Current Status of The Implication of The Clinical Practice Pattern In Hemodialysis Prescription In Regular Hemodialysis Patients In Egypt (Qalyubia) Sector A1

Thesis

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بسم الله الرحمن الرحيم

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ

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Ahmed Nour Eldin Mohammed

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LIST OF ABBREVIATIONS

Abbrev.	Full term
AIDS	Acquired immune deficiency syndrome
APKD	Autosomal dominent polycystic kidney disease
AVF	Arteriovenous fistula
AVG	Arteriovenous graft
BP	Blood pressure
BUN	Blood Urea Nitrogen
CGN	Chronic glomerulonephritis
CPN	Chronic pyelonephritis
CKD	Chronic kideny disease
CKDMBD	Chronic kideny disease-mineral bone disease
CKDOPPS	Chronic kideny outcome and practice pattern study
CLD	Chronic liver disease
CMS	US Centers for Medicare and Medicaid Services
COPD	Chronic obstructive pulmonary disease
CPG	Clinical practice guidelines
CRP	C- reactive protein
CVS	Cerebrovascular stroke
DM	Diabetes mellitus
DOPPS	Dialysis outcome and practice pattern study
ESAs	Erythropiotein stimulating agents
ESAM	European survey of anemia management

LIST OF ABBREVIATIONS (Cont….)

Abbrev.	Full term
ESRD	End stage renal disease
FMCNA	Fresnius medical care,North America
GFR	Glomerular filtration rate
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HEMO	Haemodialysis study
HGB	Haemoglobin
HIV	Human immune deficiency virus
HMWH	High molecular weight heparin
HRQOL	Health related quality of life
HD	Hemodialysis
HTN	Hypertension
IHD	Ischemic heart disease
K/DOQI	Kidney Disease Outcome Quality Initiative
KDIGO	Kidney disease improving global outcomes
LVH	Left ventricular hypertrophy
LMWH	Low molecular weight heparin
MOH	Ministry of health
NCDS	National cooperative dialysis study
NKF	National Kidney Foundation

LIST OF ABBREVIATIONS (Cont….)

Abbrev.	Full term
PCR	Protein catabolic rate
PDOPPS	Peritoneal Dialysis outcome and practice pattern study
PO4	phosphorous
PRU	Percent reduction in urea
PTFE	Polytetrafloroethylene
PTH	Parathyroid hormone
PVD	Peripheral vascular disease
SLE	Systemic lupus erythromatosis
SRI	Solute removal index
TIBC	Total iron binding capacity
TSAT	Transferrin saturation
UF	Ultrafiltration
UFH	Unfractionated heparin
URR	Urea reduction ratio
USRDS	United state renal data system

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INTRODUCTION

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 patients outcomes is limited ***(Locatelli et al., 2004).***

In recent years, specific clinical guidelines have been developed to optimize the quality of anemia management secondary to chronic kidney diseases (CKD). As a result, the National Kidney Foundation Kidney Disease Outcome Quality Initiative (K\DOQ I) guidelines and the Renal-European Dialysis and Transplantation Association best practice guidelines have been published in USA & Europe. Therefore; clinical practice guidance help individual physician and physicians as group to improve their clinical performance and thus raise standard of patients care towards optimum levels, They may also help to insure that all institution provide an equally good baseline standard of care ***(Cameron, 1999).***

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).***

Dialysis Outcomes and Practice Patterns Study (DOPPS) has observed a large variation in anemia management among different countries. The main hemoglobin concentration in hemodialysis patients varied widely across the studied countries ranging between 8g/dl to 11g/dl. The percentage of prevalent hemodialysis patients receiving erythropoietin stimulating agent "ESA" has increased from 75% to 83%. The percentage of HD patients receiving iron varies greatly among DOPPS countries range from 38% to 89% ***(Locatelli et al., 2004).***

There are challenges in implanting clinical guidelines in medical practice. Overall DOPPS data which show that, despite the availability of practice guidelines for treatment of renal anemia, wider variation in anemia management exists as gap between what is recommended by the guidelines and is accomplished in every day clinical practice. Compliance with clinical guidelines is an importance indicator of quality and efficacy of patients care at the same time their adaptation in clinical practice may be initiated by numerous factors including; clinical experts, patients 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

1. 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 (K/DIGO), stressing on anemia, bone disease management and adequacy of dialysis.
2. Statement of the current status of dialysis patients in Egypt (questionnaire)