## CNSW ABSTRACTS FROM THE NATIONAL KIDNEY FOUNDATION'S 2005 SPRING CLINICAL MEETINGS

## RACIAL DIFFERENCES IN KNOWLEDGE AND ATTITUDES ABOUT DIABETES AND ORGAN DONATION

Amy D. Waterman<sup>1</sup>; Robert Whitlock<sup>2</sup>; Ann C. Barrett<sup>1</sup>. Washington University, School of Medicine, St. Louis, MO, USA

<sup>2</sup>. Missouri Kidney Program, Columbia, MO, USA

Since African Americans and Hispanics are twice as likely to have diabetes and kidney disease compared with Caucasians, we explored whether their attitudes about diabetes and organ donation statements varied by race. Using random-digit dialing oversampling minority households, we surveyed 1,416 African-Americans (30%), Hispanics (10%), and Caucasians (60%) in Missouri (mean age: 45 years, 59% female). Most respondents had income levels between \$26,000-\$50,000 (38%) or \$10,000-\$25,000 (24%). Their overall health care satisfaction was high [mean= 6.1 on a scale from 'very dissatisfied' (1) to 'very satisfied' (7)], with no significant differences due to race. After adjusting for disproportionate sampling using data weights, we conducted chi-square analyses comparing relevant attitudes by race.

Both African Americans and Hispanics felt that more diabetes education in their communities was needed compared to Caucasians (AA: 91% vs. 85%,  $x^2$ =9.82, p<.002; HSP: 91% vs. 85%,  $x^2$ =3.67, p<.05). They both did not understand that diabetics should not smoke (AA: 87% vs. 91%,  $x^2$ =4.82, p=.03; HSP: (72% vs. 91%,  $x^2$ =38.79, p<.001)) and that dialysis is a possible complication of diabetes (AA: 65% vs. 74%,  $x^2=11.04$ , p=.001; HSP: 63% vs. 74%,  $x^2$ =6.55, p=.01). Compared to Caucasians, Hispanics were significantly less likely to: believe that health care professionals related well to them (68% vs. 56%,  $x^2$ =6.64, p=.01), avoid the doctor to avoid learning if something was wrong (65% vs. 27%,  $x^2$ =78.51, p<.001) and believe that diabetes complications were inevitable (50% vs. 38%,  $x^2$ =6.92, p=.01). African Americans were also less interested in donating their organs upon death (37% vs. 66%,  $x^2=95.13$ , p<.001) or through living donation (85% vs. 90%,  $x^2$ =6.88, p=.01) than Caucasians.

To reduce health disparities, tailored health education correcting diabetes misinformation and emphasizing the importance of organ donation needs to be made accessible to these communities.

## COMPUTERIZED ADAPTIVE ASSESSMENTS OF HEALTH-RELATED QUALITY OF LIFE AMONG HEMODIALYSIS PATIENTS

Anastasia E. Raczek<sup>1</sup>, John E. Ware, Jr.<sup>1</sup>, Klemens B. Meyer<sup>2,3</sup>, Michelle M. Chapman<sup>2,3</sup>, Asha P. Masurekar<sup>3</sup>, Renee N. Saris-Baglama<sup>1</sup>. <sup>1</sup>· QualityMetric Incorporated, Lincoln, RI, USA; <sup>2</sup>· Tufts-New England Medical Center, Boston, MA, USA; <sup>3</sup>· Dialysis Clinic, Inc., Boston, MA, USA.

Patient-reported assessments of health-related quality of life (HRQOL) are essential for understanding disease burden and treatment benefit. However, most assessment tools are impractical for routine use and do not meet clinical standards of precision. To address these issues, in an NIH-funded study we used item response theory (IRT) and computerized adaptive testing (CAT) methods to develop prototype software (CKD-CAT) for measuring three HRQOL domains of importance in kidney disease (Effects of Kidney Disease, Sleep Functioning, Bodily Pain) and field-tested it in a sample of hemodialysis patients (N=49) undergoing treatment. A 63-item static survey and the CKD-CAT were completed in random order and results were compared. CAT administrations achieved comparable score precision with fewer items ( $\underline{M}=15.2$ ,  $\underline{SD}=1.5$ ) and a significant reduction in administration time (M=6.62 min, <u>SD</u>=4.88 vs. <u>M</u>=14.08 min, <u>SD</u>=6.64). Patients preferred the CKD-CAT (57%) over the static survey (25%) but many had minimal or no previous computer experience and instinctively touched the computer screen to indicate their responses to items. A tablet touch screen PC was easier to use than a laptop with a hand-held mouse, which frequently got entangled with patients' dialysis tubing. We conclude that the use of IRT and CAT technology is likely to yield practical and precise assessment of HRQOL if patient interfaces are customized to meet the needs of the specific population and setting. Further development of the CKD-CAT is planned to broaden its application to all patients with CKD regardless of disease severity and treatment modality. The resulting tool will allow clinicians to routinely measure HRQOL, with the precision required to assess change in HRQOL with kidney disease progression, and to apply its results to patient care.

## THE FLUID ADHERENCE PROJECT: THE INFLUENCE OF SOCIAL WORK INTERVENTION IN HEMODIALYSIS

<u>Tiffany Washington</u>, Health Systems Management-Northside Dialysis Center, Winston Salem, NC, USA

Excessive fluid gains among hemodialysis patients continue to concern renal professionals. Excessive fluid gains often lead to cardiac complications and uncomfortable treatments (e.g., cramping).

This single subject design examined the influence of social work intervention on a patient who experiences consistent excessive fluid gains. The patient received two 16-ounce water bottles and was instructed to fill each water bottle each morning with two drinks reasonable to his renal diet. The patient was instructed to drink no more than the 32-ounce total per day for a duration of two weeks. Social work interventions included a calendar for daily reminders, ongoing encouragement, and a small incentive to complete the project.

The average pre-weight for the patient two weeks prior to the project was 170 pounds. During the two weeks of the project the patient's average pre-weight decreased to 167.7. This was an average decrease of 2.3 pounds for this patient over a two week period, with a weight differential (+/-) of 1.5 pounds. The patient's dry weight of 161 remained constant. It did not change at any point two weeks prior to the project or the two weeks of the project.

This study offers several implications for social work practice. It promotes future research using similar projects with more patients. It encourages renal professionals to look at how other variables such as blood pressure and treatment complications are affected by a decrease in fluid gains. Additionally, this study emphasizes the importance of consulting with a multidisciplinary team when assessing biopsychosocial factors of patients. Social work intervention with hemodialysis patients can encourage lesser fluid gains.