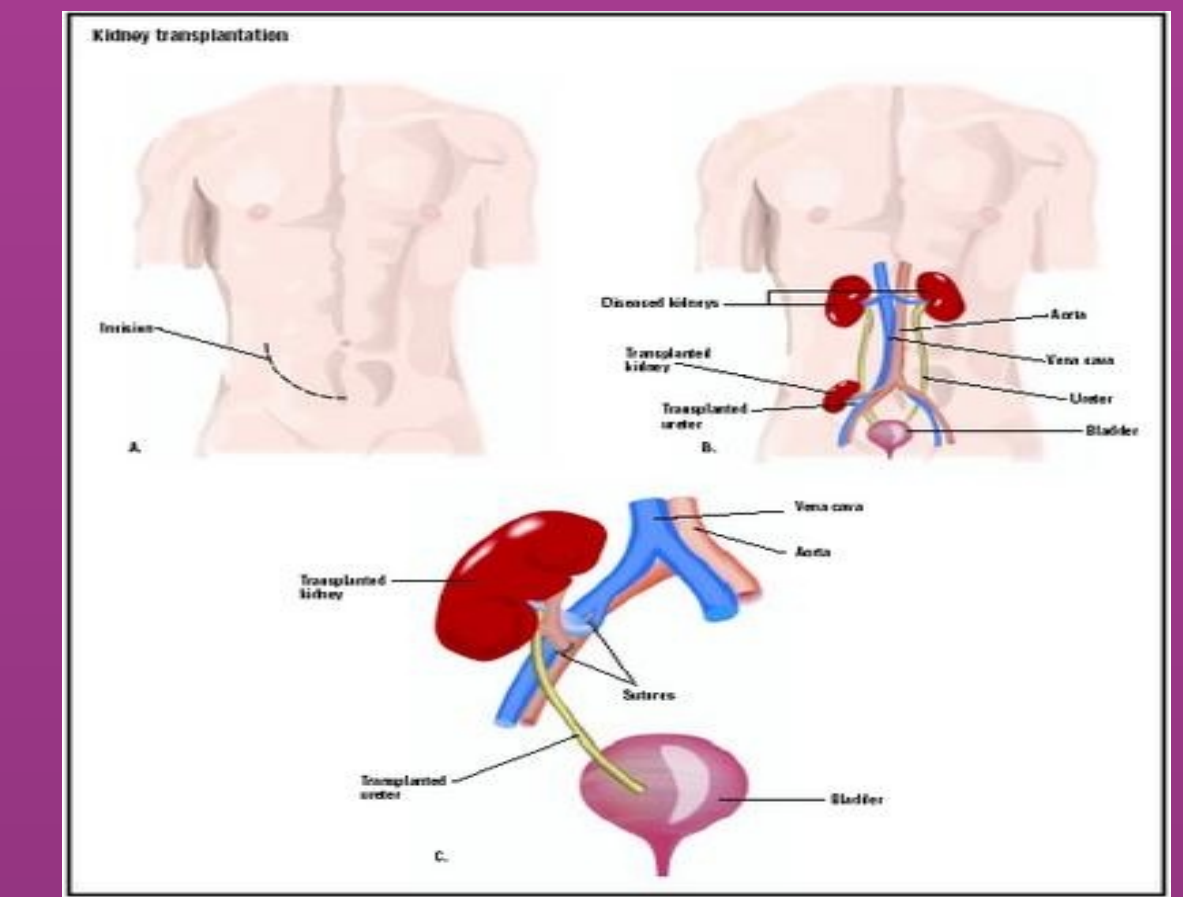
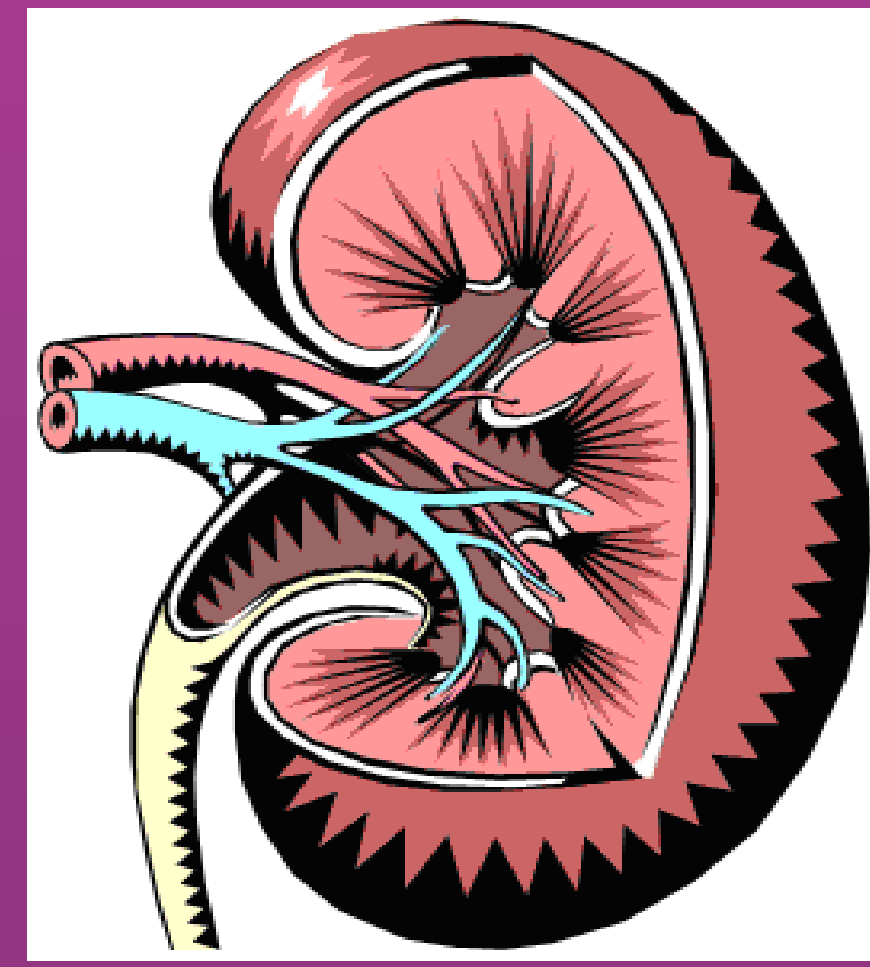


Renal Transplant Nurse Expertise and Patient Satisfaction, Mortality and Length of Stay

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Introduction

Patient satisfaction and positive clinical outcomes are important goals for health care facilities in the current climate of accountability. It has long been assumed that increasing nurse expertise leads to improved patient outcomes. The level of nurse expertise is believed to increase with specialty didactic and clinical educational programs offered through formal academic settings and professional continuing education programs, as well as continuing education programs offered by professional associations and healthcare institutions. Limited research exists in this area.

Methodology

This was a retrospective before and after study utilizing a sample of convenience consisting of the renal transplant patients on the step-down transplant until from January 2005-December 2006. The existing patient satisfaction survey data was analyzed before and after a renal transplant educational program. In addition, existing mortality and length of stay data was analyzed before and after the intervention

- Nurses communication with patient and family
- Nurses understanding and caring
- Nurses promptness in responding to calls
- Nurses instructions/explanations of treatments and tests
- Nurses respect for patients privacy
- Nurses friendliness and courtesy
- Nurses involving patient in decisions about care
- Pain management by staff
- Discharge process
- Discharge instructions
- Overall quality of nursing care

The classroom lectures were each one hour in length. Certified transplant coordinators or transplant surgeons taught class sessions. Classes were scheduled within one week of the previous spanning a 9-week timeframe. Class sessions were repeated twice to accommodate the staff schedules. The assigned clinical educator for the unit coordinated classes and attendance. Continuing education units were awarded attendants. All levels of nursing staff were taught the same information.

-)Renal transplant history and selection criteria for donor and recipient.
-)Immunology and immunosuppression medications.
-)Care of the post-op renal transplant patient.
-)Care of the living donor.
-)Post operative medications and infection prophylaxis.
-)Psychosocial impact of renal transplantation.
-)Post operative complications and precautions.
-)Review of the care maps and standing orders for the renal transplant inpatient.
-) Discharge planning, process and patient educational needs.

Problem/Question

At Shands Jacksonville Clinical Center, a renal transplant didactic and clinical educational program for nursing personnel was developed and implemented in 2005 on the adult renal transplant unit. Evaluation of the effect of this program on patient outcomes was not measured immediately upon completion. Retrospective data on patient satisfaction, mortality and average length of stay (ALOS) were available before and after the educational program. The research question is to examine the inpatient renal unit differences in patient satisfaction, mortality, and ALOS, before and after the successful completion of this nursing transplant education program.

Results

Appendix H Satisfaction Data
Eleven Nurse Sensitive Indicators

Variable	Status	Excellent	VG	Good	Fair	Poor	N
1) scomm	before	60	37	14	2	4	117
2) quality	before	67	35	8	5	2	117
3) scaring	before	62	34	16	9	5	117
4) sprompt	before	65	38	24	5	5	117
5) stests	before	60	39	12	4	2	117
6) srespect	before	66	38	10	2	1	117
7) scourtesy	before	63	38	9	2	1	117
8) sdecision	before	61	38	14	1	3	117
9) spain	before	57	36	9	9	6	117
10) sstep	before	58	44	6	4	5	117
11) sdel	before	58	45	10	2	2	117
1) scomm	after	37	25	8	0	0	70
2) quality	after	40	23	7	0	0	70
3) scaring	after	40	19	11	0	0	70
4) sprompt	after	29	18	17	2	4	70
5) stests	after	41	21	8	0	0	70
6) srespect	after	38	24	7	1	0	70
7) scourtesy	after	41	19	10	0	0	70
8) sdecision	after	34	24	9	3	0	70
9) spain	after	37	24	7	1	1	70
10) sstep	after	39	17	11	3	0	70
11) sdel	after	43	19	8	0	0	70

*satisfaction data; refer to Appendix for full description of each satisfaction indicator.

Appendix J
Statistical Analysis

Variable	Excellent Only Chi-Square p <	Grouped Excellent, Very Good, Good Fisher's Exact p <
1) scomm	0.428	0.057
2) quality	0.302	0.035
3) scaring	0.346	0.093
4) sprompt	0.831	0.597
5) stests	0.376	0.057
6) srespect	0.938	0.519
7) scourtesy	0.156	0.035
8) sdecision	0.256	0.525
9) spain	0.248	0.016
10) sstep	0.025	0.276
11) sdel	0.235	0.057

Results indicated no differences in inpatient mortality, 90-day mortality or ALOS after the educational program. A statistically significant difference was found in the number of excellent responses for patient satisfaction after the educational program in the discharge process indicator (before = 58/117 or 49%; after = 39/70 or 56%; p < 0.025). In addition, when all favorable response categories were grouped (e.g. excellent, very good, and good responses), significant differences were noted in pain management (before = 102/117 or 87%; after = 70/70 or 100%; p < 0.016), nursing quality of care (before = 110/117 or 94%; after = 70/70 or 100%; p < .035) and nursing friendliness and courtesy (before = 115/117 or 98%; after = 70/70 or 100%; p < .035).

Expert Performance Theory

The expert-performance model proposes that human expertise develops in stages. In the initial stage, learners try to acquire rules and knowledge to govern their performance. During the second stage, learners begin a process of demonstrating marginally acceptable levels of performance based on these rules and knowledge. In later stages with repeated practice, the learner transcends the slow, detached reasoning of applying the rules to performance. The learner quickly and smoothly performs behaviors consistent with the rules and knowledge. By the fourth stage, they are experts that transcend the rules and knowledge knowing intuitively how to respond and recognizing the critical aspects of a situation without any need for an effortful search. Finally, the expert can apply the learned behavior and engage critical thinking and skills to situations that are diverse in nature. This theoretical model merges well with the dynamics of nursing practice as patients and clinical situations are ever changing.

Conclusions

- Renal transplant patients were more satisfied with the nursing care after the renal transplant classes in the following areas:
- Excellent discharge process
- Increased perception of nursing quality of care
- Improved pain management
- Improved nurse friendliness and courtesy.

