GLOBAL STUDY ON COVID-19 & CVD
PRELIMINARY RESULTS
(PRELIMINARY ANALYSIS OF FIRST 2500 PATIENTS)

COVID-19 IN NUMBERS

- 220 countries affected
- Nearly 200 million cases
- More than 4 million deaths

COVID-19 & CVD

- Pre-existing cardiovascular conditions and risk factors have been linked with worse outcomes and increased risk of death in patients with COVID-19
- COVID-19 can also lead to serious cardiovascular conditions, including myocardial injury, arrhythmia, acute coronary syndrome and venous thromboembolism

WHF COVID-19 & CVD STUDY IS CLOSING THE RESEARCH GAP

- 92% of COVID-19 research comes from Europe and North America

- Distribution of COVID-19 & CVD study population by region:
  - North America: 39.9%
  - European Region: 52.1%
  - Western Pacific Region: 3.5%
  - South-East Asia Region: 1.8%
  - South America: 1.4%
  - Eastern Mediterranean Region: 0.9%
  - African Region: 0.4%
**WHF COVID-19 & CVD STUDY**

- 92% of recruited patients are from Africa (28%), Asia (53%) and Latin America (11%).
- 86% are from low- and middle-income countries.
- 66% are from lower middle-income countries.

**Sub-Saharan Africa**: 27.68%
- 50% of hospitals had specialists* or advanced care**
- Community Hospital 14%
- Private Hospital 24%
- Public Hospital 62%

**Europe**: 7.52%
- 50% of participating hospitals in Europe had specialists*

**North America**: 4.4%
- 50% of hospitals in South-East Asia had specialists* and 89% had advanced care**

**Middle East & North Africa**: 7.92%
- 56% of hospitals in South-East Asia had specialists* and 89% had advanced care**

**South-East Asia**: 39.76%
- 66% are from lower middle-income countries

**South America**: 7.32%
- 7.92%

**Western Pacific**: 5.4%
OUTCOMES

Clinical outcomes reported at discharge

- **PNEUMONIA** 35.1%
- **ACUTE RESPIRATORY DISTRESS SYNDROME** 13.8%
- **ACUTE RENAL INJURY** 8.6%
- **CARDIAC ARREST** 7.1%
- **ANAEMIA** 7.3%
- **SHOCK** 6.9%
- **ACUTE HEART FAILURE** 3.6%
- **LIVER DYSFUNCTION** 3.2%
- **ATRIAL Fibrillation** 2.1%
- **PULMONARY EMBOLISM** 1.8%
- **MYOCARDIAL INFARCTION** 1.5%
- **MYOCARDITIS** 1.3%

Outcomes at discharge

- **Death** 13.9%
- **Palliative discharge** 0.1%
- **Transfer to other facility** 4.4%
- **Alive, and still an inpatient** 3.7%
- **Discharged** 77.7%

30 Day outcome

- **Unknown** 9.5%
- **Death post-discharge** 3.4%
- **Re-hospitalized** 1%

Cause of death

- **Respiratory failure** 39.6%
- **Other 18.9%**
- **Pulmonary embolism 0.7%**
- **Myocardial infarction 1.0%**
- **Stroke 1.9%**
- **Heart failure 3.8%**
- **Presumed cardiovascular 4.6%**

**KEY FINDINGS**

**PRE-EXISTING CHRONIC CONDITIONS = HIGHER MORTALITY**

- COVID-19 patients recruited mostly from LMICs were younger*
- Higher rates of hypertension and diabetes, but lower in-hospital deaths*
- Increased post-discharge mortality (i.e., 17% up to 30 days)*

*compared to other cohorts from United States and Europe

info@worldheart.org
www.worldheart.org

worldheartfederation
worldheartfed
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