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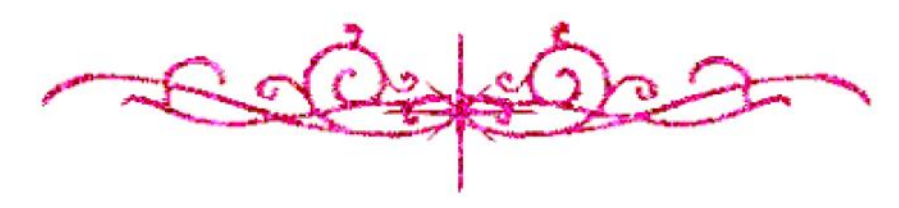

Evaluation of Prescription Practices of Antibiotics in Respiratory Tract Infections at Al-Ahrar Teaching Hospital in 2019

A Thesis

Submitted for partial fulfillment of master degree
in **Chest Diseases**

By

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2020

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Manar Samy Abdellah Abdel-fattah

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Abstract :

Background: Antibiotics are prescribed at more than 100 million adult ambulatory care visits annually, and 41% of these prescriptions are for respiratory conditions. Inappropriate antibiotic use for RTI is an important contributor to antibiotic resistance and an urgent public health threat **.**

Objective: The aim of this work is to evaluate the prescription practices of antibiotics in respiratory tract infections at Al-Ahrar Teaching Hospital in the period between March 2019 and October 2019.

Patients and Methods: One hundred and twenty five patients with respiratory tract infection admitted at at Al Ahrar Teaching Hospital and twenty five physicians working at the same hospital were included in the study. Patients were subjected to medical history and clinical examination. Laboratory investigation included (total leucocytic count & urea). Plain chest x-ray and Computed Tomograghy of chest, if needed,were done.

Results: The most frequent antibiotic prescribed empirically was broad spectrum penicillin (76%). Fifty six percent of physicians prescribed empirical antibiotic for 4 – 6 days. Sixty percent of them depended on international guidelines in prescription and the same percentage reported that prescription was based on combination of clinical, laboratory and radiological findings

Conclusion:

Ninty two percent of the studied physicians reported empirical prescription of antibiotics.The most frequent antibiotic prescribed empirically was broad spectrum penicillin.Sixty percent of studied physicians depended on international guidelines in prescription of antibiotics

Keywords: Respiratory tract infection ,Antibiotics

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List of Abbreviations

Abbr.	Full-term
RTI	**:** Respiratory tract infection
URTI	**:** upper respiratory tract infection
LRTI	**:** Lower respiratory tract infection
GABHS	**:** Group A beta-hemolytic streptococcal
RCV	**:** Respiratory syncytial virus
COPD	**:** Chronic obstructive pulmonary disease
FEV1	**:** Forced expiratory volume in the first second
IL8	**:** Interleukin 8
ARDS	**:** Adult respiratory distress syndrome
CAP	**:** Community-acquired pneumonia
S Pneumonia	**:** streptococcal pneumonia
H influenza	**:** Hemophilus influenza
HAP	**:** hospital acquired pneumonia
VAP	**:** Ventilator associated pneumonia
MDR	**:** multi drug resistant
P.aeruginosa	**:** *pseudomonas aeruginosa*
MSSA	**:** Methicillin-susceptible *S aureus*
MRSA	**:** Methicillin-resistant *S aureus*
ATS	**:** American Thoracic Society
PCT	**:** Procalcitonin
BALF	**:** Bronchoalveolar lavage fluid
CRP	**:** C-reactive protein
ABs	**:** Antibiotics
HIV	**:** Human immunodifficiency virus
IM	**:** Intra muscular
AOM	**:** Acute otitis media

ABECB : Acute bacterial exacerbation of chronic bronchitis
PO : Per oral route
BID : Bi divided dose
Singh D : Single dose
IV : Intra venous
WHO : World Health Organization
ED : Emergency department
DDDs : Daily Defined Doses
GP : General practitioner
CDC : Centers for Disease Control and Prevention
XDR : Extensively drug resistant
PDR : Pandrug resistant
COPD : Chronic obstructive pulmonary disease
AHRQ : Healthcare Research and Quality
SLE : Systemic lupus ersymatosis
TB : Tuberculosis
HCC : Hepato cellular carcinoma
ESR : Erythrocyte sedimentation rate
WBCs : White blood cells
MD : Medical degree
RICU : Respiratory intensive care unit
AE : Acute exacerbation
AMA : Antimicrobial agent
NICE : National Institute for Health and Care Excellence
TLC : Total leucocytic count

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