

Mohammed Bin Rashid University of Medicine and Health Sciences

College of Medicine

**CAUSES, SEVERITY, TREATMENTS AND PROGNOSIS OF DILATED
CARDIOMYOPATHY IN PATIENTS AT A CHILDREN'S HOSPITAL IN
DUBAI, 2017-2020: A CROSS SECTIONAL STUDY**

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Project Course (MEDC3524) as part of the Bachelor of Medicine, Bachelor of Surgery
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Declaration of Original Work

We, Aisha Saifi and Sara Tahlak, the undersigned, undergraduate medical students at the Mohammed Bin Rashid University of Medicine and Health Sciences (MBRU), and the authors of this dissertation titled “*Causes, Severity, Treatments, and Prognosis of Dilated Cardiomyopathy in Patients at a Children’s Hospital in Dubai, 2017-2020: A Cross Sectional Study*”, hereby, solemnly declare that this dissertation is our own original research work that has been conducted and prepared by us under the supervision of Dr. Samah Alasrawi (Al Jalila Children’s Specialty Hospital). This work has not previously been presented or published or formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in our dissertation have been properly cited and acknowledged in accordance with appropriate academic conventions. We further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and/or publication of this dissertation.

Student’s Signature:



Date: 24/11/2021.

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Date: 24/11/2021.

Abstract

Objective: The objective is to estimate the prevalence ratio of the cardiac and non-cardiac causes of dilated cardiomyopathy (DCM) by comparing the severity, treatment, and prognosis of diagnosed patients according to age and gender.

Methods: This was a retrospective cross-sectional study conducted at Al Jalila Children's Specialty Hospital (AJCH). A time frame sample containing secondary data from 250 diagnosed patients aged between 0 to 18 years from January 2017 to December 2020 was extracted from 'Cerner', the hospital's database. Chi-square tests were conducted for statistical analysis.

Results: Diagnosed patients are 3.5 (95% CI: 2.9, 4.2) times more likely to have a cardiac cause than a non-cardiac cause. The most prevalent cardiac and non-cardiac causes were congenital heart defects and inflammatory diseases. Overall, having a severity ranging from moderate to severe (51%), having underwent cardiac surgery (49%), and having a good prognosis (86%) had the highest prevalence compared to other severities, treatments, and prognoses.

Conclusion: This is the first study conducted in Dubai to estimate the prevalence ratio of the cardiac and non-cardiac causes and to also determine associations between the severity, treatments, and prognosis of DCM in children. Most of the diagnosed patients were between the ages of 0 to 2 years, wherein those with a good prognosis underwent cardiac surgery.