

Current Status of the Implication of the Clinical Practice Pattern in Hemodialysis Prescription in Regular Hemodialysis Patients in Egypt (North Sohag)

Protocol of Thesis

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By

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List of Contents

| Subjects | Page No. |
|--|-----------------|
| List of Figures | i |
| List of Tables | ii |
| List of Abbreviations | iii |
| Introduction | 1 |
| Aim of the Work | 4 |
| REVIEW OF LITERATURE | |
| <u>Chapter 1: ESRD burden in developing countries</u> | |
| | 5 |
| <u>Chapter 2: Hemodialysis associated co- morbidities</u> | |
| | 20 |
| <u>Chapter 3: GUIDELINES FOR KIDNEY DISEASES</u> | |
| | 34 |
| PATIENTS AND METHODS | 49 |
| RESULTS | 54 |
| Discussion | 85 |
| Summary and conclusion | 97 |
| Recommendation | 102 |
| References | 103 |
| Arabic Summary | 123 |

List of Tables

| Tab. No | Subjects | Page No. |
|---------------------------|--|-----------|
| <u>Table (1):</u> | Gender and age distribution in the study population | 54 |
| <u>Table (2):</u> | Different causes of ESRD in the study population | 57 |
| <u>Table (3):</u> | Different comorbidities in the study population | 57 |
| <u>Table (4):</u> | Work status in the study population | 58 |
| <u>Table (5):</u> | Dependency status in the study population | 59 |
| <u>Table (6):</u> | Frequency of HD sessions/week in the study population .. | 60 |
| <u>Table (7):</u> | Duration of HD session in the study population..... | 61 |
| <u>Table (8):</u> | Sponsoring status in the study population | 62 |
| <u>Table (9):</u> | Type of vascular access in the study population | 64 |
| <u>Table (10):</u> | Frequency of access failure in the study population..... | 65 |
| <u>Table (11):</u> | The levels of Hemoglobin , MCV, Iron study during the last 6 months covered by the study..... | 66 |
| <u>Table (12):</u> | Ferritin levels in the study population | 68 |
| <u>Table (13):</u> | TSAT category in the study population | 69 |
| <u>Table (14):</u> | History of blood transfusion in the study population | 70 |
| <u>Table (15):</u> | Different types of ESA used by the study population | 71 |
| <u>Table (16):</u> | History of blood transfusion in the study population | 71 |
| <u>Table (17):</u> | Different types of ESA used by the study population | 72 |
| <u>Table (18):</u> | History of iron injection in the study population | 72 |
| <u>Table (19):</u> | History of vitamins use in the study population | 73 |

List of Tables (Cont....)

| Tab. No | Subjects | Page No. |
|---------------------------|---|-----------------|
| <u>Table (20):</u> | The levels of Calcium, phosphorus and PTH during the last 6 months covered by the study | 74 |
| <u>Table (21):</u> | Calcium levels in the study population..... | 76 |
| <u>Table (22):</u> | Phosphorus levels in the study population | 77 |
| <u>Table (23):</u> | PTH levels in the study population | 78 |

LIST OF FIGURES

| Figure No. | Title | Page |
|---------------------|---|-------------|
| Figure (1): | The development of clinical practice guidelines | 36 |
| Figure (2): | Gender distribution in the study population | 54 |
| Figure (3): | Different causes of ESRD in the study population..... | 56 |
| Figure (4): | Different comorbidities in the study population | 57 |
| Figure (5): | Work status in the study population | 58 |
| Figure (6): | Dependency status in the study population | 59 |
| Figure (7): | Frequency of HD sessions/week in the study population | 60 |
| Figure (8): | Duration of HD session in the study population | 61 |
| Figure (9): | Sponsoring status in the study population..... | 63 |
| Figure (10): | Type of vascular access in the study population | 64 |
| Figure (11): | Frequency of access failure in the study population..... | 65 |
| Figure (12): | Hemoglobin category in the study population..... | 67 |
| Figure (13): | Ferritin levels in the study population | 68 |
| Figure (14): | TSAT Category in the study population..... | 69 |
| Figure (15): | History of blood transfusion in the study Population... | 70 |
| Figure (16): | Different types of ESA used by the study population.. | 71 |
| Figure (17): | History of iron injection in the study population..... | 72 |
| Figure (18): | History of vitamins use in the study population..... | 73 |

| | |
|--|-----------|
| Figure (19): Calcium levels in the study population | 75 |
| Figure (20): Phosphorus level in the study population..... | 76 |
| Figure (21): PTH levels in the study population..... | 77 |
| Figure (22): Calcium phosphorus product level in the study population | 78 |

LIST OF FIGURES (Cont....)

| Figure No. | Title | Page |
|---------------------|---|-------------|
| Figure (23): | Different types of phosphorus binders used by the study population | |
| | | 79 |
| Figure (24): | Types of complications during HD session in the study population. | |
| | | 80 |
| Figure (25): | Viral status in the study population | 81 |
| Figure (26): | Type of dialyzer used in the study population..... | 82 |
| Figure (27): | Criteria of dialysate used in the study population..... | 84 |

LIST OF ABBREVIATIONS

| Abbrev. | Full term |
|--------------|---|
| AVF | arteriovenous fistula |
| AVG | arteriovenous graft |
| BMI | Body mass index |
| PEM | protein-energy malnutrition |
| CAPD | continuous ambulatory peritoneal dialysis |
| CHF | Congestive heart failure |
| CKD | Chronic kidney disease |
| CKD5 | chronic kidney disease stage 5 |
| CLD | Chronic liver disease |
| CMS | US Centers for Medicare and Medicaid Services |
| CPG | clinical practice guidelines |
| CSN | Canadian Society of Nephrology |
| CVC | Chronic venous catheter |
| CVD | Cardiovascular disease |
| DM | Diabetes mellitus |
| DOPPS | Dialysis outcome and practice pattern study |

| | |
|-----------------|---|
| ERA-EDTA | the European Renal Association-European Dialysis |
| ERT | and Transplantation association |
| | the Evidence Review Teams |
| ESRD | End stage renal disease |
| GBD | Global Burden of Disease |
| GFR | Glomerular filtration rate |
| GraDe | Grades of recommendation assessment, Development, and evaluation |
| Hb | Hemoglobin |
| HBV | Hepatitis B Virus |
| HCV | Hepatitis C Virus |
| HIV | Human immunodeficiency virus |
| HD | Hemodialysis |
| HTN | Hypertension |
| HR | Hazard ratio |
| IV | Intravenous |
| K/DOQI | Kidney Disease Outcome Quality Initiative |
| KDIGO | Kidney disease improving global outcomes |
| KHA-CARI | The Kidney Health Australia-Caring for Australasian with Renal Impairment |
| MBD | Mineral and bone disorder |
| MIA | Malnutrition -Inflammation atherosclerosis (MIA) Syndrome |
| MICS | ‘malnutrition–inflammation complex syndrome’ |
| MOH | Ministry of health |
| NCDs | Noncommunicable diseases |
| NKF | National Kidney Foundation |
| PEM | Protein energy malnutrition |
| pmp | Per million population |
| PTH | parathyroid hormone |
| PVD | Periferal vascular disease |
| RA | The UK Renal Association |
| RCTs | Randomized clinical trials |

| | |
|-------------|---|
| RRT | Renal replacement therapy |
| SPSS | Statistical package for special science |
| VA | Vascular access |

الوضع الحالى لأشكال الممارسه الاكلينيكيه المتبعه لوصفات الاستصفاء الدموى لدى مرضى الاستصفاء الدموى فى مصر (شمال سوهاج)

رسالة

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INTRODUCTION

Chronic kidney disease (CKD) is a worldwide public health problem. According to the World Health Report 2002 and Global Burden of Disease (GBD) project, diseases of the kidney and urinary tract contribute to the global burden of diseases, with approximately 850,000 deaths every year and 15,010,167 disability-adjusted life years.

(<http://www3.who.int/whosis/menu.cfm?path=evidence,burden&language=english>.) They are the 12th cause of death and the 17th cause of disability, respectively. The global incidence and prevalence of CKD, however, may be underestimated by these data for a number of reasons.

Studies examining the link between research evidence and clinical practice have consistently shown gaps between the evidence and current practice. Some studies in the United States suggest that 30%-40% of patients do not receive evidence-based care, while in 20% of patients care may be not needed or potentially harmful. However, relatively little information exists about how to apply evidence in clinical practice, and data on the effect of evidence-based guidelines on knowledge uptake,

process of care or patient outcomes is limited (*Locatelli et al., 2004*).

Appropriately then, the care of dialysis patients has been the prime focus of nephrology, particularly after the widespread availability of maintenance dialysis when it became evident that mortality of dialyzed patients was high and their quality of life far from adequate(*Eknoyan et al, 2002*).

Guidelines practiced on anemia and actual practices are much different with different places and patients according to treatment. Moreover, in individual countries and individual units within countries local circumstances relating to economic conditions; organization of health care delivery or even legal constraints may render the immediate implementation of best practice guidelines difficult or impossible. Nevertheless, they provide a goal against which progress can be measured (*Locatelli et al., 2004*).

Compliance with clinical guidelines is an important indicator of quality and efficacy of patient care, at the same time their adaptation in clinical practice may be initiated by numerous factors including; clinical experts, patient performance, constrains of public health policies, community standard, budgetary limitation and methods of feeding back information concerning current practice (*Cameron, 1999*).

AIM OF THE WORK

End-stage renal disease (ESRD) is one of the main health problems in Egypt. Currently, hemodialysis represents the main mode for treatment of chronic kidney disease stage 5 (CKD5), previously called ESRD or chronic renal failure (*Afifi , 1999*)

Although hemodialysis is often used for treatment of ESRD, no practice guidelines are available in Egypt. Healthcare facilities are seeking nowadays to develop practice guidelines for the sake of improving healthcare services (*Ministry of Health and Population,1999*)

AIM OF THE WORK

To study the pattern of current clinical practice in hemodialysis prescription in regular hemodialysis patients in Egypt and to compare this pattern with standard international guidelines in hemodialysis prescription, stressing on anemia, bone disease management and adequacy of dialysis.

ESRD burden in developing countries

One potential outcome of chronic kidney disease (CKD) is end-stage renal disease (ESRD), requiring costly renal replacement therapy in the form of dialysis or transplantation. Although the incidence of ESRD shows signs of leveling off in developed countries, perhaps in part because of increased awareness of CKD, no such trend is seen in developing countries or minority populations. Over 2 million people now require renal replacement therapy to sustain life worldwide, but this likely represents less than 10% of those who need it (*Codreanu, 2006*)

Chronic renal failure is a devastating medical, social, and economic problem for patients and their families. The availability and quality of dialysis programs largely depend on the prevailing economic conditions, the political-social structure, overall health care facilities, and the health care funding strategies of various countries. Large disparities separate the socio-economic structures of various countries, especially the developed and the developing countries. In the developed world, health care is generally available, whereas the vast population of people living in developing countries do not have access to even basic amenities like sanitation and safe drinking water (*REPORT, AD: 2000, in The World Bank, 2000, New York, Oxford*).