom They Serve:

Family members of dying ESRD patients desired more emotional support and social work intervention and requested that social workers make contact with the family after the death (Woods et al., 1999). Siegal, Witten, and Lundin's 1994 survey of ESRD patients determined that almost 91% of respondents "believed that access to a nephrology social worker was important" (p. 33). Dialysis patients have ranked a "helpful social worker" as being the fourth highest important aspect of care, more important to them than similar nephrologists or nurses (Rubin et al. 1997). In one study, more than 84% of patients relied on nephrology social workers for clinical social work intervention to help them improve coping, adjustment and rehabilitation (Siegal, Witten, & Lundin, 1994). 70% of patients felt that social workers gave the most useful information about treatment modalities, and that social workers were twice as helpful as nephrologists in deciding between hemodialysis and peritoneal dialysis as treatment modalities (Holley, Barrington, Kohn, & Hayes, 1991).

Support for Appropriate Nephrology Social Work Tasks/Evidence of Misutilization of Master's-Level Social Workers

Russo (2002) found that 100% of nephrology social workers surveyed felt that transportation was not an appropriate task, yet 53% of respondents were responsible for making transportation arrangements. Russo (2002) found that 46% of nephrology social workers were responsible for making transient arrangements, yet only 20% were able to do patient education. Tasks such as clerical duties, admissions, billing and insurance matters prohibit effective nephrology clinical social work intervention for patients (Callahan, Witten & Johnstone, 1997; Russo, 2002). Promoting Excellence in End-of-Life Care (2002), a national program office of The Robert Wood Johnson Foundation, recommends that dialysis units discontinue using master's-level social workers for clerical tasks (such as arranging transportation) in order to ensure that nephrology social workers have sufficient time for clinical service provision to their patients and their families. Merighi & Ehlebracht (2004b; 2004c; 2005) in an exhaustive survey of 809 national nephrology social workers found that:

- 94% of social workers did clerical work (faxing, copying), and that 87% of those respondents found these tasks to be outside the scope

of their social work training.

- 61% of social workers were solely responsible for arranging patient transportation.
- 57% of social workers were responsible for making transient arrangements, taking 9% of entire social work time.
- Only 34% of the social workers thought that they had enough time to sufficiently address patient psychosocial needs.
- 26% of social workers were responsible for initial insurance verification.
- 43% of social workers tracked Medicare coordination periods.
- 44% of social workers are primarily responsible for completing admission packets.
- Alarming, 18% of social workers were involved in collecting fees from patients. This can negatively affect the therapeutic relationship and decrease patient trust.
- The more that nephrology social workers are involved with insurance/billing, the lower their job satisfaction, particularly among social workers who collect fees from patients.
- Nephrology social work job satisfaction is related to amount of time spent counseling and patient education (significantly higher job satisfaction) and insurance-related, clerical tasks (significantly lower job satisfaction).
- Respondents spent 38% of their time on insurance, billing and clerical tasks versus 25% of their time counseling and assessing patients.
- Nephrology social workers who spend more time doing insurance, billing and clerical activities report more emotional exhaustion.
- Nephrology social workers who spend more time doing counseling and patient education report less emotional exhaustion. The authors indicate that these correlations may be indicative of the fact that providing education and direct counseling to patients and family members are activities that are commensurate with the professional training and education of master's-level social workers (unlike billing, insurance and clerical tasks).

Support for Nephrology Social Work/Patient Ratios

CNSW recommends 75 patients per full-time social worker (Council of Nephrology Social Workers, 1998). Texas mandates that nephrology social workers have a patient ratio of 75 to 100 patients per full-time social

worker. Nevada has a mandated ratio of one full time social worker per 100 dialysis patients. The Oregon Council of Nephrology Social Workers recommends a ratio of 100 patients to one full-time social worker. Social workers report that high case loads result in a lack of ability to provide adequate clinical services (Merighi & Ehlebracht, 2002). Merighi & Ehlebracht (2004a), in a national survey of dialysis social workers, found that only 13% of full-time social workers had caseloads of 75 or fewer, 40% had caseloads of 76 to 100 patients, 47% had caseloads of more than 100 patients. High nephrology social work caseloads result in lower patient satisfaction and less successful patient rehabilitation outcomes (Callahan, Moncrief, Wittman, & Maceda, 1998). Estrada & Hunt (1998) recommend that increased time is needed for social workers to fully assess patients' psychosocial status. Merighi & Ehlebracht (2005) found that nephrology social workers spend more time providing counseling to patients when they have lower patient caseloads.

In one study of nephrology social workers (Bogatz, Colasanto, & Sweeney, 2005), 68% of all social workers did not have enough time to do casework or counseling; 62% did not have enough time to do patient education; 36% spent excessive time doing clerical, insurance and billing tasks. One participant stated: "the combination of a more complex caseload and greater number of patients to cover make it impossible to adhere to the federal guidelines as written. I believe our patients are being denied access to quality social work services." (p. 59). Social workers in the study had caseloads as high as 170 patients; 72% of social workers had a median caseload of 125 patients. Social workers have indicated that large caseloads hinder their ability to provide clinical interventions (Bogatz, Colasanto, & Sweeney, 2005). For every dollar invested in patient education, \$3–\$4 were saved (Bartlett, 1995).

CNSW Support for Master's-Level Social Work Service Provision

The nephrology social worker must be skilled in assessing for psychosocial influences and their interrelatedness in predicting treatment outcomes. The nephrology social worker must also be able to design interventions with the patient, the family, the medical team and community systems at large to maximize the effectiveness of ESRD treatment. The additional training received by a master's-prepared social worker enables them to perform these complex professional tasks and ensure effective outcomes that have a direct relationship to morbidity and mortality. Master's-prepared social work-

ers are trained to utilize validated tools, such as the SF36 and KDOQL, to improve care and to monitor the outcomes of directed interventions, assess the complex variables that these instruments measure (Ellstrom-Calder & Banning, 1992; Lenart, 1998; National Association of Social Workers, 1994), and continually redesign a plan of care to achieve outcome goals. The master's-prepared social worker provides the interdisciplinary team with a biopsychosocial view of the patient's strengths and needs (Berkman, 1996) through use of patient-perceived quality-of-life measures and the person-in-environment model of assessment (Monkman, 1991). Most nephrology social workers provide psychosocial services autonomously as primary providers without social work supervision or consultation. Autonomous practice in an ESRD setting demands highly developed social work intervention skills, obtained in a master's-level curriculum. MSWs are trained to autonomously provide diagnostic, preventive and treatment services for individuals, families and groups in the context of their life situations (Harris, 1995). These interventions assist ESRD patients in developing adaptive behaviors and perceptions necessary to cope with the changes brought about by chronic illness and hospitalization.

Nephrology social workers must be prepared to contribute to the development of clinical pathways to enhance treatment outcomes. Nephrology social workers must have outcome evaluation skills and must understand the interaction among individual systems, the social system, and the medical system as each impacts patients and families. Nephrology social workers must be able to distinguish between normal adjustment reactions and more debilitating and potentially self-destructive emotional reactions, as well as tailor interventions to the individual coping styles of the ESRD patient (Christensen, Smith, Turner et al., 1994). The master's in social work degree (MSW) provides an additional 900 hours of specialized training beyond a baccalaureate degree in social work. An MSW curriculum is the only curriculum which offers additional specialization in the bio-psycho-social-cultural, person-in-environment model of understanding human behavior. Undergraduate (BSW) degrees, or other mental health credentials (MA in counseling, sociology, or psychology, or PhD in psychology, etc.) do not offer this specialized and comprehensive training in bio-psycho-social assessment and interaction between individual and social systems.

The National Association of Social Workers Standards of Classification considers the baccalaureate degree as a

basic level of practice (Bonner & Greenspan, 1989; National Association of Social Workers, 1981). Under these same standards, the master's in social work degree is considered a specialized level of professional practice and requires a demonstration of skill or competency in performance (Anderson, 1986). Master's-prepared social workers are trained in conducting empirical evaluations of their own practice interventions (Council on Social Work Education). Empirically, the training of a master's-prepared social worker appears to be the best predictor of overall performance, particularly in the areas of psychological counseling, casework and case management (Booz, Allen, & Hamilton, Inc., 1987; Dhooper, Royse & Wolfe, 1990). Masters-prepared social workers are identified as major mental health service providers in both urban and rural areas (Hiratsuka, 1994).

The additional 900 hours of specialized, clinical training prepares the MSW to work autonomously in the ESRD setting, where supervision and peer support is not readily available. This additional training in the biopsychosocial model of understanding human behavior also enables the master's-prepared social worker to provide cost-effective interventions, such as assessment, education, and individual, family and group therapy, and to independently monitor the outcomes of these interventions to ensure their effectiveness. Renal patients present with highly complex needs on an individual as well as systems level. Social workers are trained to intervene in both areas of need that are essential for optimal patient functioning, and help facilitate congruity between individuals and their environments' resources, demands and opportunities (Coulton, 1979; McKinley & Callahan, 1998; Morrow-Howell, 1992; Wallace, Goldberg, & Slaby, 1984). Social workers have an expertise of combining social context and utilizing community resource information, along with knowledge of personality dynamics.

CONCLUSION

Using this vast information, CNSW members created responses to the COC that will hopefully be incorporated into the next version of the dialysis and transplant COC. We invite you to save this literature review to use in future research and publications as you join us in creating the future history of nephrology social work.

REFERENCES

1. Anderson, R. (1986). The CSWE Accrediting Standards for Social Work Education. *Social Work in Education*. CCC Code: 0162-7961/86.

2. Arthur, T., Zalemski, S., Giermek, D., & Lamb, C. (2000). Educating community providers changes beliefs towards caring for the ESRD patient. *Advances in Renal Replacement Therapy*, 7(1), 85-91.
3. Auslander, G. K., & Buchs, A. (2002). Evaluating an activity intervention with hemodialysis patients in Israel. *Social Work Health Care*, 35(1-2):407-23.
4. Auslander, G., Dobrof, J., & Epstein, I. (2001). Comparing social work's role in renal dialysis in Israel and the United States: The practice-based research potential of available clinical information. *Social Work in Health Care*, 33(3/4), 129-151.
5. Bame, S. I., Petersen, N., & Wray, N. P. (1993). Variation in hemodialysis patient compliance according to demographic characteristics. *Social Science in Medicine*, 37, 1035-1043.
6. Bartlett, E. (1995). Cost-benefit analysis of patient education. *Patient Education and Counseling*, 26(1-3), 87-91.
7. Bartlow, B. (2005). Discussing end-of-life care or what do we know? *Nephrology News & Issues*, 19(4), 55-56, 66.
8. Beder, J., Mason, S., Johnstone, S., Callahan, M. B., & LeSage, L. (2003). Effectiveness of a social work psychoeducational program in improving adherence behavior associated with risk of CVD in ESRD patients. *Journal of Nephrology Social Work*, 22, 12-22.
9. 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.
10. Beer, J. (1995) Body image of patients with ESRD and following renal transplantation. *British Journal of Nursing*, 4(10), 591-598.
11. Benik Y.M., Chowanec G.D., & Devins, GM. (1990) Marital role strain, illness intrusiveness, and their impact on marital and individual adjustment in End-Stage Renal Disease. *Journal of Psychology and Health*, 4, 245-257.
12. Berkman, B. (1996). The emerging health care world: Implications for social work practice and education. *Social Work*, 41(5), 541-551.
13. Berkman, B., Bonander, E., Rutchik, I., Silverman, B., Marcus, L., & Isaacson-Rubinger, M. (1990). Social work in health care: Directions in practice. *Social Science in Medicine*, 31(1), 19-26.
14. Bogatz, S. (2000). Winning an HMO appeal—A case studying of social work advocacy. *Journal of Nephrology Social Work*, 20, 61-67.
15. Bogatz, S., Colasanto, R., & Sweeney, L. (2005). Defining the impact of high patient/staff ratios on dialysis social workers. *Nephrology News & Issues*, Jan, 55-60.
16. Bonner, C., Dean, R., & Greenspan, R. (1989) Standards for Practice: The Development of the Clinical Social Worker in the First Two Years. *The Clinical Supervisor*, 7(4), 31-45.
17. Booz, A., & Hamilton, Inc. (1987) *The Maryland social work services job analysis and personnel qualifications study*. Prepared for the Department of Human Resources State of Maryland
18. Bordelon, T. D. (2001). Supportive relationships among hemodialysis recipients at a remodeled kidney center. *Social Work in Health Care*, 33(2), 53-65.
19. Brady, D., & Lawry, K. (2000). Infants, families and end stage renal disease: Strategies for addressing psychosocial needs in the first two years of life. *Journal of Nephrology Social Work*, 20, 17-20.
20. Burrows-Hudson, S. (1995). Mortality, morbidity, adequacy of treatment, and quality of life. *ANNA Journal*, 22(2), 113-121.
21. Burton, H., Kline, S., Lindsay, R., & Heidenheim, A. (1986). The relationship of depression to survival in chronic renal failure. *Psychosomatic Medicine*, 48, 261-269.
22. Callahan, M. B. (1997). The nephrology social work role in the National Kidney Foundation's dialysis outcomes quality initiative. *Journal of Nephrology Social Work*, 17, 9-15.
23. 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, 674.
24. Callahan, M. B., Witten, B., & Johnstone, S. (1997). Improving quality of care and social work outcomes in dialysis. *Nephrology News & Issues*, 2(4), 42-43.
25. Callahan, M. B., Moncrief, M., Wittman, J., & Maceda, M. (1998). Nephrology social work interventions and the effect of caseload

- size on patient satisfaction and rehabilitation interventions. *Journal of Nephrology Social Work*, 18, 66-79.
26. Calkins M. (1993) Ethical issues in the elderly ESRD patient. *ANNA Journal*, 20(5), 569-571.
 27. Carlson, J., Potter, L., Pennington, S., Nour, B., Sebastian, A., & Paris, W. (2000). Liver transplantation in a patient at psychosocial risk. *Progress in Transplantation*, 10(4), 209-214.
 28. Carosella, J., Bogatz, S., Lukas, S., Manlongat, M., Rhoades, D., Sage, J., & Simpson, B. (1998). Still coping after all these years: a study of psychosocial variables which affect long-term survival. *Journal of Nephrology Social Work*, 18, 9-15.
 29. Chang, C. F., Winsett, R. P., Gaber, A. O., & Hathaway, D. K. (2004). Cost-effectiveness of post-transplantation quality of life intervention among kidney recipients. *Clinical Transplantation*, 18(4), 407-415.
 30. Chen, Y. S., Wu, S. C., Wang, S. Y., & Jaw, B. S. (2003). Depression in chronic haemodialysed patients. *Nephrology*, 8(3), 121-126.
 31. Christensen, A. J., & Raichle, K. (2002). End-Stage Renal Disease. In A. J. Christensen, & M. H. Antoni (Eds.), *Chronic physical disorders* (pp. 220-243). Oxford, UK: Blackwell Publishers.
 32. Christensen, A. J., Smith, T. W., Turner, C. W., Holman, J. M., Gregory, M. C., & Rich, M. A. (1992). Family support, physical impairment, and adherence in hemodialysis: An investigation of main and buffering effects. *Journal of Behavioral Medicine*, 15, 313-325.
 33. Christensen, A., Smith, T., Turner, C., & Cundick, K. E. (1994). Patient adherence and adjustment in renal dialysis: A person x treatment interactive approach. *Journal of Behavioral Medicine* 17(6), 549-566.
 34. Code of Federal Regulations (June 3, 1976). *Part 405: Federal health insurance for the aged and disabled* (FR 22511 Sec 405:2163). Subpart U: Conditions for coverage of suppliers of End-Stage Renal Disease [ESRD] services. Washington D.C.: U. S. Government Printing Office.
 35. Cohen, L. M., Germain, M. J. Woods, A. L., Mirot, A., & Bursleson, J. A. (2005). The family perspective of ESRD deaths. *American Journal of Kidney Diseases*, 45(1), 154-161.
 36. Cohen, S., & Syme, S. (1985). *Social Support and Health*. Orlando, FL: Academic Press.
 37. Corsini, E., & Hoffman, R. (1996). Social burdens and benefits in the treatment of infants with chronic renal failure. *Dialysis and Transplantation*, 25(8), 515-522.
 38. Coulton, C. (1979). A study of the person-environment fit among the chronically ill. *Social Work in Health Care*, 5(1), 5-17.
 39. Council of Nephrology Social Workers (2002). *Standards of practice for nephrology social work (5th edition)*. New York, NY: National Kidney Foundation.
 40. Council on Social Work Education: Commission on Accreditation. *Handbook of accreditation standards and procedures* (4th edition). Subsection B5.7.9 and M5.7.11 and Subsection B5.7.7 and M5.7.8, pp. 99, 137.
 41. Cumming, J., & Cumming, E. (1965). On the stigma of mental illness. *Community Mental Health Journal*, 1(2), 135-143.
 42. Cummings, K. M., Kirscht, J., & Levin, N. (1981). Intervention strategies to improve compliance with medical regimens by ambulatory hemodialysis patients. *Journal of Behavioral Medicine*, 4(1), 111-127.
 43. DeOreo, P. B. (1997). Hemodialysis patient-assessed functional health status predicts continued survival, hospitalization, and dialysis-attendance compliance. *American Journal of Kidney Diseases*. 30(2), 204-212.
 44. Devins, G. M., Armstrong, S. J., Mandin, H., Paul, L. C., Hons, R. B., Burgess, E. D., Taub, K., Schorr, S., Letourneau, P. K., & Buckle, S. (1990). Recurrent pain, illness intrusiveness, and quality of life in end-stage renal disease. *Pain*, 42, 279-285.
 45. Devins, G. M., Binik, Y. M., Hutchinson, T. A., Hollomby, D. J., Barre, P. E., & Guttman, R. D. (1983). The emotional impact of end-stage renal disease: importance of patients' perceptions of intrusiveness and control. *International Journal of Psychiatry in Medicine*, 13(4), 327-343.
 46. Devins, G. M., Mandin, H., Hons, R. B., Burgess, E. D., Klassen, J., Taub, K., Schorr, S., Letourneau, P. K., & Buckle, S. (1990). Illness intrusiveness and quality of life in end-stage renal disease: comparison and

- stability across treatment modalities. *Health Psychology*, 9(2), 117-142.
47. Dew, M., Goycoolea, J., Switzer, G., & Allen, A. (2000). Quality of life in organ transplantation: Effects on adult recipients. In Trzepacz, P., & DiMartini, A. (Eds.), *The transplant patient: biological, psychiatric, and ethical issues in organ transplantation* (pp. 67-145). Cambridge: Cambridge University Press.
 48. Dhooper, S. (1994). *Social work and transplantation of human organs*. Westport, CT: Praeger Publishers.
 49. Dhooper, S., Royse, D., & Wolfe, L. (1990). Does social work education make a difference? *Social Work Education*, 1990, 35(1), 57-61.
 50. Dobrof, J., Dolinko, A., Lichtiger, E., Uribarri, J., & Epstein, I. (2000). The complexity of social work practice with dialysis patients: Risk and resiliency factors, interventions and health-related outcomes. *Journal of Nephrology Social Work*, 20, 21-36.
 51. Dobrof, J., Dolinko, A., Lichtiger, E., Uribarri, J., & Epstein, I. (2001). Dialysis patient characteristics and outcomes: The complexity of social work practice with end-stage renal disease population. *Social Work in Health Care*, 33, 105-128.
 52. DOEW (1976). *Renal disease: Implementation of coverage of suppliers of end stage services*. Federal Register Part II.
 53. Dunn, V., & Janata, M. (1987). Interprofessional assumptions and the OSU commission. *Theory Into Practice*, 16(2), 99-102.
 54. Ellstrom-Calder, A., & Banning, J. (1992). National multi-center testing of a renal psychosocial intervention assessment instrument: The ECB renal patient questionnaire. Perspectives: *JNCSW*, 13, 97-111.
 55. End Stage Renal Disease Network of Texas (2001). Retrieved February 15, 2005, from http://www.esrdnetwork.org/professional_standards.htm.
 56. Ericson, G., & Riordan, R. (1993). Effects of a psychosocial and vocational intervention on the rehabilitation potential of young adults with End-Stage Renal Disease. *Rehabilitation Counseling Bulletin*, 37(1), 25-36.
 57. Erickson, J., LeSage, L., & Johnstone, S. (1998). *The effectiveness of a brief, structured group intervention in overcoming attendance barriers and achieving positive group outcomes*. Unpublished manuscript.
 58. ESRD Network of Texas (2002). Social services practice recommendations. Retrieved from http://www.esrdnetwork.org/professional_standards.htm
 59. Estrada, R. M., & Hunt, M. E. (1998). A study of the pre-disposing factors of depression in in-center chronic hemodialysis. *Journal of Nephrology Social Work*, 18, 103-112.
 60. Evans, R.W. (1990). Quality of life assessment and the treatment of End Stage Renal Disease. *Transplant Review*, 4, 28-51.
 61. Evans, R., Manninen, D., Garrison, L., Hart, G., Blagg, C., Gutman, R., Hull, A., & Lowrie, E. (1985). The quality of life of patients with End Stage Renal Disease. *New England Journal of Medicine*, 312(9), 553-559.
 62. Federal Register (June 1976). *Conditions of Coverage for ESRD Facilities*, 42 CFR Part 405, Subpart U.
 63. Fielding, D., Moore, B., Dewey, M., Ashley, P., McKendrick, T., & Pinkerton, P. (1985). Children with End Stage Renal Disease: Psychological effects on patients, siblings and parents. *Journal of Psychosomatic Research*, 29, 457-465.
 64. Finkelstein F. O., & Finkelstein, S. H. (1999). Psychological adaptation and quality of life of the patient with End Stage Renal Disease. In E. Brown, & P. Parfrey (Eds.) *Complications of long term dialysis* (pp 168-187). London, UK: Oxford University Press.
 65. Fisher, M. S. (2003). Psychosocial evaluation interview protocol for living related and living unrelated kidney donors. *Social Work in Health Care*, 38(1), 39-61.
 66. Fortner-Frazier, C. (1981). *Social work and dialysis*. Berkeley: University of California Press.
 67. Fox, R. C., & Swazey, J. P. (1979). Kidney dialysis and transplantation. In E. Fox (Ed.) *Essays in medical sociology* (p.105-145). NY: Wiley & Sons.
 68. Frank, A., Auslander, G. K., & Weissgarten, J. (2003). Quality of life of patients with end-stage renal disease at various stages of the

- illness. *Social Work in Health Care*, 38(2), 1-27.
69. Friend, R., Hatchett, L., Schneider, M. S., & Wadhwa, N. K. (1997). A comparison of attributions, health beliefs, and negative emotions as predictors of fluid adherence in renal dialysis patients: A prospective analysis. *Annals of Behavioral Medicine*, 19, 344-347.
 70. Fukunishi, I. (1990). Psychosomatic aspects of patients on hemodialysis. *Psychotherapy & Psychosomatics*, 54, 221-228.
 71. Fukunishi, I., & Honda, M. (1995). School adjustment of children with end-stage renal disease. *Pediatric Nephrology*, 9, 553-557.
 72. Gangji, A. S., Windrim, R., Gandhi, S., Silverman, J. A., & Chan, C. T.
 73. Gerson, A., Hwang, W., Fiorenza, J., Barth, K., Kaskel, F., Weiss, L., Zelikovsky, N., Fivush, B., & Furth, S. (2004). Anemia and health-related quality of life in adolescents with chronic kidney disease. *American Journal of Kidney Diseases*, 44(6), 1017-1023.
 74. Gitlin, L., Lyons, K., & Kolodner, E. (1994). A model to build collaborative research or educational teams of health professionals in gerontology. *Educational Gerontology*, 20, 15-34.
 75. Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice-Hall.
 76. Gokal, R. (1993). Quality of life in patients undergoing renal replacement therapy. *Kidney International*, 43(40), S23-S27.
 77. Goldstein, M., Yassa, T., Dacouris, N., & McFarlane, P. (2004) Multidisciplinary pre-dialysis care and morbidity and mortality of patients on dialysis. *American Journal of Kidney Diseases*, 44(4), 706-714.
 78. Grumke, J., & King, K. (1994). Missouri kidney program: A 10-year review. *Dialysis and Transplantation*, 23, 691-712.
 79. Gudex, C. M. (1995). Health-related quality of life in end-stage renal failure. *Quality of Life Research*, 4(4), 359-366.
 80. Gutman, R. (1983). Characteristics of long-term (14 years) survivors of maintenance dialysis. *Nephron*, 33, 111-115.
 81. Harris, N. (1995). *Social work education and public human services partnerships: A technical assistance document*. A report of a Ford Foundation-funded project. Alexandria, VA: CSWE.
 82. Hartwell, L. (2002). *Chronically happy: Joyful living in spite of chronic illness*. San Francisco: Poetic Media Press.
 83. Healthy people 2010, Chronic kidney disease (n.d.). Retrieved March 16, 2005 from <http://www.healthypeople.gov/document/html/volume1/04ckd.htm>
 84. Hedayati, S. S., Jiang, W., O'Connor, C. M., Kuchibhatla, M., Krishnan, K. R., Cuffe, M. S., Blazing, M. A., & Szczech, L. A. (2004). The association between depression and chronic kidney disease and mortality among patients hospitalized with congestive heart failure. *American Journal of Kidney Diseases*, 44(2), 207-215.
 85. Hiratsuka, J. (1994). Social workers still mainstay of rural poor. *NASW News*, 39(2), February: 1.
 86. Holley, J. L., Barrington, K., Kohn, J., & Hayes, I. (1991). Patient factors and the influence of nephrologists, social workers, and nurses on patient decisions to choose continuous peritoneal dialysis. *Advances in Peritoneal Dialysis*, 7, 108-110.
 87. Holley J. L., & Reddy, S. S. (2003). Pregnancy in dialysis patients: A review of outcomes, complications, and management. *Seminars in Dialysis*, 16, 384-388.
 88. Houle, C., Cyphert, F., & Boggs, D. (1987). Education for the professions. *Theory Into Practice*, 16(2), 87-93.
 89. House, A. (1987). Psychosocial problems of patients on the renal unit and their relation to treatment outcome. *Journal of Psychosomatic Research*, 31(4), 441-452.
 90. Husebye, D. G., Westle, L., Styrvoky, T. J., & Kjellstrand, C. M. (1987). Psychological, social, and somatic prognostic indicators in old patients undergoing long-term dialysis. *Archives of Internal Medicine*, 147, 1921-1924.
 91. Iacono, S. A. (2005). Predialysis anxiety: What are the concerns of patients? *Journal of Nephrology Social Work*, 24, 21-24.
 92. Iacono, S. A. (2004). Chronic pain in the hemodialysis patient population. *Dialysis & Transplantation*, 33(2), 92-101.
 93. Iacono, S. A. (2003). Coping with pain: The dialysis patient's perspective. *Journal of Nephrology Social Work*, 22, 42-44.

94. Institute on Rehabilitation Issues (2001). *Effective strategies for improving employment outcomes for people with chronic kidney disease*. Hot Springs, AR: Department of Education, Office of Special Education and Rehabilitation Services.
95. Institute of Medicine (1991). *Kidney failure and the federal government*. Washington, DC: National Academy Press.
96. Jacobos, C., & Thomas, C. (2003). Financial considerations in living organ donations. *Progress in Transplantation*, 13(2), 130-136.
97. Johnstone, S. (2003). Evaluating the impact of a physical rehabilitation program for dialysis patients. *Journal of Nephrology Social Work*, 22, 28-30.
98. Johnstone, S., & Callahan, M.B. (April, 1999). Refocusing nephrology social work: NKF/CNSW launch program to target treatment outcomes. *Nephrology News and Issues*, 27-41
99. Johnstone, S. & Halshaw, D. (2003). Making peace with fluid social workers lead cognitive-behavioral intervention to reduce health-risk behavior. *Nephrology News & Issues*, (12), 20-31.
100. Johnstone, S., Hays, R., & King, C. (2002). Evaluating the impact of a physical rehabilitation program for dialysis patients. *Nephrology News & Issues*, 16(9), 39-42.
101. Johnstone, S., & LeSage, L. (1998) *The key role of the nephrology social worker in treating the depressed ESRD patient: Patient utilization preferences and implications for on-site staffing practices*. Unpublished manuscript.
102. Johnstone, S., Seamon, V. J., Halshaw, D., Molinair, J., & Longknife, K. (1997). The use of medication to manage patient-staff conflict in the dialysis clinic. *Advances in Renal Replacement Therapy*, 4(4), 359-371.
103. Johnstone, S., Walrath, L., Wohlwend, V., & Thompson, C. (2004). Overcoming early learning barriers in hemodialysis patients: The use of screening and educational reinforcement to improve treatment outcomes. *Advances in Chronic Kidney Disease*, 11(2), 210-216.
104. Kaitelidou, D., Maniadaakis, N., Liaropouls, L., Ziroyanis, P., Theodorou, M., & Siskou, O. (2005). Implications of hemodialysis treatment on employment patterns and everyday life of patients. *Dialysis & Transplantation*, 34(3), 138-147, 185.
105. Kalantar-Zadeh, K., Kopple, J. D., Block, G., & Humphreys, M. H. (2001). Association among SF36 quality-of-life measures and nutrition, hospitalization, and mortality in hemodialysis. *Journal of the American Society of Nephrology*, 12, 2797-2806.
106. Katon W., & Schulberg, H. (1997). Epidemiology of depression in primary care. *General Hospital Psychiatry*, 14, 237-247.
107. Kimmel, P. (2000). Psychosocial factors in adult end-stage renal disease patients treated with hemodialysis: Correlates and outcomes. *American Journal of Kidney Diseases*, 35(Suppl), 132-140.
108. Kimmel P. (1990). Life cycle of the End Stage Renal Disease patient: Towards a developmental view of End Stage Renal Disease. *American Journal of Kidney Diseases*, 15(3): 191-193.
109. Kimmel, P., Peterson, R., Weihs, K., Simmens, Alleyne, S., Cruz, I., & Veis, J. (1998). Psychosocial factors, behavioral compliance and survival in urban hemodialysis patients. *Kidney International*, 54, 245-254.
110. Kimmel, P., Peterson, R., Weihs, K., Simmens, S., Boyle, D., Verne, D., Alleyne, S., Cruz, I., & Veis, J. (2000). Multiple measurements of depression predict mortality in a longitudinal study of chronic hemodialysis outpatients. *Kidney International*, 5(10), 2093-2098.
111. Kimmel, P., Peterson, R., Weihs, K., Simmens, S., Boyle, D., Verne, D., Umana, W., Veis, J., Alleyne, S., & Cruz, I. (1995). Behavioral compliance with dialysis prescription in hemodialysis patients. *Journal of the American Society of Nephrology*, 5(10), 1826-1834.
112. Korniewicz, D., & O'Brien, M. (1994) Evaluation of a hemodialysis patient education and support program. *ANNA Journal*, 21, 33-39.
113. Koo, J. R., Yoon, J. W., Kim, S. G., Lee, Y. K., Oh, K. H., Kim, G. H., Chae, D. W., Noh, J. W., Lee, S. K., & Son, B. K. (2003). Association of depression with malnutrition in chronic hemodialysis patients. *American Journal of Kidney Diseases*, 41(5), 1037-1042.

114. Kurella, M., Kimmel, P. L., Young, B. S., & Chertow, G. M. (2005). Suicide in the United States End Stage Renal Disease program. *Journal of the American Society of Nephrology*, *16*, 774-781.
115. Life Options Rehabilitation Advisory Council (1997). *Building quality of life: A practical guide to renal rehabilitation*. Madison, WI: Medical Education Institute.
116. Kurella, M., Yaffe, K., Shlipak, M. G., Wenger, N. K., & Chertow, G. M. (2005). Chronic kidney disease and cognitive impairment in menopausal women. *American Journal of Kidney Diseases*, *45*(1), 67-76.
117. Kurtin, P. S., Landgraf, J. M., & Abetz, L. (1994). Patient-based health status measurements in pediatric dialysis: Expanding the assessment of outcome. *American Journal of Kidney Diseases*, *24*(2), 376-382.
118. Kutner, N. (1994). Assessing End Stage Renal Disease patients' functioning and well-being: Measurement approaches and implications for clinical practice. *American Journal of Kidney Diseases*, *24*(2), 321-333.
119. Kutner, N. (1994). Psychosocial issues in End Stage Renal Disease: Aging. *Advances in Renal Replacement Therapy*, *1*(3), 210-218.
120. Landsman, M. K. (1975). The patient with chronic renal failure: A marginal man. *Annals of Internal Medicine*, *82*(2), 268-70.
121. Lenart, A. (1998). The effects of patient and staff psychological orientations of patient adherence to fluid intake recommendations: A program evaluation. *Journal of Nephrology Social Work*, *17*, 81-102.
122. Leo, R. J., Smith, B. A., & Mori, D. L. (2003). Guidelines for conducting a psychiatric evaluation of the unrelated kidney donor. *Psychosomatics*, *44*(6), 452-460.
123. LeSage, L. (1998) The role of the nephrology social worker in managing underlying mental illness in the ESRD patient: A clinical case study. *Council of Nephrology Social Workers' Quarterly Review*. *24* (2).
124. Levenson, J., & Olbrisch, M. (2000). Psychosocial screening and candidate selection. In Trzepacz, P., & DiMartini, A. (Eds.), *The transplant patient: Biological, psychiatric, and ethical issues in organ transplantation* (pp. 21-41). Cambridge: Cambridge University Press.
125. Levine, B. J. (1999). "The emerald city complex" transitional depression in adjustment to organ transplant: A review of the literature and implications for transplant social work. *Journal of Nephrology Social Work*, *18*.
126. Lewis, K., Winsett, R. P., Cetingok, M., Martin, J., & Hathaway, K. (2000). Social network mapping with transplant recipients. *Progress in Transplantation*, *10*(4), 262-266.
127. Lindber, J. S., Husserl, F. E., Ross, J. L., Jackson, D., Scarlata, D., Nussbam, J., Cohen, A., & Elzein, H. (2005). Impact of multidisciplinary early renal education on vascular access placement. *Nephrology News & Issues*, *19*(3), 35-43.
128. Lowrie, E. G., & Lew, N. L. (1990). Death risk in hemodialysis patients: The predictive value of commonly measured variables and an evaluation of death rate differences between facilities. *American Journal of Kidney Diseases*, *15*, 458-482.
129. MacDonald, H. (1995). Chronic renal disease: The mother's experience. *Pediatric Nursing*, *21*, 503-507, 574.
130. MacKinnon, J., & MacRae, N. (1996). Fostering geriatric interdisciplinary collaboration through academic education. *Physical and Occupational Therapy in Geriatrics*, *14*(3), 41-49.
131. Mapes, D., Bragg-Gresham, J. L. Bommer, J. Fukuhara, S., McKeivitt, P., & Wikstrom, B. (2004). Health-related quality of life in the Dialysis Outcomes and Practice Patterns Study (DOPPS). *American Journal of Kidney Diseases*, *44* suppl (5), 54-60.
132. McClellan, W. M., Anson, C., Birkeli, K., & Tuttle, E. (1991). Functional status and quality of life: Predictors of early mortality among patients entering treatment for End Stage Renal Disease. *Journal of Clinical Epidemiology*, *44*(1), 83-89.
133. McClellan, W., Stanwyck, D., & Anson, C. (1993). Social support and subsequent mortality among patients with End Stage Renal Disease. *Journal of the American Society of Nephrology*, *4*, 1028-1034.
134. McKinley, M., & Callahan, M.B. (1998). Utilizing the case management skills of the nephrology social worker in a managed care environment. In National Kidney Foundation (Ed.), *Standards of practice for nephrology social work (4th ed.)* (pp. 120-128). New York, NY: National Kidney Foundation.

135. McKinley, M., Schrag, W. F., & Dobrof, J. (2000). The nephrology social worker as clinician. *Nephrology News & Issues*, *14*(3), 38-39.
136. McQuarrier, B., & Gordon, D. (2003). Separate, dedicated care teams for living organs. *Progress in Transplantation*, *13*(2), 90-93.
137. Medical Education Institute (2004). Social work project reduces missed treatments. *In Control*, *1*(3), S2, S8.
138. Merighi, J. R., & Ehlebracht, K. (2005). Emotional exhaustion and workload demands in renal social work practice. *Journal of Nephrology Social Work*, *24*, 14-20, & *Journal of Nephrology Social Work* (in press).
139. Merighi, J. R., & Ehlebracht, K. (2004a). Workplace resources, patient caseloads, and job satisfaction of renal social workers in the United States. *Nephrology News & Issues*, *18*(4), 58-63.
140. Merighi, J. R., & Ehlebracht, K. (2004b). Issues for renal social workers in dialysis clinics in the United States. *Nephrology News & Issues*, *18*(5), 67-73.
141. Merighi, J. R., & Ehlebracht, K. (2004c). Unit-based patient services and supportive counseling. *Nephrology News & Issues*, *18*(6), 55-60.
142. Merighi, J. R., & Ehlebracht, K. (2002). Advocating for change in nephrology social work practice. *Nephrology News & Issues*, *16*(7), 28-32.
143. Mold, J., & Holt, R. (1993). A survey of faculty opinions regarding interdisciplinary education in a health sciences center. *Gerontology and Geriatrics Education*, *13*(4), 65-73.
144. Mollaoglu, M. (2004). Depression and health-related quality of life in hemodialysis patients. *Dialysis & Transplantation*, *33*(9), 544-555.
145. Monkman, M. (1991). Outcome objectives in social work practice: Person and environment. *Social Work*, *36* (3): 253-258.
146. Moores, E. (1983). Social work with renal failure patients: Roles of the social worker. In W. J. Stone, & P. L. Rabin (Eds.). *End Stage Renal Disease: An integrated approach* (pp. 149-164). NY: Academic Press.
147. Morrow-Howell, N. (1992). Clinical case management: The hallmark of gerontological social work. *Geriatric Social Work Education*, *18*, 119-131.
148. Moss, A. H. (2005) Improving end-of-life care for dialysis patients. *American Journal of Kidney Diseases*, *45*(1), 209-212.
149. Nason, F., & Delbanco, T. (1976). Soft services: A major, cost-effective component of primary medical care. *Social Work in Health Care*, *1*(3), 297-308.
150. National Association of Social Workers (1981). *Standards for the classification of social work practice*. Maryland: National Association of Social Workers.
151. National Association of Social Workers/ National Kidney Foundation (1994). *Clinical Indicators for Social Work and Psychosocial Services in Nephrology Settings*.
152. National Institutes of Health (1993). *Morbidity and mortality of dialysis: NIH Consensus Statement*, *11*(2). Bethesda, MD: NIH.
153. Nichols, K., & Springford, V. (1984). The psycho-social stressors associated with survival by dialysis. *Behavior Research and Therapy*, *22*(5), 563-574.
154. Nicholas, D. B. (1999). Factors contributing to caregiver meaning: The case of mothers of children in dialysis. *Journal of Nephrology Social Work*, *19*, 22-32.
155. O'Brien, M. (1983). *The courage to survive: The life career of the chronic dialysis patient*. NY: Grune & Stratton.
156. Oldenburg, B., Macdonald, G., & Perkins, R. (1988). Prediction of quality of life in a cohort of End Stage Renal Disease patients. *Journal of Clinical Epidemiology*, *41*(6), 555-564.
157. Paniagua, R., Amato, D., Vonesh, E., Guo, A., & Mujais, S. (2005). Health-related quality of life predicts outcomes but is not affected by peritoneal clearance: The ADEMEX trial. *Kidney International*, *67*(3), 1093-2005.
158. Paradis, I. (2000). Psychosocial issues in transplantation. *Progress in Transplantation*, *10*(4), 199-200.
159. Parkerson, G. R., Broadhead, W. E., & Tse, C.K. (1995). Health status and severity of illness as predictors of outcomes in primary care. *Medical Care*, *33*, 55-66.
160. Parsonnet L. (1991). An integrated approach to psychotherapy with the ESRD population: A case presentation. *Loss, Grief, and Care*, *5* (1), 77-82.
161. Pelletier-Hibbert, M., & Sohi, P. (2001). Sources of uncertainty and coping strategies used by family members of individuals living

- with End Stage Renal Disease. *Nephrology Nursing Journal*, 28(4), 411-419.
162. Petrie, K. (1989). Psychological well-being and psychiatric disturbance in dialysis and renal transplant patients. *British Journal of Medical Psychology*, 62, 91-96.
 163. Port, F. (1990). Mortality and causes of death in patients with End Stage Renal Failure. *American Journal of Kidney Diseases*, 15(3), 215-217.
 164. Promoting Excellence in End-of-Life Care (2002). *End Stage Renal Disease Workgroup Recommendations to the Field*; Missoula, MT: The Robert Wood Johnson Foundation.
 165. Psimenos, G. (2003). "Psychodialysis": A key element for adequate hemodialysis. *Dialysis & Transplantation*, 32(2) 104, 94-97.
 166. Rabin, P. L. (1983). Psychiatric aspects of End Stage Renal Disease: Diagnosis and management. In W. J. Stone, & P. L. Rabin (Eds.), *End Stage Renal Disease: An integrated approach*, (pp. 111-147). NY: Academic Press.
 167. Raiz, L. (1999). Employment following renal transplantation: The employer perspective. *Journal of Nephrology Social Work*, 19, 57-65.
 168. Raiz, L. (1996). The transplant trap: The impact of health policy on employment status following renal transplantation. *Journal of Health Social Policy*, 8(4), 67-87.
 169. Rasgon, S., Schwankovsky, L., James-Rogers, A., Widrow, L., Glick, J., & Butts, E. (1993). An intervention for employment maintenance among blue-collar workers with End Stage Renal Disease. *American Journal of Kidney Diseases*, 22(3), 403-412.
 170. Romano, M. (1981). Social worker's role in rehabilitation: A review of the literature. In J. Brown, B. Kirlin, & S. Watt (Eds.), *Rehabilitation services and the social work role: Challenge for change* (pp. 13-21). Baltimore, MD: Williams & Wilkins.
 171. Root, L. (2005). Our social work group's process of conducting an outcomes-driven project. *Journal of Nephrology Social Work*, 24, 9-13.
 172. Rosen, L. S. (2002). The trauma of life-threatening illness: *End Stage Renal Disease. Dialysis & Transplantation*, 31(5), 295-302.
 173. Rosen, L. S. (1999). Common psychosocial factors in the treatment of End Stage Renal Disease. *Journal of Nephrology Social Work*, 19, 69-72.
 174. Ross, J. W., Roberts, D., Campbell, J., Solomon, K. S., & Brouhard, B. H. (2004). Effects of social work intervention on non-emergent pediatric emergency department utilization. *Health & Social Work*, 29(4), 263-273.
 175. Rubin, H., Jenckes, M., Fink, N., Meyer, K., Wu, A., Bass, E., Levin, N., & Powe, N. (1997). Patient's view of dialysis care: Development of a taxonomy and rating of importance of different aspects of care. *American Journal of Kidney Disease*, 30(6), 793-801.
 176. Rusell, C. L., & Ashbaugh, C. (2004). The experience of immunosuppressive medication on compliance: A case study. *Dialysis & Transplantation*, 33(10), 610-621.
 177. Russo, R. (2002). The role of the renal social worker in the 21st century. *Nephrology News & Issues*, 16(3), 38,40.
 178. Sankarasubbaiyan, S., & Holley, J. L. (2000). An analysis of the increased demands placed on dialysis health care team members by functionally dependent hemodialysis patients. *American Journal of Kidney Disease*, 35(6), 1061-1067.
 179. Saran, R., Bragg-Gresham, J. L., Rayner, H. C., Goodkin, D. A.; Keen, M. L., Van Dijk, P. C., Kurokawa, K., Piera, L., Saito, A., Fukuhara, S., Young, E. W., Held, P. J., & Port, F. K. (2003). Nonadherence in hemodialysis: Associations with mortality, hospitalization, and practice patterns in the DOPPS. *Kidney International*, 64(1), 254-263.
 180. Schatell, D., & Witten, B. (2004). Anemia: Dialysis patients' experiences. *Nephrology News & Issues*, 17(11), 49-54.
 181. Scott, M. B. (1999). Exploration of factors that impact mode of death in the hemodialysis patient. *ANNA Journal*, 26(6), 577-583.
 182. Shulman, R., Price, J., & Spinelli, J. (1989). Biopsychosocial aspects of long-term survival on End Stage Renal Failure therapy. *Psychology and Medicine*, 19, 945-954.
 183. Siegal, B., Witten, B., & Lundin, A.P (1994). Patient access and expectations of nephrology social workers. *Nephrology News and Issues*, April, 32-33,40.
 184. Sikon, G. M. (2000). Pre-dialysis education reduces anxiety in the newly diagnosed chronic renal failure patient. *Dialysis & Transplantation*, 6, 346, 344-345.

185. Simmons, R., & Abress, L. (1990). Quality-of-life issues for End Stage Renal Disease patients. *American Journal of Kidney Disease*, 15(3), 201-208.
186. Sloan, R.S., & Rice, S. (2000). Legacies, liars and those alone: Lived experiences of End Stage Renal Disease revealed through group work. *Journal of Nephrology Social Work*, 20, 7-15.
187. Smith, M., Hong, B., & Robson, A. (1985). Diagnosis of depression in patients with End Stage Renal Disease. *The American Journal of Medicine*, 79, 160-166.
188. Sommers, L. S., Marton, K. I., Barbaccia, J. C., & Randolph, J. (2000). Physician, nurse, and social worker collaboration in primary care for chronically ill seniors. *Archives of Internal Medicine*, 160(12), 1825-1833.
189. Spira J. (1996). Understanding and developing psychotherapy groups for medically ill patients. *Group Psychotherapy for the Medically Ill*. Baltimore, MD: Williams & Wilkins. 1-30.
190. Takaki, J., Nishi, T., Nangaku, M., Shimoyama, H., Inada, T., Matsuyama, N., Kumano, H., & Kuboki, T. (2003). Clinical psychological aspects of restless legs syndrome in uremic patients on hemodialysis. *American Journal of Kidney Diseases*, 41(4), 833-839.
191. Texas Administrative Code, Title 25, Chapter 177—End Stage Renal Disease Facilities Licensing Rules, Health and Safety Code, 251, April, 1999.
192. Thomas, C. (2000a). How grass-roots efforts turned tobacco tax money into transplants. *Nephrology News & Issues*, 14(11), 41-50.
193. Thomas, C. (2000b). Increasing access to transplantation for the working poor: Social workers as advocates. *Journal of Nephrology Social Work*, 20.
194. Thomas, C. (2003). Patient access to transplant social workers: Is there life after hospital downsizing? *Transplant News & Issues*, 6, S16-S19.
195. United States Renal Data System (2003). *Annual Data Report*. Bethesda, MD: National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases.
196. U.S. Renal Data System (2000). *Annual Data Report*. Bethesda, MD: National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases.
197. Valdez, R. (1997). A comparison of sleep patterns among compliant and noncompliant chronic hemodialysis patients. *Journal of Nephrology Social Work*, 17, 28-36.
198. Vourlekis, B., & Rivera-Mizzoni, R. (1997). Psychosocial problem assessment and ESRD patient outcomes. *Advances in Renal Replacement Therapy*, 4(2), 136-144.
199. Wallace, S., Goldberg, R., & Slaby, A. (1984). *Guide for clinical social work in health care*. NY: Praeger Publishers.
200. Warady, B., Alexander, S., Watkins, S., Kohaut, E., & Harmon, W. (1999). Optimal care of the pediatric End Stage Renal Disease patient on dialysis. *American Journal of Kidney Diseases*, 33(3), 567-583.
201. Ware, J. E. (1992). Comments on the use of health status assessment in clinical settings. *Medical Care* 1992. 30:MS205-MS209.
202. White, Y., & Greyner, B. (1999). The biopsychosocial impact of End Stage Renal Disease: The experience of dialysis patients and their partners. *Journal of Advanced Nursing*, 30(6), 1312-1320.
203. Witten, B. (1998). The social worker's role in starting a rehabilitation program (pp. 57-63). *In Standards of Practice for Nephrology Social Work (4th ed.)*. New York, NY: National Kidney Foundation.
204. Wolfe, W. A., & Toomey, E. (2004). An evolving strategy to increase the number of minority and low-income patients referred for transplantation. *Nephrology News & Issues*, 18(11), 52, 54-6.
205. Wolfe, W. A. (2003). Achieving equity in referrals for renal transplant evaluations with African-American patients: The role of nephrology social workers. *Social Work in Health Care*, 37(3), 75-87.
206. Woods, A., Berzoff, J., Cohen, L. M., Cait, C. A., Pekow, P., German, M., & Poppel, D. (1999). The family perspective of end-of life care in End Stage Renal Disease: The role of the social worker. *Journal of Nephrology Social Work*, 19, 9-21.

207. Wright, L. (2000). Mentorship programs for transplant patients. *Progress in Transplantation, 10*, 267-272.
208. Wu, A. W., Fink, N. E., Cagney, K. A., Bass, E. B., Rubin, H. R., Meyer, K. B., Sadler, J. H., & Powe, N. R. (2001). Developing a health-related quality-of-life measure for End Stage Renal Disease: The CHOICE health experience questionnaire. *American Journal of Kidney Diseases, 37*(7), 11-21.
209. Wuerth, D., Finkelstein, S. H., Juergensen, D., Juergensen P., Steele, T. E., Kliger, A. S., & Finkelstein, F. O. (1997). Quality of life assessment in chronic peritoneal dialysis patients. *Adv Perit Dial, 13*:125-127, 1997
210. Wuerth, D., Finkelstein, S. H., Ciarcia, J., Peterson, R., Kliger, A. S., & Finkelstein, F. O. (2001). Identification and treatment of depression in a cohort of patients maintained on chronic peritoneal dialysis. *American Journal of Kidney Diseases, 37*(5), 1011-1017.
211. Yanagida, E., & Streltzer, J. (1979). Limitations of psychological tests in a dialysis population. *Psychosomatic Medicine, 41*(7), 557-567.
212. Yusack, C. M. (1999). The effectiveness of a structured education program on the completion of advance directives among hemodialysis patients. *Journal of Nephrology Social Work, 19*, 51-56. **JNSW**