



شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية
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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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**FACTORS ASSOCIATED WITH THE OCCURRENCE OF
DIARRHEA AMONG CRITICALLY ILL PATIENTS**

A Thesis

**Presented to the Graduate School
Faculty Nursing, Alexandria University**

In partial Fulfillment

Of

Master of Science

The Requirements

In

Critical Care Nursing

By

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2009

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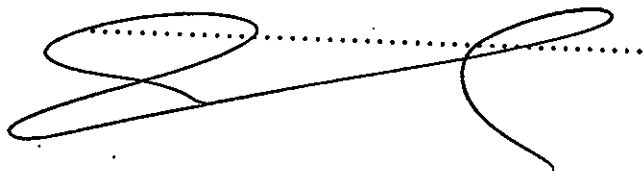
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LIST OF ABBREVIATIONS

Abbreviation	Full word
1. AAD	1.Antibiotics associated diarrhea
2. APACHE	2.Acute physiology and chronic health evaluation
3. COP	3.Capillary oncotic Pressure
4. CDAD	4.Clostridium difficile associated diarrhea
5. CID	5. Clostridium difficile infection
6. CDC	6.Center disease control
7. CVP	7.Central venous pressure
8. ETF	8.Enteral tube feeding
9. E.coli	9. Escherichia coli
10. EIA	10.Enzyme immunoassays
11. HR	11.Heart rate
12. ICU	12.Intensive care Unit
13. MRSA	5.Methicillin-resistant staphylococcusa aureus
14. MDRO	14.Multi-drug resistance organisms
15. NI	15.Nosocomial infection
16. PMC	18. Pseudo membranous colitis
17. WBCs	116.White blood cells
18. RBCs	18.Red blood cells
19. VRE	19.Vancomycin Resistance enterococci
20. VAP	20.Ventilator associated pneumonia

INTRODUCTION

Introduction

Critically ill patients are at high risk for diarrhea, especially those in intensive care units (ICU). ⁽¹⁾ The causes of acute diarrhea in this setting are quite different from those of community acquired diarrhea. The onset of diarrhea complicates the care of critically ill patients, who often have complex cardiopulmonary, renal or metabolic problems. Diarrhea is common in critically ill patients. ⁽²⁾ Diarrhea occurs because of imbalance between fluid loss into the bowel and reabsorption. Normally, most fluids are absorbed in the jejunum and ileum leaving about 1.5 liter absorbed in the colon. The maximum absorptive capacity of the colon 4.5 l/day. It can be the predominant symptom of severe illness, or be caused by reactivation of chronic illness, altered intestinal function during critical illness or a complication of treatment. ⁽³⁾

Diarrhea is one of many symptoms that may complicate the hospitalization of a critically ill patient. It is caused by a variety of etiologies. ⁽⁴⁾ Any disease that inflames the intestinal tract can lead to diarrhea. Specific microorganisms or the toxins can produce intestinal inflammation and diarrhea. The inflammation irritates the intestinal mucosa to increase its secretions and motility. Medications, inappropriate use of laxatives antacids; antibiotics associated diarrhea (AAD), enteral feeding and hypoalbuminemia. ⁽⁶⁾ Drugs that have been particularly associated with diarrhea: antibiotics, magnesium contain antacid, digoxin, methyl dopa, laxatives, antihypertensive agents, antidysrhythmic drugs and non steroid anti-inflammatory drugs. ⁽⁵⁻⁷⁾

Statistical reports from Ministry Of Health indicated that in Assiut University Hospital 2410 patients were admitted in periods from April 2004 to October 2006 and 69% of these admitted patients had diarrhea during their stay in ICU. ⁽⁸⁾ Adam and Batson 1997, McClave et al 1999, revealed that between 15 and 52% of critically ill patients developed diarrhea. Montejo 1999, found an incidence of diarrhea in 14.7% of 400 intensive care patients studied in the Spanish multicentre prospective survey in gastrointestinal complications. Cynoberl and Moor 2003, mentioned that diarrhea occurred in 34.78% of critically ill patients, far higher than that in the non critical patients 20.69%. ⁽⁹⁻¹²⁾ Mythen et al 1997, reported that between 25 and 40% of critically ill patients developed diarrhea. ⁽¹³⁾

Nutrition support is commonly used as supportive care in critically ill patients, either to treat existing malnutrition or to prevent development of nutritional deficiencies. ⁽¹⁴⁾ In the ICU, diarrhea is frequent occurrence in tube fed patients. ⁽¹⁵⁾ Stroud *et al.* 2003, reported that enteral tube feeding (ETF) related diarrhea occurs in up to 60% of patients on intensive care units although it is usually caused by factors other than the tube feeding itself as elixir drugs containing sorbitol are most often responsible. Other factors which may be responsible for diarrhea included bacterial over growth of enteral feeding itself, bolus feeding and rapid rate. ⁽¹⁶⁾

Hypoalbuminemia is common in seriously ill patients and cause osmotic diarrhoea if it is associated with a lowering of capillary oncotic pressure (COP). Hypoalbuminemia is associated with poor outcome in acutely ill patients. The normal serum concentration of