Evaluation of Follow up Care among Post Kidney Transplantation Clients

Thesis

Submitted in Partial Fulfillment of the Requirements for the Master Science in Nursing Degree (Community Health Nursing)

by

Yossria Attaia Ameen Omar (B.Sc. Nursing)

Faculty of Nursing Ain Shams University 2009

Evaluation of Follow up Care among Post Kidney Transplantation Clients

Thesis

Submitted in Partial Fulfillment of the Requirements for the Master Science in Nursing Degree (Community Health Nursing)

Supervisors

Prof. Sabry Abdel Aziz Gohar

Professor of Medicine Faculty of Medicine Ain Shams University

A. Prof. Hanaa Abdel Hakem

Assistant Professor of Community Health Nursing Faculty of Nursing Ain Shams University

Faculty of Nursing
Ain Shams University
2009

تقييم رعاية المرضى أثناء المتابعة ما بعد زرع الكلى

برو نوكول مقدم يسرية عطية أمين عمر بكالوريوس تمريض جامعة الزقازبق

للحصول على درجة الماجستير فى تمريض صحة المجتمع إشراف أ.د. صبرى عبد العزيز جوهر أستاذ الأمراض الباطنة كلية الطب جامعة عين شمس

د. هناء عبد الحكيم أ.م. تمريض صحة المجتمع بكالوريوس تمريض جامعة عين شمس

د. نهلة أحمد عبد العزيز مدرس تمريض صحة المجتمع بكالوريوس التمريض جامعة عين شمس

جامعة عين شمس كلية التمريض ٢٠٠٧

Evaluation of Follow up Care among Post Kidney Transplantation Clients

Protocol

Submitted to Faculty of Nursing Ain Shams University

In Partial Fulfilment of the Requirements of Master Degree
In Community Health Nursing

Бу

Yossria Attaia Ameen Omar

High Institute of Nursing Zagazig University

Supervisors

Prof. Sabry Abdel Aziz Gohar

Professor of Medicine Faculty of Medicine Ain Shams University

A. Prof. Hanaa Abdel Hakem

Assistant Professor of Community Health Nursing
Faculty of Nursing
Ain Shams University

Dr. Nahla Ahmed Abdel Aziz

Lecturer of Community Health Nursing Faculty of Nursing Ain Shams University

Ain Shams University Faculty of Nursing **2007**



Acknowledgment

First and foremost, I feel always indebted to God, the most kind and the most merciful.

I would like to express my sincere appreciation and my deep gratitude to **Prof. Dr. Sabry Abdel Aziz Gohar,** Professor of Medicine, Faculty of Medicine, Ain Shams University who assigned the work, and kindly supplied me with all necessary facilities for its success and helped me to complete this work.

I wish to express my sincere thanks and heartful gratitude to A. Prof.Dr. Hanaa Abdel Hakem, Assistant Professor of Community Health Nursing, Faculty of Nursing, Ain Shams University for the great support, encouragement, patience and help to complete this work.

I would like to express my deep gratitude and profound respect to **Dr** .Nahla Ahmed Abdel Aziz Lecturer of Community Health Nursing, Faculty of Nursing, Ain Shams University for the great support and encouragement to complete this work.

Finally, I would like to express my appreciation to my family and my colleagues who participated in a way or another in the accomplishment of this work.



Abstract

This study is a descriptive study aimed to evaluate the follow up care among post kidney transplantation clients through: assessing the health problems and needs of patients with kidney transplantation, assessing follow up care and finding out the obstacles which hinder compliance during follow up care among post kidney transplantation patients. This study was conducted in the kidney transplantation out patient clinics at Nasr City Health Insurance Hospital, Nasser Institute, and Mataria Kidney Institute. There are a large number of patients attending the kidney transplantation out patient's clinics. The study involved 101 patients who had performed kidney transplantation for not more than six months from both sex and different ages. Tools of the study involved 1)- a pre-designed questionnaire to assess characteristics ,assess patients patients practice transplantation their knowledge and about post transplantation compliance, 2)- Patient medical records to assess patient health problems and physical conditions. And 3)- Observational checklist to assess home environment. The main results showed that, the common health problems that faced the patients after renal transplantation were related to rejection, hypertension and infection. Patients were compliant with infection control measures, medications and with medical followthe main hindering up. Forgetfulness is compliance. This study recommended continuous evaluation and monitoring of follow up care and factors compliance patients hindering with kidney transplantation.

Key words

Renal Replacement – Transplantation – Renal Failure- Compliance Adherence – Follow- up – Nursing Role.

CONTENT

Subjects I	Page
Abstract	
Introduction & Aim of the Study	1
Renal failure	6
Renal replacement therapy	12
Renal Transplantation	18
Compliance among post transplantation patients	47
Application of Nursing Process for Caring Pat	ient
with Renal Transplantation	53
Follow-up care among post kidney transplanta	tion
patients	72
Subject and Methods	84
Results	96
Discussion	135
Conclusion	154
Recommendations	155
Summary	157

CONTENT

Subjects	Page
References	164
Appendices	
Arabic Summary	

List of Abbreviations

ARF	Acute Renal Failure
CAPD	Continous Ambulatory Peritoneal Dialysis
CCPD	Continous Cycling Peritoneal Dialysis
CMV	Cytomegalovirus
CRF	Chronic Renal Failure
CSA	Cyclosporine
CVVH	Continous Venovenous Heamofiltration
EBV	Epstien-Barr virus
ESRD	End Stage Renal Disease
GFR	Glomerular Filtration Rate
HIV	Humman Immune Virus
HLA	Human Leukocyte Antigen
HSV	Herps Simplex Virus
IHD	Itermittent Haemodialysis
IST	Immuno Suppressant Therapy
NKF	National Kidney Foundation
NSAIDs	Non steroid Anti-Inflammatory Drugs
PD	Peritoneal Dialysis
PMP	Per Million Population
PTDM	Post Transplant Diabetes Mellitus
RRT	Renal Replacement Therapy
RT	Renal Transplantation
USRDS	United State Renal Data System
VZV	Varicella-Zoster Virus

LIST OF FIGURES

Figure	Title	Page
Review of Literature Figures		
Figure 1	Site of the Transplanted Kidney.	7
Figure 2	Steps of Nursing Process.	54
Results Figu	res	
Figure 1	Percentage Distribution of the	99
	Studied Sample according to	
	their Gender.	
Figure 2	Percentage Distribution of the	102
	Studied Sample according to	
	their Support System and Home	
	Environment.	
Figure 3	Percentage Distribution of the	105
	Studied Sample according to	
	their Health.	
Figure 4	Percentage Distribution of the	116
	Studied Sample according to	
	their Compliance with post	
	transplantation medications.	

LIST OF FIGURES

Figure	Title	Page
Figure 5	Percentage Distribution of the Studied Sample according to their Compliance with post transplantation follow-up.	117
Figure 6	Percentage Distribution of the Studied Sample according to their Knowledge, Practice and Compliance.	123

Introduction

Renal failure is a situation in which the kidneys fail to function adequately. It divided in acute and chronic forms; either forms may be due to a large number of other medical problems (*Alexander & Sehgal*, 1999).

When the kidneys malfunction, problems frequently encountered are abnormal fluid levels in the body, deranged acid levels, abnormal levels of potassium, calcium, phosphate, hematuria (blood in the urine), proteinuria and (in the longer term) anemia. Long-term kidney problems have significant repercussions other diseases, such on as cardiovascular disease (Gordon et al; 2005).

Prevalence of renal failure in Egypt is 483 per million population (PMP), and the prevalence of renal failure over the world is 975 PMP In Egypt, most patients are undergoing intermittent haemodialysis 99.9%, while 0.1% were treated by peritoneal dialysis. the number of dialysis patients in the year 2004 was 35751 patients. There are 370 governmental dialysis centers. The majority of dialysis centers in

Egypt are private centers. The mortality rate of renal failure in Egypt is 117 per 1000 dialysis patients per year and over the world it is 63 per 1000 dialysis patients per year (*Afifi, 2005*).

End-stage renal disease (ESRD) cannot be treated with conventional medical treatments such as drugs. Only two treatments allow continuing living when the functioning: dialysis kidneys stop and kidney transplantation Kidney transplantation is the replacement of nonworking kidneys with a healthy kidney from another person (the donor). The healthy kidney (the "graft") takes over the functions of the nonworking kidneys. A person can live normally with only one kidney as long as it functions properly (Ghoneim et al; 2005).

Dialysis is primarily used to provide an artificial replacement for lost kidney function due to renal failure. Dialysis may be used for very sick patients who have suddenly but temporarily, lost their kidney function (acute renal failure) or for quite stable patients who have permanently lost their kidney

function (chronic renal failure) (Fiebiger et al; 2004&Doesch et al; 2008)

Renal transplantation (RT) has become the treatment of choice for most patients with irreversible renal failure Renal transplantation is the transplant of a kidney in a patient with ESRD, Kidney transplantation typically is classified as deceased-donor formerly known as cadaveric) or living-donor transplantation depending on the source of the recipient organ (American Society; 2001&Engle; 2003).

In the United States of America (USA) The rate of RT are 32 per 1000 dialysis patients per year. This rate is much lower than northern Europe (135 per 1000 dialysis patients). In Egypt about 60-70 patients per 1000 receive a RT each year, and the projected number of performed transplantation until the end of 2004 is 7000 cases There are about 20 recognized active transplantation centers, but there is undefined number of smaller centers (*Afifi* 2003; , *Mossa et al* 2003; & Bakr 2005;).

Nursing care of patients with RT is complex, rewarding and challenging (*Allen*, 2005). The main role of community health nurse is to do comprehensive assessment of the health problems and health needs of the client and establish the goal to facilitate the nursing intervention, provide preventive, curative and rehabilitative care to client (*Hesney et al*, 2000).