



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



HANAA ALY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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Assessment of Clinical Pharmacy Services Implemented in Drug Information Center in an Egyptian Hospital

A Thesis

Submitted for fulfillment of the requirements for the

Ph.D. degree in Pharmaceutical Sciences

(Clinical Pharmacy)

By

Dina Mohamed Ibrahim Ibrahim Belal

Clinical pharmacist at New Cairo Hospital

M.Sc. of Pharmaceutical sciences (Clinical Pharmacy), 2013

Faculty of Pharmacy, Ain Shams University

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا
مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ
الْحَكِيمُ ﴿٣٢﴾"

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List of Abbreviations

ACCP	American College of Clinical Pharmacy
ADRs	Adverse Drug Reactions
APhA	American Pharmacists Association
ARDS	Acute respiratory distress syndrome
ASHP	American Society of Health System Pharmacists
ASU	Ain Shams University
COVID-19	Corona Virus Disease 2019
DI	Drug Information
DIC	Drug Information Center
DIR	Drug Information Request
DIS	Drug Information Service
DTC	Drugs and Therapeutics Committee
DUE	Drug Use Evaluation
EBM	Evidence based medicine
EBP	Evidence based pharmacy
EDA	Egyptian Drug Authority
EDIC	Egyptian Drug Information Center
EPVC	Egyptian Pharmacovigilance Center
FDA	Food and Drug Administration
HCPs	Healthcare Practitioners

List of Abbreviations

HRS	Hepatorenal Syndrome
ICSR	Individual case safety report
ICU	Intensive Care Unit
IRB	Institution review board
L.E	Egyptian Pound
ME	Medication Error
MOH	Ministry of Health
NICU	Neonatal Intensive Care Unit
PD	Patient Days
PV	Pharmacovigilance
RDU	Rational Drug Use
REC	Research Ethics Committee
SBP	Spontaneous Bacterial Peritonitis
STGs	Standard Treatment Guidelines
TDM	Therapeutic Drug Monitoring
UMC	Uppsala Monitoring Centre
WHO	World Health Organization

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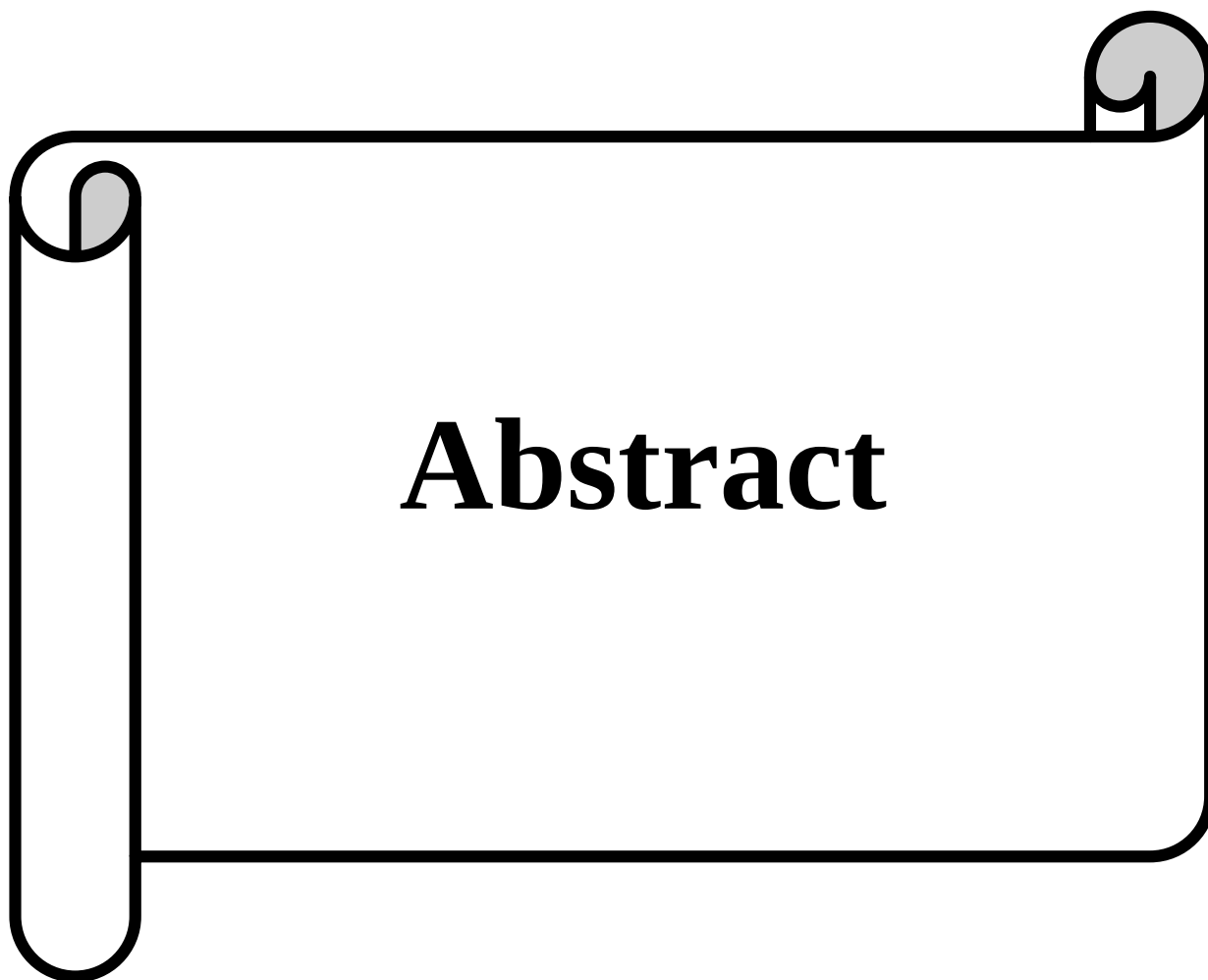
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Abstract of Chapter I

“Optimizing Human Albumin Use in the Intensive Care Unit”

Introduction:

Albumin is a non-blood plasma substitute known for its high cost and limited availability. It is derived from blood through a hard manufacturing process and it has a superior advantage over non protein colloids for being a relatively safer product. It has been commonly used in various indications and has been reported to be inappropriately used in different healthcare settings. Hence, interventions are required to control its irrational use.

Aim: To evaluate the impact of clinical pharmacist implemented interventions on optimizing of albumin use in an intensive care unit (ICU).

Methods: The study included three phases; a preparation phase where the appropriate use criteria of human albumin were determined. A local albumin dispensing protocol and a restriction dispensing form were prepared by the clinical pharmacists based on international guidelines in the literature and both were approved by the local drugs and therapeutics committee, and a retrospective pre-implementation phase included the evaluation of medical records of all ICU patients receiving albumin for appropriateness of albumin use according to the developed protocol. This was followed by a prospective implementation phase where the dispensing protocol and restriction dispensing form were applied. The pattern of albumin consumption and cost were recorded and compared between the retrospective and prospective phases. All healthcare team were educated on using the dispensing form and on the approved appropriate indications of albumin use on several educational sessions. These sessions were held by clinical pharmacy department in order to ensure adherence to the approved protocol.

Results: It was found that the clinical pharmacists' interventions have led to a significant optimization of albumin use. Baseline serum albumin of patients was