

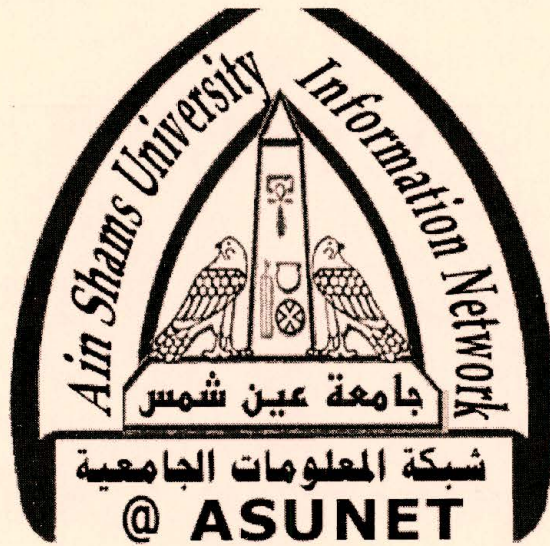


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# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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ASSESSMENT OF FLUID AND ELECTROLYTE IMBALANCE AMONG  
CRITICALLY ILL PATIENTS, EL-MANIAL UNIVERSITY HOSPITAL:  
NURSE'S KNOWLEDGE AND RESPONSIBILITIES

تقييم اختلال السوائل و الالكتروليتات لمرضى الحالات الحرجة بمستشفى المنيل الجامعي:  
معلومات الممرضات و مسؤولياتهم

By

Samah Zidan Mahani

(B.Sc. Nursing)

Thesis Submitted For Partial Fulfillment of the Requirements of the  
Master Degree in Medical Surgical Nursing Sciences

Under Supervision of

Dr. Warda Youssif Mohamed

Prof. of Medical Surgical Nursing

Faculty of Nursing

Cairo University

Dr. Waheed Ahmed Radwan

Prof. of Critical Care Medicine

Faculty of Medicine

Cairo University

Dr. Manal Sayed Esmael

Asst.prof. of Medical Surgical Nursing

Faculty of Nursing

Cairo University

FACULTY OF NURSING

CAIRO UNIVERSITY

2011

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## APPROVAL PAGE FORM

This Thesis for Master Degree in Medical Surgical Nursing

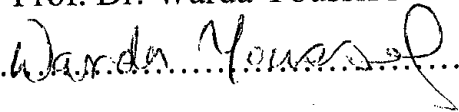
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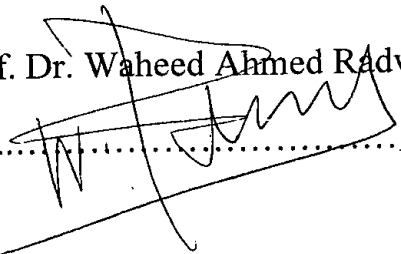
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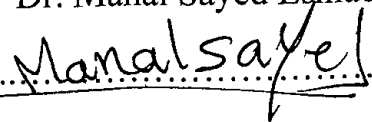
Prof. Dr. Warda Youssif Mohamed

  
.....

Prof. Dr. Waheed Ahmed Radwan

  
.....

Dr. Manal Sayed Esmael

  
.....

Date: 19.../...4.../...2011

Assessment of Fluid and Electrolyte Imbalance among Critically  
Ill Patients, El-Manial University Hospital:  
Nurse's Knowledge and Responsibilities

Abstract

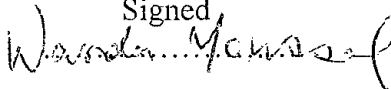
By

Samah Zidan Mahani

Fluid and electrolyte imbalances are common problems in acute care settings. Nurses who are familiar with the causes, symptoms and signs, and management of these problems are in the best position to anticipate electrolyte imbalances, and to treat them quickly. As well, the life-threatening nature of these imbalances makes them a particularly important area for nursing assessment and care. Therefore the aim of this study was three folds; first, was to assess nurse's knowledge related to fluid and electrolyte imbalances, second, was to assess nurse's responsibilities related to fluid and electrolyte imbalances, third and last, was to estimate the prevalence of fluid and electrolyte imbalances among critically ill patients at the Critical Care Department, El-Manial University Hospital, Cairo University. A convenience sample of (50) nurses working in Critical Care Department and 100 adult male and female patients having fluid and/or electrolytes imbalances were recruited to fulfill the aim of this study. Three tools were formulated & tested to collect data pertinent to the study; Knowledge assessment sheet; Performance assessment checklists; and patient's assessment sheet. Structured interview, reviewing medical & nursing records, & direct observation techniques were utilized for data collections. The study results revealed that although there is a significant statistical relation between nurses knowledge / performance ( $F/P = 7.439 - 0.002 / 18.918 / 0.0005$  respectively) and level of education, the majority of nurses had unsatisfactory ( $< 60\%$ ) knowledge and performance levels in percentages of (94% & 100% respectively) related to fluid and/or electrolytes imbalances in the critical care. Also the prevalence of imbalances was in a ratio of 100 patients out to 500 patients were having fluid and / or electrolyte imbalances. The most fluid and electrolyte imbalances were hyponatremia, hypokalemia, fluid excess, and hypocalcemia in percentages of (65%, 39%, 26%, 12%) respectively. Hyponatremic patients mostly complain of tachycardia and fluid excess (27.69, 32.3) respectively. Hypokalemic patients had ECG changes, irregular heart beats, shallow rapid respiration, and polyuria with difference between the two assessments (51.28, 69.23, 30.77, 53.85) respectively. It can be concluded that although nurses knowledge influenced positively with the level of education, experience, and performance, the majority of nurses had unsatisfactory knowledge and performance related to this area in the critical care. So the study recommended conduction of further study in order to enrich, improve, & update nurse's knowledge and performance related to this area.

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Key words: Nurses knowledge, responsibilities, fluid and electrolyte imbalance, critically ill patients

Signed  
  
Chairperson of the thesis

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