

**Clinical impact and efficacy of bedside echocardiography on
patient management in pediatric intensive care units in fayoum
university hospital**

Thesis

Submitted for partial fulfillment of master degree in pediatrics

By

Ahmed Mostafa Mohamed Marouf

(M.B.B.Ch)

Faculty of medicine- Fayoum University

Supervised by

Prof. Mohamed Ezzat Al-Ghwass

Professor of Pediatrics

Faculty of Medicine, Fayoum University

Dr. Sara Ibrahim Abo Elnor

Lecturer of Pediatrics

Faculty of Medicine, Fayoum University

Fayoum university

2021



Name of candidate : Ahmed Mostafa Mohamed Marouf

Degree : the master

Title of thesis : Clinical impact and efficacy of bedside echocardiography on patient management in pediatric intensive care units in fayoum university hospital

Supervisors :1. Dr Mohamed ezzat Algwwass

2. Dr Sara Ibrahim Abo ELnor

Abstract

Introduction :Management of critically ill children in pediatric ICU is a difficult task that require proper assessment as multisystem affection may overlap clinical diagnosis . The use of echocardiography is increasing in the last few years as a ,bedside and non invasive . investigation for proper assessment of hemodynamic state of the patient

Objectives: The aim of the study is to determine the efficacy of echocardiography as .abedside investigation on management of critically ill children in ICU

Patient and Methods :This study was conducted in pediatric ICU of fayoum university hospital on 100 critically ill pediatric patients admitted to PICU between January 2020 to December 2020

Results : Our study results show that echo was effective in management in 45% of study group in the form of fluid restriction, starting antifailure drugs and inotropes with 85% of them show improvement and assessment of LV function was the most common indication .for echo in pediatric ICU

Conclusion: Echocardiographic evaluation is an invaluable tool and the requirement of echocardiographic assessment increases according to clinical severity. We believe that the use of echocardiography by intensivists and pediatric cardiologists goes together. However,

in the future, it can be used by pediatric intensivists with adequate training and quality control for primary echocardiographic assessment .