Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Table 11. The Mean Differences Between QTc Correction Equations in Women Using ANOVA Comparison

| Comparison | Mean  | p Value  | 95% CI LB | 95% CI UB |
|------------|-------|----------|-----------|-----------|
| QTcB vs QTcH | 25.968 | <0.001   | 17.623    | 34.314    |
| QTcB vs QTcFri | 33.843 | <0.001   | 25.497    | 42.189    |
| QTcB vs QTcFra | 37.122 | <0.001   | 28.776    | 45.468    |
| QTcH vs QTcFri | 7.875  | 0.073    | -0.471    | 16.221    |
| QTcH vs QTcFra | 11.154 | 0.003    | 2.808     | 19.5      |
| QTcFri vs QTcFra | -3.279 | 0.743    | -11.645   | 5.067     |

RESULTS First is local, catheter-directed delivery of therapeutics directly to the lungs. A localized delivery of therapeutics could increase the bioavailability of drug(s) at the site of action, in comparison to systemic delivery alone. A second approach is light-based therapy. Considering the antiviral, anti-inflammatory, antimicrobial, and vasculoprotective characteristics of visible light energy (380 to 750 nm), a localized, light-based catheter therapeutic approach could prove to be effective. Given the distinct features of COVID-19 disease progression and its attack on hemoglobin and porphyrins, we suggest the infusion of porphyrin-based photosensitizers (PS). COVID-19 has an affinity for PS and would attach to these molecules, which would reduce hypoxic symptoms and allow for their deactivation through the photodestruction of PS molecules. A third approach considers that several studies have demonstrated that viruses hold electrical charges. Neutralizing the charge of the virus within an electrical field is feasible to reduce the viral load using pacing wires and catheters placed near lungs. A final approach is the neuropeptide modulator of the host inflammatory response. In a small preclinical study, the release of proinflammatory cytokines was reduced following transcutaneous low intensity focused ultrasound treatment of the spleen.

CONCLUSION Several catheter-based therapies for COVID-19 were discussed. It should be noted that in all approaches, the combination of a catheter-based therapy with systemic pharmaceutical therapy is recommended. Robust clinical trials with clinically meaningful and relevant endpoints will be needed to assess the feasibility and safety of these approaches.

METHODS Four transcatheter-based solutions were explored in their potential uses for COVID-19 therapy: local drug delivery, energy-based and photodynamic therapy, and neuromodulation.

BACKGROUND COVID-19 has been the catalyst for a quantum shift in our professional and personal lives, literally and figuratively within the blink of an eyelash. Healthcare workers (HCWs) have been profoundly impacted by this disruption at all levels, especially those working in high-stress specialties, such as cardiology, in resource-deprived and population-dense areas in developing countries, such as India. We studied the impact of COVID-19 on a cohort of HCWs working in a high-stress, high-turnover cardiac intensive care unit (CICU) of a tertiary care center in India. Questionnaires, results, and conclusions detailed in this presentation. Considering the fact that India has not even reached the peak of the pandemic, the negative psychosocial impact of COVID-19 on HCWs of the cardiovascular community is highly concerning and disheartening. Simplistic, sustainable long-term action plans are the need of the hour. We must use the cataclysm wrought by COVID-19 to plug our broken healthcare systems. For that, our frontline warriors should be at the best state of physical, mental, and emotional well-being to face up to this challenge. The time to take action is NOW!!

METHODS Evaluate the psychosocial impact of COVID-19 on HCWs working in a highly-stressed environment with high patient burden and turnover rates (45 bedded CICU including 15 step-down beds; average occupancy 90% to 100%). Understand perceived psychological burden and risk of post-traumatic stress disorder (PTSD) in these HCWs.

METHODS Evaluate the psychosocial impact of COVID-19 on HCWs working in a highly-stressed environment with high patient burden and turnover rates (45 bedded CICU including 15 step-down beds; average occupancy 90% to 100%). Understand perceived psychological burden and risk of post-traumatic stress disorder (PTSD) in these HCWs.
Delineating Stressors for this HCW Cohort

A. Personal Sphere:
1. Fear that you / your family are infected by COVID-19
2. Your likelihood of getting infected by COVID-19
3. Your fear regarding possibility of becoming infected by COVID-19
4. Inability to dress as leisure and / or social activities impacted
5. Preventive measures at home to protect relatives during pandemic: shift to another place - 10/ separate room - 6 / PPE at home while in common places - 4/ not possible to distance - 0

** Scale: 01 - 10 [01 - lowest; 10 - highest] / %

B. Professional Sphere - Impact of COVID-19 on Daily Workload
1. Tense working environment
2. Scarcity of support / teamwork
3. PPE usage burden (gloves, aprons, long-sleeved gowns, surgical masks, eye goggles)?
4. Willingness to get reemployed to COVID-19 ICU, if required at peak of pandemic
5. Willingness to transfer to remote / virtual consultants for follow-up patients [post-discharge]
6. Increased bureaucracy
7. Extended working hours

*** Rate: 01 - 10 [01 - lowest; 10 - highest] / %

Timeframe: April - June 2020

RESULTS Based on the preliminary data accumulated from this HCW cohort, COVID-19 has had a major negative psychosocial impact on it. 40% of HCWs are fearful of getting infected with COVID-19 and / or infecting family with it. 5% resigned from fear of contracting the virus. 35% faced social ostracization / discrimination to some extent since the pandemic onset. 3% came in contact with suspected COVID-19 patients and were quarantined, which has led to PTSD-like symptoms in that subset. Based on the preliminary data accumulated from this HCW cohort, COVID-19 has had a major negative psychosocial impact on it. 60% feel that their stress levels are higher by 50% or more due to direct / indirect impact of the pandemic. 70% opine that their workload demands / PPE burden / reinforcement of infection control protocols / ambiguous admission / treatment criteria. 80% believe that they / their family members are at heightened risk of getting infected with COVID-19, 60% have symptoms of burnout. However, 80% of these hesitant to seek help for fear of symptoms of burn-out

CONCLUSION Action Plan: Simplified admission / discharge / follow-up protocols

Emphasis on virtual / remote follow-up visits for patients

Education / awareness on COVID-19, especially for nursing staff

Addressing PPE usage, its gaps and emphasizing adherence to it

Addressing gaps in infection control protocol

Reducing viral load by staggered workhours / breaks

Anonymous in-house psychologist counseling options

CATEGORIES OTHER - COVID-19 Lectures

TCT CONNECT-220

Influenza and Pneumonia Vaccination Effect on Cardiovascular Events

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BACKGROUND In 2017, the U.S. Centers for Disease Control and Prevention listed heart disease as the leading cause of death, with pneumonia and influenza being the eighth cause of death. Several studies suggested the protective effects of influenza vaccination on myocardial infarction (MI). There is limited literature evaluating the combined use of pneumococcal polysaccharide vaccine (PPV) and influenza vaccine on cardiovascular outcomes and mortality.

METHODS A retrospective observational study, analyzing the 2012 to 2015 National Inpatient Sample Databases was conducted to compare various cardiovascular events in adult patients who did and did not receive vaccination during the hospital visit. International Classification of Disease, 9th revision codes were used to extract data for specific variables. The outcomes included MI, transient ischemic attacks, cardiac arrest, stroke, heart failure, and death. Frequency of...