Assessment Performance of Nurses Caring for Patients with Kidney Transplantation

Thesis

Submitted for Partial Fulfillment of the Requirement
of Master Degree in Nursing Science
(Medical Surgical Nursing)

By

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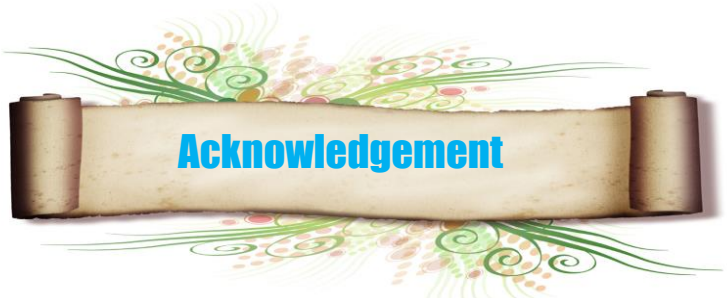
وأنزل الله عليك الكتاب
والحكمة وعَلَّمَكَ مَا لَمْ تَكُن تَعْلَمُ
وكَانَ فَضْلُ اللَّهِ عَلَيْكَ عَظِيماً

صدق الله العظيم

سورة النساء

الآية (١١٣)



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Sherin Saad

Dedicated to

I would like to dedicate this work to my great mother and my father, for whom I will never find adequate words to express my gratitude also for my dear young sister who always makes my life full of happiness and to my lovely daughter' Menna.

Sherin Saad

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List of Abbreviations

ARF	: Acute renal failure
ATG	: Antithymocyte globulin
ATN	: Acute tubular necrosis
BP	: Blood Pressure
BUN	: Blood urea nitrogen
CKD	: Chronic kidney disease
CMV	: Cytomegalic virus
CRF	: Chronic renal failure
CVP	: Central venous pressure
ECG	: Electrocardiogram
ESRD	: End- stage renal disease
GFR	: Glomeruli filtration rate
GIS	: Gastro intestinal system
HIV	: Human Immunodeficiency Virus
IV	: Intravenous
NHBD	: Non-heart-beating donor
NIDDK	: National Institute of Diabetes and Digestive and Kidney
NSAIDs	: Non-steroidal anti-inflammatory drugs
OGTT	: Oral glucose tolerance test
PCA	: Patient-controlled analgesia
PD	: Peritoneal dialysis
RRT	: Renal replacement therapy
TB	: Tuberculin

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ABSTRACT

Kidney transplantation is the treatment of choice for most suitable end-stage renal disease. Nursing practice requires complex combinations of performance,(knowledge, practice and attitudes). **The aim of the study** is to assess performance of nurses' regarding care for patient with kidney transplantation. **Research questions;** is the nurse's level of knowledge regarding their care for patient with kidney transplantation satisfactory? And is the nurse's level of practice regarding their care for patient with kidney transplantation satisfactory? **Subjects:** A convenience sample of all available nurses who are working at the transplant unit and caring for patients with kidney transplantation at the first 10 days after surgery and accepted to participate in the study were (30) staff nurse. In the unit of transplantation affiliated to Ghonim center at Mansoura University **Results:** Most (80%) of nurses under study had satisfactory level of knowledge regarding indications of kidney transplantation. Majority of nurses under study (97%, 93%) had satisfactory level of knowledge regarding assessment before surgery and complications of kidney transplantation respectively. Two fifths of nurses under study (40%) had unsatisfactory level of knowledge regarding signs and symptoms of rejection. All (100%) nurses under study had satisfactory level of practice regarding measuring respiration, blood pressure, intake and output and taking blood sample. As well (70%) of nurses under study had unsatisfactory level of practice regarding hand hygiene, (63%) of nurses under study had unsatisfactory level of practice regarding wearing personal protective equipment,(50%, 63%) of nurses under study had unsatisfactory level of practice regarding care of central line and caring of urinary catheterization respectively **In conclusion**, More than three quarters of nurses under study had satisfactory level of total knowledge regarding care of patient with kidney transplantation. Approximately three quarters of nurses under study had satisfactory level of total practice regarding care of patient with kidney transplantation. **Recommendations**: Formal educational program should be held for nurses working or dealing with patient with kidney transplantation to develop, revise and acquire the knowledge and practice needed to deal with such group of patients based on assessment of their knowledge and practice level.

Key words: kidney transplantation, Nurses' knowledge, Practice.

Introduction

The renal system is complex and vital to the human body. The urinary system is an important part of the body because it helps to maintain the water balance in the body. It also helps to maintain the acid - base balance in the body tissues. In addition, the urinary system filters the excessive amounts of soluble waste out of the blood and excretes them in the urine **(Usha, 2009).**

Mini disorders affect the function of the renal system severe loss of kidney function, either acutely or chronically, is a threat to life and requires removal of toxic waste products and restoration of body fluid volume and composition toward normal. This can be accomplished by kidney transplantation or by dialysis with an artificial kidney **(John, 2011).**

Kidney transplant is life-sustaining treatment for end-stage kidney disease (ESKD). More than 500.000 patients in the United States are currently receiving some form of ESRD therapy. Approximately 16.000 kidney transplants are performed each year in the United States **(John, 2011).** Approximately more than 6268 patients are performed

kidney transplants from 2009 till 2014in the Arab Republic of Egypt ***(Ministry of Health &Population, 2014)***.

Many disease processes can lead to end-stage kidney disease. For this reason, potential recipients must undergo numerous laboratory tests and some noninvasive physical testing before they can be approved as candidates. Because after transplantation the patient's immune system will be purposely and controllably compromised ***(Donna & Linda, 2013).***

There are several contraindications to kidney transplantation as malignancy during the past 3 years, active infectious process, advanced cardiopulmonary disease, high risk for surgery, non-adherence to current medical regimen, recreational drug use and other serious contributing disease processes **(Linda, 2010).**

Many complications are possible after renal transplantation. Rejection is the most common and serious complication of transplantation and is the leading cause of graft loss. The three types of rejection are hyperacute, acute, and chronic. Other complications may involve susceptibility to infection, cardiovascular disease, malignancies,

recurrence of renal disease and corticosteroid-related complications ***(Sharon, Shannon & Margaret, 2007).***

Successful transplantation of a single donor kidney to a patient with ESRD can restore kidney function to a level that is sufficient to maintain essentially normal homeostasis of body fluids and electrolytes. Patients who receive kidney transplants typically live longer and have fewer health problems than those who are maintained on dialysis. Maintenance of immunosuppressive therapy is required for almost all patients to help prevent acute rejection and loss of the transplanted kidney ***(John, 2011).***

The nurse must be familiar with the variety of pathologies that affect the renal system and be able to accurately assess changes in the renal system as they occur **(Rick & Leslie, 2012).**Transplant nurses should acquire advanced knowledge and skills from technology that is used to monitor data, plan care and improve patient outcome ***(Health Resources & Services Administration in U.S.A., 2015).***

Transplant nurses use the acquired knowledge and skills to assess the patient's response to treatment; diagnose the patient, family, and support systems response; provide

education and support to assist the patient their family and support system as they to adapt to the transplantation process; and to monitor quality and safety and outcomes ***(Barbarak& Nancy, 2010).***

Assessment of transplant nurses performance is essential to ensure optimal care for the transplant recipient and donor and their families within a dynamic healthcare delivery system. Also ensure that transplant recipients are aware of the long-term commitment to self-administration of medications, side effect profiles, surveillance and the rational for concordance with immunosuppressive regimens to optimize their health and the longevity of graft function ***(Fouda, 2014).***

Significance of the Study:

The goal of transplantation is to improve the quality of life for patients with end stage renal disease (ESRD). Transplantation is not a cure, but an alternative to dialysis. The goal for the transplant recipient is to achieve a level of activity and health comparable to a person of their age who does not have kidney disease.

Nephrology nurses should be able to apply an in-depth knowledge of organ transplantation to assess, plan,