

Missouri Kidney Program

University of Missouri Health System

Patient Education Program Summary Report



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METHODS

The Missouri Kidney Program's (MoKP) Center for Chronic Kidney Disease Education Patient Education Program (PEP) classes began in 1983 with the goal of educating individuals diagnosed with chronic kidney disease and their families. From July 1, 2008 to June 30, 2009, 204 individuals diagnosed with chronic kidney disease and 183 of their family members and friends attended PEP classes. Of these patients, 149 (73%) agreed to participate in a study assessing their transplant knowledge and decision-making through a partnership with Washington University School of Medicine.

Sample Selection

This report examines all survey data collected from all individuals with chronic kidney disease who completed all or at least some portion of the survey. Participation in the PEP classes is voluntary, thus individuals attending were not selected at random from the population of all individuals diagnosed with chronic kidney disease in Missouri or border states.

Survey Administration

PEP classes were held on two weekend afternoons. Patients attending were asked to complete a "pre-survey" containing demographic, treatment interest, and knowledge questions before hearing presentations. After hearing the presentations, patients were asked to complete the "post-survey" which contained the same questions about treatment interest and knowledge that they had previously completed. The post-survey also asked patients to evaluate the information provided, the patient and professional speakers who presented and how prepared they felt to make an informed decision about different treatments.

Missing Data

Patients who participated in PEP did not always attend every presentation. Some patients did not answer every question. Some did not return a survey. Each table and analysis is limited by the number of patients who responded to any question.

Data Coding

The majority of variables used in the data analysis were coded identically to the survey instrument. However, the continuous variable, age, was recoded into age categories consistent with the United States Renal Data System (USRDS). For the univariate and multivariate analyses, we dichotomized demographic variables where sample sizes in some cells were low (less than 10 individuals) to create better statistical models.

Resident zip codes were classified into rural/urban geographic designations based on Rural-Urban Commuting Area codes developed by the WWAIMI Rural Health Research Institute (RHRC), HRSA's Office of Rural Health Policy and the Department of Agriculture's Economic Research Service¹. Based on previous research², we used a three category classification, modifying RHRC four-category classification (urban, large rural, small rural and isolated) by combining small rural and isolated. The final categories were:

- Urban: Greater than 50,000 population or census tracts with substantial commuter flows (30%–50%) to such an area
- Large rural: Between 10,000 and 49,999 population or census tracts with commuter flow to such an area
- Small rural: Less than 10,000 population without substantial commuter flow

¹WWAMI Rural Health Research Center. Online data. Accessed December 2009 from <http://depts.washington.edu/uwruca/>; ² VanBibber, Zuckerman, Finlayson (2006). Rural versus urban inpatient case-mix difference in the US. *Journal of American College of Surgeons*, 203, 812-16.

ANALYSES & KEY RESEARCH QUESTIONS

All statistical analyses were performed using the statistical analysis software SPSS 17.0 (SPSS, 2009). All figures and tables were prepared using SPSS and Microsoft Word 2007. We conducted frequency and descriptive statistics to summarize data into categories to examine key relationships. Significant differences are shown when $p < .05$. We conducted inferential statistics to explore certain key research questions, specifically:

1. Did the knowledge of patients significantly improve from pre- to post-class?
2. Did patients' interest in types of dialysis differ from pre- to post-class?
3. Did the type of dialysis patients would choose vary as a function of age, sex, race, education level, area of residence or whether they lived with someone?
4. Did patients' confidence to take transplant-related actions differ from pre- to post-class?
5. Did transplant confidence vary as a function of age, sex, race, educational level, area of residence or whether they lived with someone?
6. Did patients' positive attitudes about transplant differ from pre- to post-class?
7. Did positive attitudes about transplant vary as a function of age, sex, race, educational level, area of residence or whether they lived with someone?
8. Did patients' negative attitudes about transplant differ from pre- to post-class?
9. Did negative attitudes about transplant vary as a function of age, sex, race, educational level, area of residence or whether they lived with someone?
10. Did patients feel they could make informed decisions about dialysis and transplant after the class?

OVERVIEW OF KEY FINDINGS

I. Patient Education Program Attendance

- Compared to last year, there was a 63% increase in class attendance (125 patients during 2007-2008 vs. 204 patients during 2008-2009).
- Last year Diet and Kidney Disease showed the highest patient attendance with 90%; this year Introduction to Kidney Disease showed the highest patient attendance with 92%.
- The last class on Day 2 showed the least attendance. Last year Kidney Transplant had 79% patient attendance and this year Hemodialysis had 83% patient attendance.

II. Patient Demographics

- The mean and median age of patients was 63 years.
- Most patients were Caucasian (80%) or African-American (13%). Compared to last year, the number of African-Americans attending the PEP program was lower but this year included more areas of Missouri with higher proportions of Caucasians.
 - Examining all 204 patients, 19% were African-American, 3.4% were Hispanic and 2.7% marked their race as “Other”, which is still lower than last year.
 - However, after examining only the 126 (out of the total 204) patients that attended in Kansas City and Saint Louis, the percent of African-American patients this year was 29% compared to 27% last year.
- The majority of patients were from urban areas (73%). 15.8% of patients reside in small rural communities with fewer than 10,000 residents.
- There were more males (55%) than females (44%).
- 33% of patients had high school education or less, while 32% of patients had a college degree or higher.
- 106 patients (72%) were not employed, whereas 42 (28%) were employed.
- The majority were living with someone (87%) and, on average, had at least 1 family member or friend attend the PEP class with them.
- Most patients (69%) had been diagnosed with kidney disease in the last 5 years, of which 24% had been diagnosed in the past year.
- Most patients (53%) reported their current health was good or better.

III. Family Members and Friends' Demographics

- There were 126 family members and friends who accompanied the 149 patients who consented. The majority of patients (54%) had at least 1 family member or friend attend.
- Family members and friends of patients in attendance were spouses (62%), children (16%), parents (7%), friends (7%), siblings (5%) or other relationship (3%).
- The mean age of family members and friends in attendance was 57 years.
- Most family members and friends were female (72%) and white (90%). If we examine all 183 family members and friends who attended, of those who reported race (N=178), the majority were Caucasian (80%) or African-American (13%).

IV. Dialysis Status

- Most patients were not on dialysis at pre-test (92%).
- All but 2 of the 12 individuals on dialysis at pre-test were on center hemodialysis (83%). One person was on continuous cycling peritoneal dialysis (8%) and one person was on home hemodialysis (8%).
- Of the 21 (15%) patients who had received an access for dialysis at pre-test, they had the access placed either in their arm (71%), chest/neck area (19%), stomach (5%), or both arm and chest/neck area (5%).

- When comparing dialysis preferences from pre- to post-test, patients' preference for peritoneal dialysis significantly increased (14% vs. 42%, $p < .001$), while their interest in center (12% vs. 15%, $p > .05$) and home (6% vs. 8%, $p > .05$) hemodialysis did not significantly change.
- After the class, 18% of patients progressed at least one stage of readiness towards talking with their family about their dialysis options.

V. Knowledge about Kidney Disease: Pre- and Post-Class

- Compared to their pre-test knowledge, individuals were able to answer more kidney disease questions correctly at post-test (71% versus 86% answered correctly). Patients' mean knowledge significantly improved from pre- to post-class (16 vs. 19 questions out of 24, $t = 7.57$, $p < .001$).
- From pre- to post-test, the greatest increases in knowledge were for the specific questions:
 - Hemodialysis 3 times a week removes 10-15% of wastes that healthy kidneys remove (53% vs. 96% correct)
 - Medicare covers a live donor's surgery (59% vs. 94% correct)
 - Kidney transplants that occur before a patient starts dialysis generally last longer than other transplants (52% vs. 87% correct)

VI. Kidney Transplant

- 84% of patients had not been evaluated for a kidney transplant prior to class.
- 79% of patients had never spoken to a transplant coordinator.
- 7% of patients stated they were currently on the transplant waiting list.
- The majority of patients did not have any living donor offers (60%) prior to class.
- Confidence to Take Transplant-Related Actions:
 - Patients showed the greatest increase in confidence with these items: "complete medical tests to get on the deceased donor waiting list" (21% vs. 59%, $p < .01$), and "tell people you would like to have a living donor transplant" (20% vs. 39%, $p > .05$).
 - Patients showed no significant difference in mean transplant confidence from pre- to post-class (6.5 vs. 6.9 out of 12, $t = 1.55$, $p > .05$).
- Positive and Negative Attitudes about Transplant:
 - Patients showed a significant increase in mean score reflecting positive attitudes about transplant from pre- to post-class (5.0 vs. 5.5 out of 8, $t = 3.28$, $p < .001$).
 - Patients showed the greatest change in positive attitudes about transplant with the item "with a transplant, I could eat and drink the way I want" from pre- to post-test (46% vs. 62%, $p < .01$).
 - Patients showed a significant decrease in mean score reflecting negative attitudes about transplant from pre- to post-test (10.5 vs. 9.8 out of 16, $t = -2.38$, $p < .05$).
 - Patients showed the greatest change in negative attitudes about transplant with the item "I could have health problems due to the transplant" from pre- to post-test (49% vs. 38%, $p > .05$), which was not significant.
- Transplant-Related Actions:
 - Out of a total of 7 different transplant-related actions, on average, 23% of patients progressed at least 1 stage towards taking a transplant action after the class from pre- to post-class.
 - From pre- to post-test, at least 25% of patients progressed at least one stage towards getting on the deceased donor waiting list, accepting someone's offer to donate, or asking someone to be their living donor.

VII. Informed Decision-Making

- At the conclusion of class, 93% of patients stated they could make an informed decision about their dialysis options.
- 86% of patients agreed they could make an informed decision about deceased donation.
- 83% of patients agreed they could make an informed decision about living donation.

VIII. Evaluation

- 100% of patients said they would recommend the Missouri Kidney Program Patient Education Program to someone else who has kidney disease.
- Professional (81% excellent) and patient (77% excellent) speakers for the Transplant class received the highest evaluation ratings.

IX. Patient Demographics by Class Location

- There were no significant differences in age, gender, education completed, level of social support or current employment status by location.
- Race was significantly different by location with more racial/ethnic minorities attending in St. Louis (33%) and Kansas City (24%) compared to other locations (Springfield=6%, Joplin=0%, Warrensburg=13%, $p=.05$).
 - With all 204 patients, more minority/ethnic groups attending in St. Louis (38%) and Kansas City (37%) compared to Warrensburg (13%), Springfield (7%) and Joplin (0%).
- Area of residence was significantly different by location with more patients from urban areas attending in St. Louis (85%) and Kansas City (92%) compared to other locations (Springfield=62%, Joplin=31%, Warrensburg=13%, $p<.001$). The majority of patients who attended in Warrensburg were from large rural areas (75%).

X. Treatment Information by Class Location

- Dialysis type was significantly different by location with more dialysis patients attending in Kansas City (94%), St. Louis (95%) Springfield (91%) and Joplin (85%) compared to Warrensburg (75%, $p<.05$). Additionally, there were more patients receiving center hemodialysis in Joplin (15%) compared to Kansas City (4%) and St. Louis (5%).
- Pre-test transplant confidence was significantly different by location with patients in Springfield (Mean=4.9) showing less confidence than in other locations (Kansas City=7, St. Louis=7.2, Joplin=6.5, Warrensburg=6.4, $p<.05$).
- Pre-test positive attitudes about transplant were higher among patients in St. Louis (Mean=5.8) and Kansas City (5.1) compared to Springfield (4.3), Joplin (4.6) or Warrensburg (4.3).
- Patients in Springfield (31%) and Kansas City (29%) progressed at least 1 stage from pre- to post-class for readiness to get on the deceased donor waiting list compared to other areas (St. Louis=8%, Joplin=8%, Warrensburg=12%, $p<.05$).
- Patients in Springfield (43%) progressed at least 1 stage from pre- to post-class for readiness to accept someone's offer to donate compared to other locations (Kansas City=9%, St. Louis=15%, Joplin=31%, Warrensburg=25%, $p<.01$).

XI. Patients' Recommendations for Program Improvement

- Two patients stated professional speakers read too much and were dull.
- Two patients in Springfield said the sound on the machine needs to be louder.
- Eighteen patients stated the program was "very good" or "excellent."
- Fifteen patients stated the program was "very informative."

XII. MoKP Staff Recommendations for Program Improvement

- Due to the efforts to increase participation of rural patients, there was an increase in the percentage of Caucasian patients and a reduction in African-Americans as an overall percentage of total class attendees compared to FY2008. Re-examination of attendance in St. Louis and Kansas City found an increase in the percentage of African-Americans attending PEP in those areas from 27% to 29%.
- There were 3 questions where patients' knowledge declined instead of improved. We recommend to review the slides to assure that they cover those points adequately.
- Additionally, a few of these patients had completed their post-survey by phone or mail days after the class which could have affected their memory of the items. We recommend not allowing patients to complete surveys outside of class.

Answers to Key Research Questions

1. Did the patient's knowledge significantly improve from pre- to post-class? **Yes.** *Patients' knowledge significantly increased from pre- to post-class (16 vs. 19 questions out of 24, $t = 7.57$, $p < .001$).*
2. Did patients' interest in types of dialysis differ from pre- to post-class? **Yes.** *When comparing dialysis preferences from pre- to post-test, patients' preference for peritoneal (14% vs. 42%) significantly increased. There was also a significant decrease in the number of PEP patients who were unsure about which type of dialysis they would have (61% vs. 26%).*
3. Did the type of dialysis they would choose vary as a function of age, sex, race, education level, area of residence or whether they lived with someone? **No.** *Type of dialysis patients would choose post-class did not vary as a function of age, race, educational level, area of residence or whether they lived with someone.*
4. Did patients' confidence to take transplant-related actions differ from pre- to post-class? **No.** *Patients' mean transplant confidence did not significantly differ from pre- to post-class, although there was a slight increase.*
5. Did transplant confidence vary as a function of age, sex, race, educational level, area of residence or whether they lived with someone? **Yes for race.** *At post-test, African-Americans (Mean=8.6) had significantly more transplant confidence compared to Whites (Mean=6.7); however, confidence change from pre- to post-test was not different by race. From pre- to post-class, mean transplant confidence did not vary by age, sex, educational level, area of residence, or whether they lived with someone.*
6. Did patients' positive attitudes about transplant differ from pre- to post-class? **Yes.** *Patients' mean positive attitudes about transplant significantly increased from pre- to post-class.*
7. Did positive attitudes about transplant vary as a function of age, sex, race, educational level, area of residence or whether they lived with someone? **No.** *From pre- to post-class, mean positive attitudes about transplant did not vary by age, sex, race, educational level, area of residence, or whether they lived with someone.*
8. Did patients' negative attitudes about transplant differ from pre- to post-class? **Yes.** *Patients' mean negative attitudes about transplant significantly decreased from pre- to post-class.*
9. Did negative attitudes about transplant vary as a function of age, sex, race, educational level, area of residence or whether they lived with someone? **No.** *From pre- to post-class, mean negative attitudes about transplant did not vary by age, sex, race, educational level, area of residence, or whether they lived with someone.*
10. Did patients' feel they could make informed decisions about dialysis and transplant after the class? **Yes.** *Over 90% of patients felt they could make an informed decision about their dialysis options. Additionally, 86% felt they could make an informed decision about deceased donation and 82% felt they could make an informed decision about living donation.*

STATISTICAL ANALYSES

I. Patient Education Program Attendance

Total patients with kidney disease who attended the class:	204
• Total patients with kidney disease who attended all six sessions:	152 (74%)
Total family and friends of kidney patients who attended the class:	183
Total patient, family member and friend attendance:	387

A. Patients, Family Members and Friends by Location

Location	Patients (#)	Percent	Family Members & Friends (#)	Percent	Total (#)	Total Percent
Kansas City	71	34.8%	70	38.3%	141	36.4%
St. Louis	55	27.0%	53	29.0%	108	27.9%
Springfield	44	21.6%	37	20.2%	81	20.9%
Joplin	26	12.7%	20	10.9%	46	11.9%
Warrensburg	8	3.9%	3	1.6%	11	2.9%
Total	204	100.0%	183	100.0%	387	100.0%

B. Class Attendance of Patients

	Intro to Kidney Disease	Diet & Kidney Disease	Financing & Coping	Kidney Transplant	Peritoneal Dialysis	Hemodialysis
Yes	188 (92.2%)	184 (90.2%)	176 (86.3%)	178 (87.3%)	174 (85.3%)	169 (82.8%)
No	16 (7.8%)	20 (9.8%)	28 (13.7%)	26 (12.7%)	30 (14.7%)	35 (17.2%)
Total	204 (100.0%)	204 (100.0%)	204 (100.0%)	204 (100.0%)	204 (100.0%)	204 (100.0%)

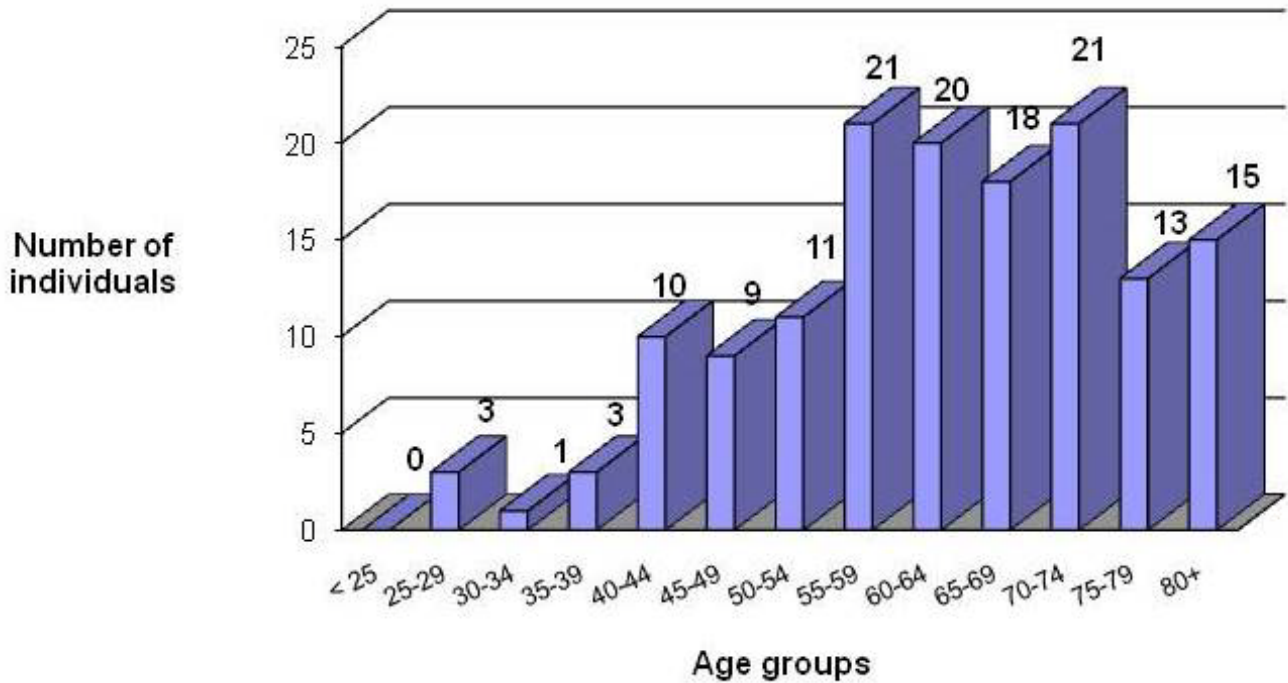
C. Study Participation*

Total patients with kidney disease who consented to be a part of the study:	149
Total patients with kidney disease who completed the pre-survey w/ consent:	146 (98%)*
Total patients with kidney disease who completed the post-survey w/ consent:	133 (89%)*

* For all analyses (Sections II – XI), only patients who consented and answered individual questions are included.

II. Patient Demographics

A. Age [Average Age: 63 years (SD = 13 years)]



SD=Standard Deviation

B. Gender

Male	82	55.0%
Female	67	45.0%
Total	149	100.0%

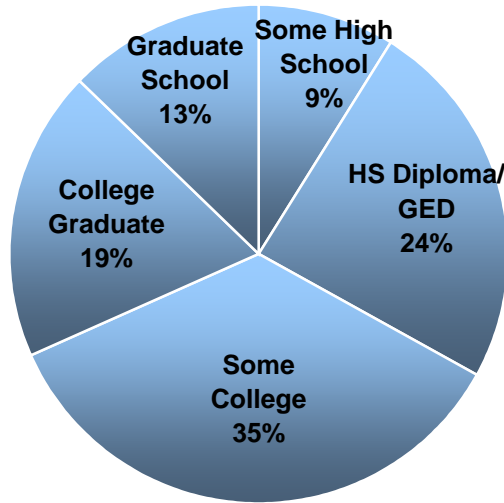
C. Race

White	120	80.5%
Black	20	13.4%
Hispanic	5	3.4%
Other	4	2.7%
Total	149	100.0%

D. Availability of Social Support

Living with someone	128	87.1%
Living alone	19	12.9%
Total	147	100.0%

E. Education



(N=148)

F. Employment

Not employed	106	71.6%
Employed	42	28.4%
Total	148	100.0%

G. Area of Residence*

Urban	106	72.6%
Large Rural	17	11.6%
Small Rural	23	15.8%
Total	146	100.0%

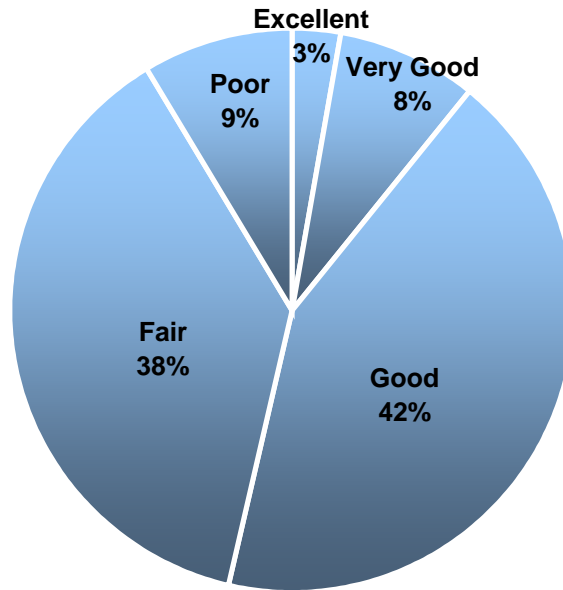
* Urban: Greater than 50,000 population or census tracts with substantial commuter flows (30%–50%) to such an area; Large rural: Between 10,000 and 49,999 population or census tracts with commuter flow to such an area; Small rural: Less than 10,000 population without substantial commuter flow (VanBibber et al., 2006)

H. Diagnosis Information

H1. How long ago were you diagnosed with Kidney Disease?

Less than 1 year	33	24.1%
1-5 years	62	45.2%
Greater than 5 years	42	30.7%
Total	137	100.0%

H2. In general, would you say your health is...



(N=148)

III. Family Members and Friends' Demographics

A. Number of Family Members and Friends Present per Patient

Mean: 0.85 family members or friends (SD= 0.8)

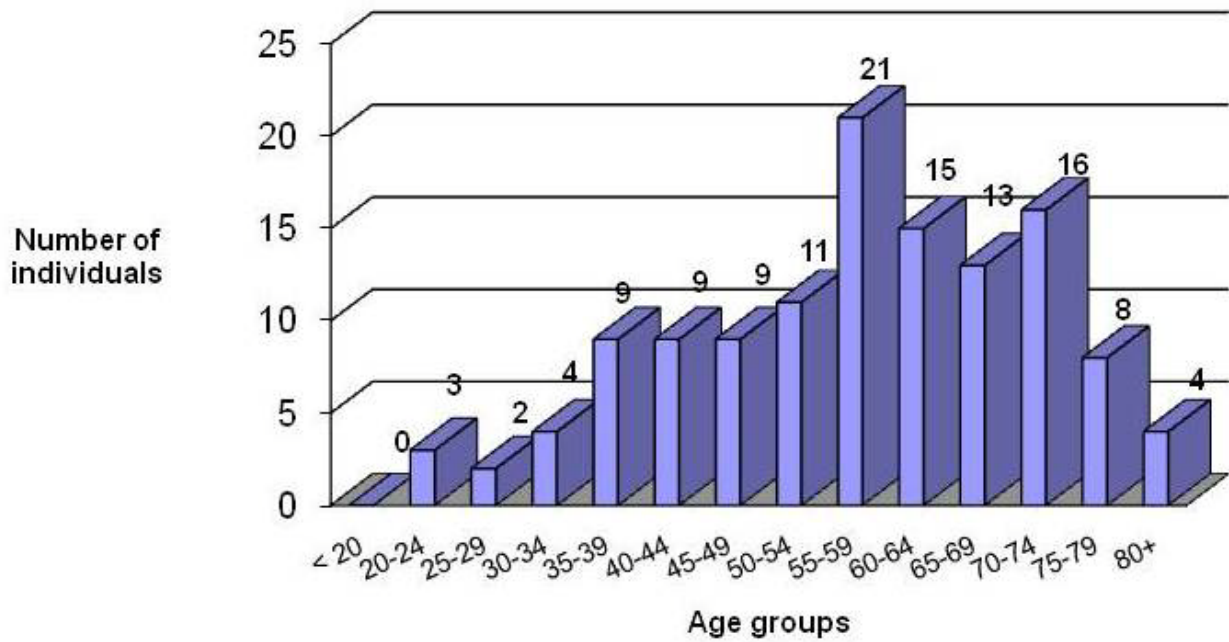
Median: 1 family member or friend (Range=0-4)

Mode: 1 family member or friend

B. Relationship to Patient

Spouse	78	61.9%
Child	20	15.9%
Parent	9	7.1%
Friend	9	7.1%
Sibling	6	4.8%
Other	4	3.2%
Total	126	100.0%

C. Age [Average Age: 57 years (SD = 14 years)]



SD=Standard Deviation

D. Gender

Female	91	72.2%
Male	35	27.8%
Total	126	100.0%

E. Race

White	110	90.2%
Black	7	5.7%
Hispanic	3	2.5%
Other	2	1.6%
Total	122	100.0%

F. Area of Residence

Urban	75	66.4%
Large Rural	14	12.4%
Small Rural	24	21.2%
Total	113	100.0%

IV. Dialysis Status

A. Dialysis and Access

A1. Where is your dialysis access?

	Frequency	Percent
No Access	122	85.3%
Access	21	14.7%
Access type, if one:		
<i>Arm</i>	<i>15</i>	<i>71.4%</i>
<i>Chest/Neck</i>	<i>4</i>	<i>19.0%</i>
<i>Arm and Chest/Neck</i>	<i>1</i>	<i>4.8%</i>
<i>Stomach</i>	<i>1</i>	<i>4.8%</i>
Total	21	100.0%

A2. When did you start dialysis?

	Frequency	Percent
Not yet on dialysis	132	91.7%
On dialysis	12	8.3%
Began dialysis		
<i>1984</i>	<i>1</i>	<i>8.3%</i>
<i>2006</i>	<i>1</i>	<i>8.3%</i>
<i>2007</i>	<i>2</i>	<i>16.7%</i>
<i>2008</i>	<i>6</i>	<i>50.0%</i>
<i>2009</i>	<i>2</i>	<i>16.7%</i>
Total	12	100.0%

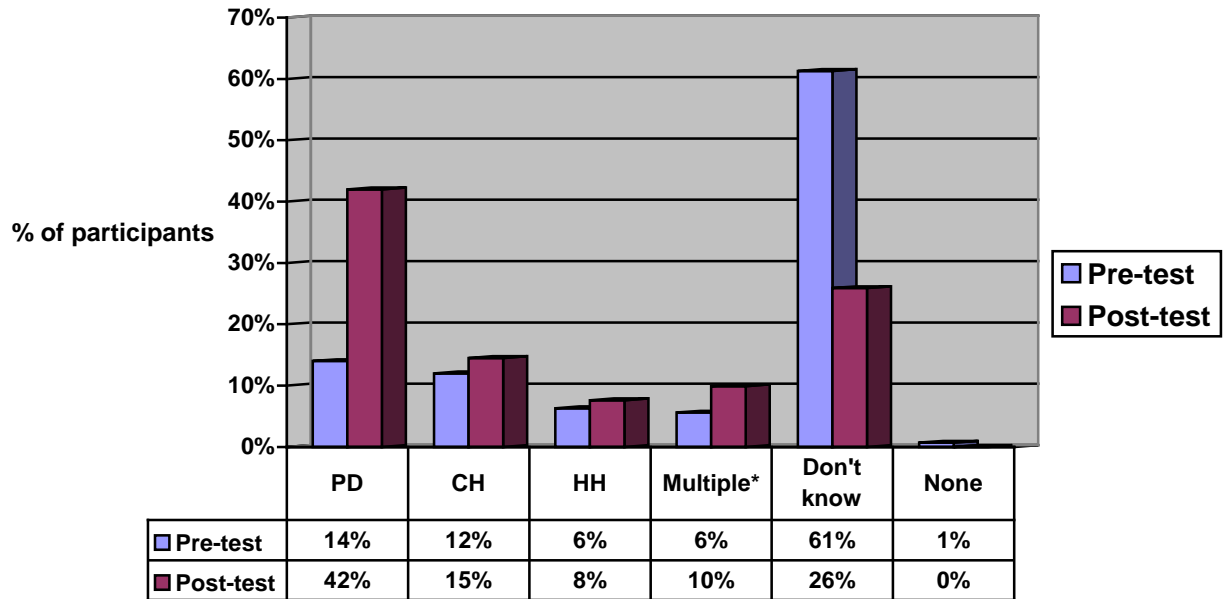
A3. What type of dialysis do you do?

CH = Center Hemodialysis **PD** = Peritoneal Dialysis **HH** = Home Hemodialysis

Dialysis type	Frequency	Percent
CH	10	83.3%
PD	1	8.3%
HH	1	8.3%
Total	12	99.9%

A4. If you have to do dialysis in the future, which treatment would you choose?

PD = Peritoneal Dialysis **CH** = Center Hemodialysis **HH** = Home Hemodialysis



*Multiple: Patients who chose mixed modes (e.g., CAPD & home hemodialysis)

Using the McNemar test to determine if there were any significant changes in dialysis choice from pre- to post-test, we found that interest in peritoneal dialysis (14% vs. 42%, $p < .001$) significantly increased, while interest in center hemodialysis (12% vs. 15%, $p > .05$) and home hemodialysis (6% vs. 8%, $p > .05$) did not significantly change. There was no significant change for patients who preferred more than one modality (6% vs. 10%, $p > .05$). Lastly, there was a significant decrease in the number of PEP patients who were unsure about which type of dialysis they would have (61% vs. 26%, $p < .001$).

B. Dialysis-Related Actions

B1. Pre- and Post-Class Dialysis Actions

<i>At this point, do you plan to:</i>	I am doing this or have done this			I plan to do this within 1-6 months			I don't plan to do this		
	% Pre	% Post	% Chg	% Pre	% Post	% Chg	% Pre	% Post	% Chg
Talk with a medical professional you trust about your treatment options?	80.3	76.2	-4.1	19.0	23.0	+4.0	0.7	0.8	+0.1
Learn more about your dialysis options?	78.6	76.9	-1.7	18.6	19.2	+0.6	2.8	3.8	+1.0
Talk with your family about your dialysis options?	66.7	69.7	+3.0	25.7	25.0	-0.7	7.6	5.3	-2.3

B2. Pre- and Post-Class Dialysis Stage of Change

Action	% Progressed \geq 1 Stage Towards Action	% No Action Change	% Regressed \geq 1 Stage Away from Action
Talk with a medical professional you trust about your treatment options?	9.4	75.6	14.9
Learn more about your dialysis options?	13.9	71.5	14.6
Talk with your family about your dialysis options?	17.6	71.8	10.7

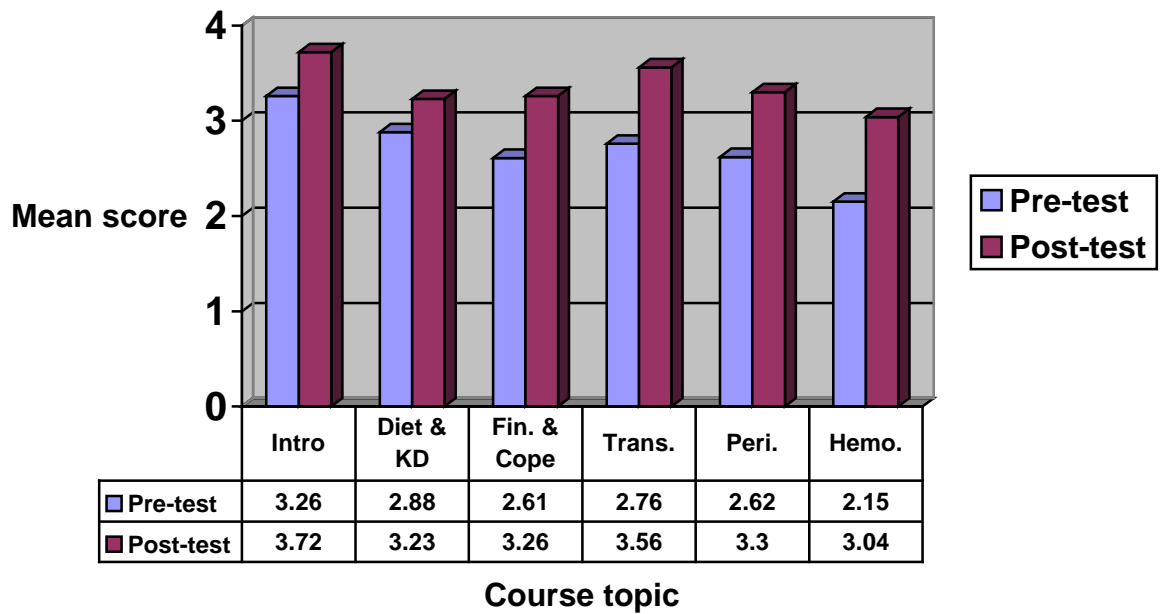
V. Knowledge about Kidney Disease

A. Pre- and Post-Class Knowledge

Question	Pre-Test % Correct	Post-Test % Correct	% Change
Introduction to Kidney Disease			
Kidneys control blood pressure and anemia. (T)	87.9	94.2	+ 6.3
Poor appetite and headache can be symptoms of uremia. (T)	87.2	95.7	+ 8.5
Nothing can slow down how fast kidneys fail. (F)	80.0	89.1	+ 9.1
People with kidney failure can choose not to treat it. (T)	77.5	95.7	+18.2
Diet and Kidney Disease			
Transplant patients can eat anything they want. (F)	82.1	76.6	- 5.5
People on peritoneal dialysis must eat more protein than those on hemodialysis. (T)	34.7	63.8	+29.1
Fluid gains don't matter because dialysis takes it off. (F)	94.2	92.7	- 1.5
Over-the-counter medicines and herbs are safe to use. (F)	89.7	99.3	+ 8.1
Financing and Coping with Kidney Disease			
Medicare covers a live donor's surgery. (T)	59.0	93.8	+34.8
People on dialysis can't work full-time. (F)	81.5	88.8	+ 7.3
Symptoms of uremia can look like depression. (T)	78.0	96.9	+18.9
Medicare covers transplant drugs forever if you have Medicare due to kidney failure only. (F)	59.3	60.3	+ 1.0
Kidney Transplant			
Deceased donor kidneys work longer than kidneys from living donors. (F)	93.8	98.5	+ 4.7
Kidney transplants that occur before a patient starts dialysis generally last longer than other transplants. (T)	52.4	86.8	+34.4
Only half of all transplanted kidneys work for one year or more. (F)	83.5	95.5	+12.0
Most living donors use their own health insurance to pay for donation testing and hospitalization costs. (F)	55.4	84.4	+29.0
Peritoneal			
Peritoneal dialysis requires a helper. (F)	59.2	84.1	+24.9
People who are blind cannot do peritoneal dialysis. (F)	79.4	83.8	+ 4.4
Hernias can be a problem on peritoneal dialysis. (T)	62.1	86.2	+24.1
It's harder to travel on peritoneal than hemodialysis. (F)	72.6	89.6	+17.0
Hemodialysis			
A catheter is the best kind of hemodialysis access. (F)	70.2	79.2	+ 9.0
Hemodialysis 3 times a week removes 10-15% of wastes that healthy kidneys remove. (T)	52.8	96.2	+43.4
You must do center hemodialysis the same days and times. (T)	69.0	67.7	- 1.3
You must do home hemodialysis the same days and times. (F)	37.0	68.9	+31.9
TOTAL PERCENT OF QUESTIONS CORRECT	70.8%	86.2%	+ 15.4%

*Patients who attended sessions that corresponded to each section of questions were included in the percentages. No missing values were included because patients could have failed to complete the post-test portion entirely or skipped a question.

B. Knowledge by Course Topic



COURSE TOPIC	Pre-Test Mean # Correct (SD)	Post-Test Mean # Correct (SD)	Significance
Introduction to Kidney Disease	3.26 (0.9)	3.72 (0.6)	t = 5.81, p < .001
Diet and Kidney Disease	2.88 (0.8)	3.23 (0.8)	t = 4.30, p < .001
Financing and Coping with Kidney Disease	2.61 (1.0)	3.26 (0.9)	t = 6.63, p < .001
Kidney Transplant	2.76 (0.9)	3.56 (0.7)	t = 8.62, p < .001
Peritoneal Dialysis	2.62 (1.1)	3.30 (1.0)	t = 7.02, p < .001
Hemodialysis	2.15 (0.8)	3.03 (0.9)	t = 9.47, p < .001
TOTAL MEAN QUESTIONS CORRECT	15.82 (3.4)	19.02 (4.4)	t = 7.57, p < .001

* Mean score out of a possible 24.

Patients were able to answer significantly more questions correctly in each topic post-class class compared to their pre-class scores.

VI. Kidney Transplant

A. Prior Pursuit of Transplant

A1. In the last year, have you ever spoken to a transplant coordinator?

	Frequency	Percent
No	115	78.8%
Yes	31	21.2%
Transplant Center		
<i>Barnes-Jewish</i>	16	53.3%
<i>U of Kansas</i>	5	16.7%
<i>St. Louis U</i>	4	13.3%
<i>Research</i>	1	3.3%
<i>St. Lukes</i>	1	3.3%
<i>U of Missouri Columbia</i>	1	3.3%
<i>Mayo (Rochester, NY)</i>	1	3.3%
<i>Allen CIGNA</i>	1	3.3%
Total	30	100.0%

(Missing=1)

A2. Has a healthcare professional at a transplant center ever said you were not eligible for kidney transplant?

GFR = Glomerular Filtration Rate **PKD** = Polycystic Kidney Disease

	Frequency	Percent
No	138	95.2%
Yes	7	4.8%
Reason		
<i>Cancer</i>	2	28.6%
<i>Poor health</i>	1	14.3%
<i>Weight</i>	1	14.3%
<i>GFR > 20%</i>	1	14.3%
<i>PKD</i>	1	14.3%
<i>Not specified</i>	1	14.3%
Total	7	100.0%

A3. Have you ever been evaluated for a kidney transplant?

	Frequency	Percent
No	125	84.5%
Yes	23	15.5%
Total	148	100.0%

A4. Are you on the kidney transplant waiting list now?

	Frequency	Percent
No	131	88.5%
Yes	10	6.8%
Don't Know	7	4.7%
Total	148	100.0%

A5. Have you ever had a kidney transplant?

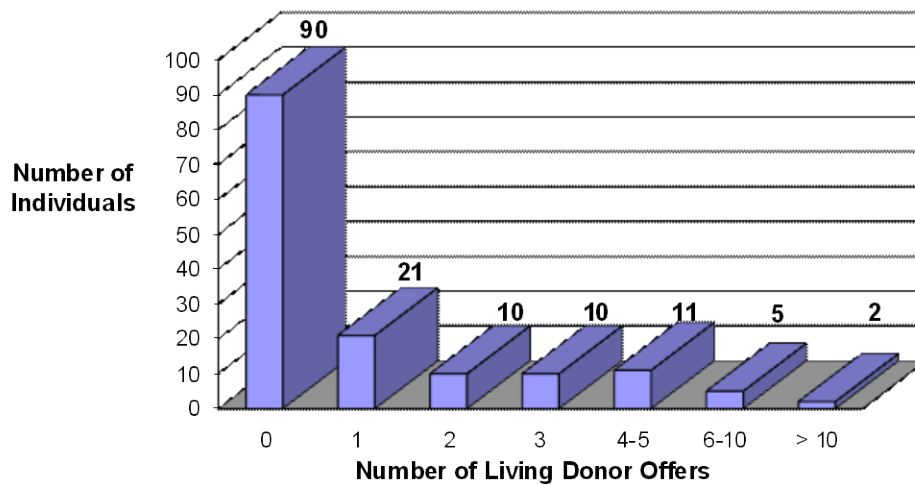
	Frequency	Percent
No	146	98.0%
Yes	3	2.0%
Total	149	100.0%

A6. How many people have offered to be living donors for you, so far?

Mean: 1.49 donor offers (SD = 4.5)

Median: 0 donor offers (Range=0-50)

Mode: 0 donor offers



B. Confidence to Take Transplant-Related Actions

B1. Pre- and Post-Class Transplant Confidence

<i>How confident are you that you could:</i>	Pre-Test % Very/Completely Confident	Post-Test % Very/Completely Confident	% Change
Complete medical tests to get on the deceased donor waiting list?*	21.3	58.9	+ 37.6
Tell people you would like to have a living donor transplant?	20.2	38.5	+ 18.3
Ask someone to be your living donor?	26.4	26.1	- 0.3
TOTAL PERCENT VERY/ COMPLETELY CONFIDENT	22.6 %	41.2 %	+ 18.6%

*p < .01

B2. Overall Transplant Confidence

	Mean Confidence (SD)	Range
Pre-Test	6.54 (2.7)	3-12
Post-Test	6.86 (2.6)	3-12

* Mean score out of a possible 12.

We utilized a paired t-test to see if there were significant differences in confidence from pre- to post-test.

Patients did not differ in total confidence from pre- to post-test, t = 1.55, p > .05.

C. Positive Attitudes about Transplant

C1. Pre- and Post-Class Positive Attitudes about Transplant

<i>How important are these statements to your transplant decision?</i>	Pre-Test % Moderately/Very Important	Post-Test % Moderately/Very Important	% Change
With a transplant, I could eat and drink the way I want.	46.4	62.2	+ 15.8
A living donor transplant could happen more quickly because I won't wait for a kidney from the waiting list.	48.2	60.6	+ 12.4
TOTAL PERCENT IMPORTANT	47.3 %	61.4 %	+ 14.1 %

C2. Overall Mean Positive Attitudes about Transplant

	Mean Pros (SD)	Range
Pre-Test	4.99 (1.8)	2-8
Post-Test	5.51 (1.7)	2-8

*Mean score out of a possible 8.

We utilized a paired t-test to see if there were significant differences in total positive attitudes from pre- to post-test. **Patients significantly differed in total positive attitudes from pre- to post-test, t = 3.28, p < .001.**

D. Negative Attitudes about Transplant

D1. Pre- and Post-Class Negative Attitudes about Transplant

<i>How important are these statements to your transplant decision?</i>	Pre-Test % Moderately/Very Important	Post-Test % Moderately/Very Important	% Change
If a transplant fails, it would have been a lot of work and pain for nothing.	42.4	35.4	- 7.0
I could have health problems due to the transplant.	48.6	38.1	- 10.5
The surgery would inconvenience the living donor's work or life too much.	63.0	57.0	- 6.0
I don't know how to bring up living donation with potential donors.	46.7	49.2	+ 2.5
TOTAL PERCENT IMPORTANT	50.2 %	44.9 %	- 5.3 %

D2. Overall Mean Negative Attitudes about Transplant

	Mean Pros (SD)	Range
Pre-Test	10.46 (3.2)	4-16
Post-Test	9.82 (2.8)	4-16

***Mean score out of a possible 16.**

We utilized a paired t-test to see if there were significant differences in total negative attitudes from pre- to post-test. **Patients significantly differed in total negative attitudes from pre- to post-test, $t = -2.38$, $p < .05$.**

E. Transplant-Related Actions

E1. Pre- and Post-Class Transplant Actions

<i>At this point, do you plan to:</i>	I am doing this or have done this			I plan to do this within 1-6 months			I don't plan to do this		
	% Pre	% Post	% Chg	% Pre	% Post	% Chg	% Pre	% Post	% Chg
Learn more about transplants?	67.1	65.1	-2.0	21.4	25.6	+4.2	11.4	9.3	-2.1
Talk with your family about whether you should get a transplant?	61.0	54.6	-6.4	17.0	28.5	+11.5	22.0	16.9	-5.1
Call a transplant center to start evaluation?	31.9	32.3	+0.4	27.5	42.5	+15.0	40.6	25.2	-15.6
Get on the deceased donor waiting list?	18.0	23.8	+5.8	36.1	42.8	+6.7	45.9	33.3	-12.6
Accept someone's offer to donate?	25.2	31.7	+6.5	26.0	35.7	+9.7	48.9	32.5	-16.4
Tell people you would like to have a living donor transplant?	23.1	30.7	+7.6	26.1	33.9	+7.8	50.7	35.4	-15.3
Ask someone to be your living donor?	20.8	29.6	+8.8	17.7	24.8	+7.1	61.5	45.6	-15.9

E2. Pre- and Post-Class Transplant Stage of Change

Action	% Progressed \geq 1 Stage Towards Action	% No Action Change	% Regressed \geq 1 Stage Away from Action
Learn more about transplants?	17.5	65.9	16.7
Talk with your family about whether you should get a transplant?	19.2	64.0	20.8
Call a transplant center to start evaluation?	23.7	70.5	5.7
Get on the deceased donor waiting list?	26.5	66.7	6.9
Accept someone's offer to donate?	28.0	64.0	7.9
Tell people you would like to have a living donor transplant?	24.1	67.5	8.3
Ask someone to be your living donor?	24.6	66.1	9.2

VII. Informed Decision-Making

At this point, I can make an informed decision about...

	% Agree
My dialysis options	93.3%
Whether to pursue deceased donation	86.5%
Whether to pursue living donation	82.7%

VIII. Evaluation

A. Referral

Would you recommend these classes to someone with kidney disease?

	Frequency	Percent
Yes	123	100.0%
No	0	0.0 %
Total	123	100.0%

B. Moderator & Professional Speaker Quality

	Moderator	Intro. to Kidney Disease	Diet and Kidney Disease	Financing and Coping	Transplant	Peritoneal Dialysis	Hemodialysis
Excellent	70 (72.9%)	90 (67.7%)	91 (68.4%)	90 (68.2%)	97 (80.8%)	95 (76.6%)	89 (72.4%)
Good	22 (22.9%)	38 (28.6%)	33 (24.8%)	37 (28.0%)	22 (18.4%)	26 (21.0%)	29 (19.5%)
Fair	4 (4.2%)	5 (3.7%)	8 (6.0%)	4 (3.0%)	1 (0.8%)	3 (2.4%)	4 (3.3%)
Poor	0 (0.0%)	0 (0.0%)	1 (0.8%)	1 (0.8%)	0 (0.0%)	0 (0.0%)	1 (0.8%)
Total	96 (100.0%)	133 (100.0%)	133 (100.0%)	133 (100.0%)	120 (100.0%)	124 (100.0%)	123 (100.0%)

C. Patient Speaker Quality

	Transplant (patient speakers OR video)	Peritoneal Dialysis	Hemodialysis
Excellent	96 (77.4%)	92 (71.9%)	87 (69.0%)
Good	25 (20.2%)	32 (25.0%)	36 (28.6%)
Fair	2 (1.6%)	4 (3.1%)	3 (2.4%)
Poor	1 (0.8%)	0 (0.0%)	0 (0.0%)
Total	124 (100.0%)	132 (100.0%)	126 (100.0%)

IX. Patient Demographics by Class Location

A. Age by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
< 25	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
25-29	2 (4.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (12.5%)	3 (2.1%)
30-34	0 (0.0%)	1 (2.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.7%)
35-39	0 (0.0%)	1 (2.6%)	2 (5.7%)	0 (0.0%)	0 (0.0%)	3 (2.1%)
40-44	3 (6.0%)	4 (10.3%)	2 (5.7%)	1 (7.7%)	0 (0.0%)	10 (6.9%)
45-49	4 (8.0%)	1 (2.6%)	3 (8.6%)	0 (0.0%)	1 (12.5%)	9 (6.2%)
50-54	6 (12.0%)	2 (5.1%)	3 (8.6%)	0 (0.0%)	0 (0.0%)	11 (7.6%)
55-59	7 (14.0%)	6 (15.4%)	4 (11.4%)	3 (23.1%)	1 (12.5%)	21 (14.5%)
60-64	3 (6.0%)	8 (20.5%)	4 (11.4%)	2 (15.4%)	3 (37.5%)	20 (13.8%)
65-69	6 (12.0%)	4 (10.3%)	5 (14.3%)	3 (23.1%)	0 (0.0%)	18 (12.4%)
70-74	6 (12.0%)	5 (12.8%)	4 (11.4%)	4 (30.8%)	2 (25.0%)	21 (14.5%)
75-79	5 (10.0%)	3 (7.7%)	5 (14.3%)	0 (0.0%)	0 (0.0%)	13 (8.9%)
80 +	8 (16.0%)	4 (10.3%)	3 (8.6%)	0 (0.0%)	0 (0.0%)	15 (10.3%)
Total	50 (100.0%)	39 (100.0%)	35 (100.0%)	13 (100.0%)	8 (100.0%)	145 (100.0%)
Mean	63	62	63	64	58	63

*No significant differences by city

B. Gender by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Male	24 (44.4%)	22 (56.4%)	24 (68.6%)	9 (69.2%)	3 (37.5%)	82 (55.0%)
Female	30 (55.6%)	17 (43.6%)	11 (31.4%)	4 (30.8%)	5 (62.5%)	67 (45.0%)
Total	54 (100.0%)	39 (100.0%)	35 (100.0%)	13 (100.0%)	8 (100.0%)	149 (100.0%)

*No significant differences by city

C. Race by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
White	41 (75.9%)	26 (66.7%)	33 (94.3%)	13 (100%)	7 (87.5%)	120 (80.5%)
Black	7 (13.0%)	11 (28.2%)	1 (2.9%)	0 (0.0%)	1 (12.5%)	20 (13.4%)
Hispanic	4 (7.4%)	0 (0.0%)	1 (2.9%)	0 (0.0%)	0 (0.0%)	5 (3.4%)
Other	2 (3.7%)	2 (5.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (2.7%)
Total	54 (100.0%)	39 (100.0%)	35 (100.0%)	13 (100.0%)	8 (100.0%)	149 (100.0%)

*p=.05

D. Education by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Less than high school	6 (11.1%)	2 (5.3%)	4 (11.4%)	0 (0.0%)	1 (12.5%)	13 (8.8%)
High school or GED	11 (20.4%)	10 (26.3%)	9 (25.6%)	6 (46.2%)	0 (0.0%)	36 (24.3%)
Some college	17 (31.5%)	11 (28.9%)	14 (40.0%)	4 (30.8%)	6 (75%)	52 (35.1%)
Completed college	12 (22.2%)	10 (26.3%)	3 (8.6%)	2 (15.4%)	1 (12.5%)	28 (18.9%)
Graduate school	8 (14.8%)	5 (13.2%)	5 (14.3%)	1 (7.7%)	0 (0.0%)	19 (12.8%)
Total	54 (100.0%)	38 (100.0%)	35 (100.0%)	13 (100.0%)	8 (100.0%)	148 (100.0%)

*No significant differences by city

E. Social Support by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
With Someone	48 (88.9%)	34 (87.2%)	27 (79.4%)	12 (100.0%)	7 (87.5%)	128 (87.1%)
Alone	6 (11.1%)	5 (12.8%)	7 (20.6%)	0 (0.0%)	1 (12.5%)	19 (12.9%)
Total	54 (100.0%)	39 (100.0%)	34 (100.0%)	12 (100.0%)	8 (100.0%)	147 (100.0%)

*No significant differences by city

F. Current Employment Status by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Not employed	35 (64.8%)	25 (64.1%)	29 (85.3%)	10 (76.9%)	7 (87.5%)	128 (87.1%)
Employed	19 (35.2%)	14 (35.9%)	5 (14.7%)	3 (23.1%)	1 (12.5%)	19 (12.9%)
Total	54 (100.0%)	39 (100.0%)	34 (100.0%)	13 (100.0%)	8 (100.0%)	148 (100.0%)

*No significant differences by city

G. Area of Residence by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Urban	45 (84.9%)	35 (92.1%)	21 (61.8%)	4 (30.8%)	1 (12.5%)	106 (72.6%)
Large rural	1 (1.9%)	2 (5.3%)	4 (11.8%)	4 (30.8%)	6 (75.0%)	17 (11.6%)
Small rural	7 (13.2%)	1 (2.6%)	9 (26.5%)	5 (38.5%)	1 (12.5%)	23 (15.8%)
Total	53 (100.0%)	38 (100.0%)	34 (100.0%)	13 (100.0%)	8 (100.0%)	146 (100.0%)

*p<.001

X. Treatment Information by Class Location

A. Access Type by Location

Access Type	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
No Access	42 (85.7%)	34 (89.5%)	31 (88.6%)	9 (69.2%)	6 (75.0%)	122 (85.3%)
Access	7 (14.3%)	4 (10.5%)	4 (11.4%)	4 (30.8%)	2 (25.0%)	21 (14.7%)
Access type, if one:						
Arm	5 (71.4%)	2 (50.0%)	4 (100.0%)	3 (75.0%)	1 (50.0%)	15 (71.4%)
Chest/Neck	1 (14.3%)	2 (50.0%)	0 (0.0%)	0 (0.0%)	1 (50.0%)	4 (19.0%)
Arm/Chest/Neck	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (25.0%)	0 (0.0%)	1 (4.8%)
Stomach	1 (14.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (4.8%)
Total	7 (100.0%)	4 (100.0%)	4 (100.0%)	4 (100.0%)	2 (100.0%)	21 (100.0%)

*No significant differences by city

B. Dialysis Type by Location

Dialysis Type	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
None	46 (93.9%)	37 (94.9%)	32 (91.4%)	11 (84.6%)	6 (75.0%)	132 (91.7%)
Center Hemodialysis	2 (4.1%)	2 (5.1%)	3 (8.6%)	2 (15.4%)	1 (12.5%)	10 (6.9%)
Home Hemodialysis	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (12.5%)	1 (0.7%)
Peritoneal Dialysis	1 (2.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.7%)
Total	49 (100.0%)	39 (100.0%)	35 (100.0%)	13 (100.0%)	8 (100.0%)	144 (100.0%)

*p < .05

C. Post-Test Dialysis Choice by Location

Dialysis Type	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Peritoneal Dialysis	20 (43.5%)	13 (36.1%)	15 (46.9%)	4 (36.4%)	3 (50.0%)	55 (42.0%)
Center Hemodialysis	3 (6.5%)	7 (19.4%)	7 (21.9%)	1 (9.1%)	1 (16.7%)	19 (14.5%)
Home Hemodialysis	6 (13.0%)	2 (5.6%)	0 (0.0%)	1 (9.1%)	1 (16.7%)	10 (7.6%)
Mixed modes	5 (10.9%)	3 (8.3%)	3 (9.3%)	2 (18.2%)	0 (0.0%)	13 (9.9%)
Don't know	12 (26.1%)	11 (30.6%)	7 (21.9%)	3 (27.2%)	1 (16.7%)	34 (26.0%)
Total	46 (100.0%)	36 (100.0%)	32 (100.0%)	11 (100.0%)	6 (100.0%)	131 (100.0%)

*No significant differences by city

***D. Dialysis Stage Progression by Location
(Progressed towards taking action)***

Action	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Talk with a medical professional you trust about your treatment options?	6 (11.1%)	2 (5.1%)	3 (8.6%)	0 (0.0%)	1 (12.5%)	12 (9.4%)
Learn more about your dialysis options?	7 (13.0%)	5 (12.8%)	5 (14.3%)	0 (0.0%)	1 (12.5%)	18 (13.9%)
Talk with your family about your dialysis options?	6 (11.1%)	8 (20.5%)	7 (20.0%)	1 (7.7%)	1 (12.5%)	23 (17.6%)

*No significant differences by city

E. Pre- and Post- Class Knowledge by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Pre-test mean score	14.9 (3.8)	15.9 (3.8)	16.4 (3.0)	16.6 (1.7)	17.8 (1.5)	15.8 (3.4)
Post-test mean score	19.5 (4.3)	18.4 (4.8)	19.3 (3.8)	18.8 (4.0)	18.0 (6.0)	19.0 (4.4)

*No significant differences by city

F. Spoken to Transplant Coordinator by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Yes	7 (13.7%)	12 (30.8%)	6 (17.1%)	3 (23.1%)	3 (37.5%)	31 (21.2%)
No	44 (86.3%)	27 (69.2%)	29 (82.9%)	10 (76.9%)	5 (62.5%)	115 (78.8%)

*No significant differences by city

G. Pre- and Post- Class Transplant Confidence by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Pre-test mean score*	7.0 (2.7)	7.2 (2.9)	4.9 (1.8)	6.5 (2.6)	6.4 (2.6)	6.5 (2.7)
Post-test mean score	6.8 (2.7)	7.2 (2.9)	6.0 (2.1)	8.1 (2.5)	7.2 (2.5)	6.9 (2.6)

*F = 3.04, p < .05

No significant difference at post-test by city

H. Pre- and Post- Class Positive Attitudes about Transplant by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Pre-test mean score*	5.1 (1.9)	5.8 (1.5)	4.3 (1.7)	4.6 (1.9)	4.3 (1.5)	5.0 (1.8)
Post-test mean score	5.6 (1.9)	5.8 (1.6)	5.0 (1.6)	6.0 (1.1)	5.4 (1.7)	5.5 (1.7)

*F = 3.90, p < .01

No significant difference at post-test by city

I. Pre- and Post- Class Negative Attitudes about Transplant by Location

	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Pre-test mean score	10.3 (3.6)	11.4 (2.7)	10.2 (3.0)	9.7 (3.3)	10.3 (3.5)	10.5 (3.2)
Post-test mean score	9.9 (2.9)	9.9 (3.1)	9.5 (2.7)	9.9 (2.0)	7.8 (3.1)	9.8 (2.8)

*No significant differences by city

**J. Transplant Stage Progression by Location
(Progressed towards taking action)**

Action	Kansas City	St. Louis	Springfield	Joplin	Warrensburg	Overall
Learn more about transplants?	11 (20.4%)	3 (7.7%)	7 (20.0%)	1 (7.7%)	0 (0.0%)	22 (17.5%)
Talk with your family about whether you should get a transplant?	6 (11.1%)	8 (20.5%)	7 (20.0%)	2 (15.4%)	1 (12.5%)	24 (19.2%)
Call a transplant center to start evaluation?	10 (18.5%)	3 (7.7%)	12 (34.3%)	3 (23.1%)	1 (12.5%)	29 (23.7%)
Get on the deceased donor waiting list?*	15 (27.8%)	3 (7.7%)	11 (31.4%)	1 (7.7%)	1 (12.5%)	31 (26.5%)
Accept someone's offer to donate?***	5 (9.3%)	6 (15.4%)	15 (42.9%)	4 (30.8%)	2 (25.0%)	32 (28.0%)
Tell people you would like to have a living donor transplant?	7 (13.0%)	7 (17.9%)	10 (28.6%)	3 (23.1%)	2 (25.0%)	29 (24.1%)
Ask someone to be your living donor?	9 (16.7%)	7 (17.9%)	8 (22.9%)	4 (30.8%)	1 (12.5%)	29 (24.6%)

* $\chi^2 = 9.752$, $p < .05$

** $\chi^2 = 15.85$, $p < .01$

No other significant differences by city

XI. Patients' Recommendations for Program Improvement:

A. Comments to Improve the Program

- Some professional speakers read too much, dull (2)
- Sound on machine needs to be louder (*Springfield*) (2)
- Supply copies of overheads and make larger (*KC*)
- Speak in plain language, not medical terms and abbreviations
- More detailed financial information (*attended Day 1*)
- How to prevent kidney disease
- A dummy to show how peritoneal works
- How to approach a potential living donor
- More on diet requirements as related to potassium, phosphorous & calcium. Also water intake. (*attended all modules*)
- Doctor to attend one session
- More parking (*Springfield*)
- A polished program for CE for nurses to offset some of your expenses

B. Other Comments

- Very good/excellent program (18)
- Very informative (15)
- Thank you (8)
- Very helpful (7)
- Excellent speakers (4)
- Patient speakers friendly & informative (2)
- Learned more in the last 2 days than in the last 16 years
- Diagnosed 8 years ago and feel I have been in the dark on most all of it
- I found out so much more than I expected
- I feel that my health will improve because of my being here