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## ABSTRACTS PRESENTED AT



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## 108038

**MODALITY: E-POSTER RESEARCHER - NON-CASE REPORT**  
**CATEGORY: EPIDEMIOLOGY AND HEALTH POLICIES/ GLOBAL HEALTH**

**TITLE: IMPACT OF THE COVID-19 PANDEMIC ON DEATHS FROM ACUTE MYOCARDIAL INFARCTION (AMI) IN YOUNG PEOPLE IN BRAZIL**

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**Objectives:** Cardiovascular diseases are one of the main causes of death in Brazil and worldwide, and AMI is its main exponent. During the pandemic of the new coronavirus, health systems had to adapt to adequate care of these patients. The need for isolation and home office can favor the development of traditional risk factors for AMI, most often neglected by young people, such as a sedentary lifestyle, obesity, smoking, excessive consumption of alcohol, stress and poor nutrition. In addition, and taking into account the difficulty of the population's access to health services in the Brazilian pandemic scenario, the present study aimed to evaluate the impact of COVID-19 on deaths from AMI in young people in Brazil. **Method:** We used data from the "Portal da Transparência", a platform managed by the National Association of Registrars of Natural Persons (Arpen-Brazil), through the website <https://transparencia.registrocivil.org.br/especial-covid>. We evaluated the number of deaths from AMI in Brazil in young people (aged 20 to 59 years) and its relationship with the beginning of the COVID-19 pandemic in Brazil (March 2020) with data from January 2019 to December 2021. **Results:** From January 2019 to December 2021, 64,512 patients between 20 and 59 years old died from AMI, 44,940 (69.7%) were male. There was an increase in the number of total deaths over the years studied from 20075 to 20706 and 23731. The average monthly deaths in the period before the pandemic in Brazil was 1680 ± 123, in contrast to 1862 ± 181 after the beginning of the pandemic (p=0.001). The age group with the highest number of deaths was 50-59 with a mean of 13568 ± 766, followed by 40-49 with a mean of 16710 ± 533. **Conclusion:** According to official data on deaths from AMI in young adults between 20 and 59 years old, there was a progressive increase from 2019 to 2021, with a predominance of male patients. The COVID-19 pandemic contributed to this increase significantly. Age remains an important risk factor and older age groups continue to be the most affected.

## 108078

**MODALITY: E-POSTER RESEARCHER - NON-CASE REPORT**  
**CATEGORY: HEART FAILURE/ CARDIOMYOPATHY/ TRANSPLANT**

**TITLE: OUTCOMES OF PREGNANT WOMEN WITH NON-COMPACTION CARDIOMYOPATHY: CASES SERIES FROM INCOR- REGISTRY**

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**Background:** Non-compaction cardiomyopathy (NCC) is a genetic congenital disease, with adverse clinical manifestations. The circulatory overload and hypercoagulability status of pregnancy, both can lead to serious complications. **Purpose:** To study the maternal and fetal outcomes of pregnant women with NCC. **Methods:** Out of 495 pregnant women with heart disease studied, four of them had a diagnosis of NCC confirmed by echocardiography and/or cardiac magnetic resonance exams. Before pregnancy, the symptoms were angina pectoris, syncope, and three cases with symptomatic arrhythmias, two of them underwent radiofrequency ablation. In the multidisciplinary follow-up, the therapy management was adjusted for pregnancy **Results:** The Table below presents the characteristics of patients and the maternal-fetal evolution. There were no deaths, but three patients required hospitalization for treatment of heart failure and cardiac arrhythmias, right away emergency cesarean section resulting premature babies. In the follow-up-12months, no changes were observed in the clinical or myocardium remodeling of NCC patients. The investigation of newborns did not identify any case of NCC **Conclusions:** The heterogeneity of NCC expression and the proportion of maternal and fetal complications, observed in this series, discourage pregnancy in patients with NCC. However, if pregnancy occurs, it should be followed into a tertiary hospital with a multidisciplinary team on standby.

	Age (years)	LVEF (%)	NCC	Cardiac Complications	Treatment	Obstetric complications	Gestational age (weeks)	Newborn weight (gns)
Case 1	41	66	2.35	-	-	PRCM	32	1650
Case 2	36	45	4.7	SVT	Adenosin Metoprolol Amiodarone	Fetal distress	36	2336
Case 3	34	45	3.2	HF	Diclofenac Nitroglicerina	Fetal distress	33	2390
Case 4	34	50	2.4	HF	Furosemide Carvedilol	-	37	3748

HF: heart failure; LVEF, left ventricular ejection fraction; NCC: ratio of noncompacted myocardium to compacted myocardium; PRCM: Preterm premature rupture of membranes; SVT: supraventricular tachycardia.

## 108095

**MODALITY: E-POSTER RESEARCHER - NON-CASE REPORT**  
**CATEGORY: CONGENITAL AND PEDIATRIC CARDIOLOGY**

**TITLE: GLOBAL PREVALENCE OF DEPRESSION AND ANXIETY IN ADOLESCENTS AND ADULTS WITH CONGENITAL HEART DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS**

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**Background** Living with congenital heart disease (CHD) and the required invasive treatments are believed to have an impact on the psychological health of afflicted individuals. Therefore, mental health in persons with CHD is an area of concern. The epidemiology of depression and anxiety in CHD, however, is not fully understood and literature seems to report contradictory findings. **Objective** We aimed (i) to estimate the proportion of depression and anxiety in adolescents and adults with CHD around the globe; and (ii) to explore differences in depression and anxiety rates between people with CHD and the general population. **Methods** We conducted a systematic literature review and meta-analysis, registered in PROSPERO (CRD42021228395). Searches were performed in PubMed, Embase, Cinahl and Web of Science from their inception to March 6, 2021. We identified 91 studies, which enrolled 180,176 patients in total. A random effects meta-analysis of single proportions was conducted according to the DerSimonian-Laird method. Hedges' g (g) was calculated to compare the level of depression and anxiety with the general population. Results The pooled estimated proportion showed that 21.1% of the people with CHD had mild depressive symptoms and 10.3% had moderate depressive symptoms. When looking at the clinical diagnosis of depression, 10.3% had actual depression, and 16.1% had a lifetime episode of depression. For anxiety, 42.7% had mild anxiety symptoms and 21.9% had moderate anxiety symptoms. A clinical anxiety disorder was found in 12.7%, and 23.3% had a lifetime episode of anxiety disorder. The mean scores on questionnaires assessing symptoms of depression (g=0.215; 95%CI=0.062-0.368) or anxiety (g=0.292; 95%CI=0.165-0.419) were significantly higher in CHD than in the general population. However, this higher symptom score was not reflected in a significantly higher proportion of CHD patients having mild depressive symptoms (p=0.654), moderate depressive symptoms (p=0.869), mild anxiety symptoms (p=0.055) or moderate anxiety symptoms (p=0.287), when using the predefined cut-off scores. **Conclusions** This meta-analysis showed that there is a high proportion of depression and anxiety in persons with CHD. Although patients with CHD had higher scores of depressive and anxiety symptoms than people from the general population, the prevalence of depressive or anxiety symptomatology was not higher in CHD.

## 111457

**MODALITY: E-POSTER RESEARCHER - NON-CASE REPORT**  
**CATEGORY: SPIRITUALITY AND CARDIOVASCULAR MEDICINE**

**TITLE: HIGH SPIRITUALITY SCORE PROTECTS AGAINST BURNOUT AND ITS CONSEQUENCES AMONG BRAZILIAN CARDIOLOGISTS**

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**PURPOSE:** Burnout among physicians is frequent and has several consequences for physician and patient. We hypothesized that high spirituality protect against burnout. **METHODS:** A survey with cardiologists, Aug 2018, asked about Burnout, demographics, spirituality, religiosity, job characteristics. We measured Burnout by 3 validated questions (three MBI -Maslach Burnout Inventory- domains). Subjects were Burnout + (B+) if they were in the top 3 scores ("> once a week") on emotional exhaustion and/or depersonalization. Demographics, Spirituality score, DUREL religion index, job aspects, were correlated with B+ or B-. We evaluated consequences of burnout (suicidal ideation, stress, anxiety, depression measured by the DASS-21 form). Multivariate models evaluated the adjusted impact of spirituality over burnout and its consequences. Statistical analysis with SPSS version 23. **RESULTS:** 1000 survey forms, 40.5% response rate; 39 excluded (4 incomplete, 35 graduated <2y); final sample, 375 cardiologists; age 48.8±12.6y, male 57.3%. Burnout rate was 34.6%. Variables associated with Burnout in bivariate analysis: civil state (divorced/single 28.9% B+, married 6.8%, P=0.020), years from graduation (B+, 20.3±13.1y; B-, 25.3±12.5y; P<0.001), age (B+, 45.4±13.1y; B-, 50.0±12.4y; P=0.001), duty hours/week (Q1 to Q4; 24.0%, 27.8%, 46.5%, and 60.9%; P<0.001), and night shifts/week (0 to 3; 30.7%, 38.2%, 41.7%, and 71.4%; P=0.001). Gender (P=0.295), Spirituality score (P=0.099), DUREL (P<0.05 for all 3 domains), postgrad (P=0.701) and subspecialty (P=0.668) not associated with B+. Consequences of Burnout: suicidal ideation (B+, Yes 10.9%; B- Yes 1.3%; P<0.001), DASS Global score (B+, 18.1±11.7; B-, 8.1±6.8, P<0.001), and DASS subscales of Anxiety, Stress, and Depression (P<0.001 for all) were all associated with B+. In a multivariate regression model (Table 1), Number of Duty Hours per Week was associated with Burnout (OR=1.79, 95% CI 1.34-2.41, P<0.001), while Spirituality Score (but not Religiosity by DUREL index) protected against Burnout (OR=0.87, 95% CI 0.77-0.98, P=0.043). **CONCLUSIONS:** High number of duty hours per week increases Burnout among Brazilian cardiologists, while high Spirituality protects them against Burnout.