



STATEMENT ON RECOMMENDATIONS TO FOR HEALTH CARE PROVIDERS ON CARDIOVASCULAR DISEASES AND THE COVID-19 PANDEMIC

The Kenya Cardiac Society is cognizant of the current coronavirus disease of 2019 (COVID-19) pandemic and the potential health and economic impact on the country. We applaud the efforts that have been put in place by the government and pledge to contribute towards containing this disease.

Studies from China, till recently the epicenter of the epidemic, as well as other countries reporting high number of cases and deaths have revealed several issues that need to be considered as far as Cardiovascular Diseases (CVDs) are concerned. These include:

- Older patients (65 years and older) have a higher risk of severe disease and deaths¹.
- Patients with underlying conditions are at higher risk for complications or mortality—up to 50% of hospitalized patients have a chronic medical illness (40% cardiovascular or cerebrovascular disease)³.
- Individuals with CVDs and associated risks such as hypertension, diabetes and smoking are at higher risk of severe disease and death^{2,3}.
- Covid-19 infection has been associated with multiple direct and indirect cardiovascular complications including acute myocardial injury, myocarditis, arrhythmias and venous thromboembolism¹.
- With the increase in focus towards response to COVID-19, potential for compromise in the rapid triage of non-COVID-19 patients with cardiovascular conditions may result².
- Cardiovascular health care workers are at the frontline of managing COVID-19 infected patients and therefore measures should be put in place to minimize this risk².
- COVID-19 infection may have longer-term implications for overall cardiovascular health however long-term follow-up data concerning the survivors of respiratory virus epidemics are scarce³.

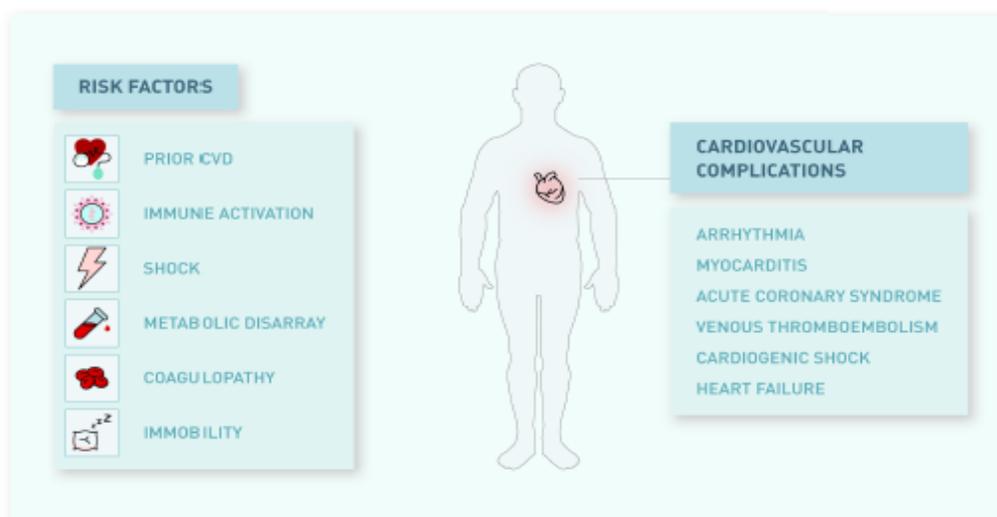


Figure 1: Risk factors and potential CV sequelae which may result from COVID-19 infection²

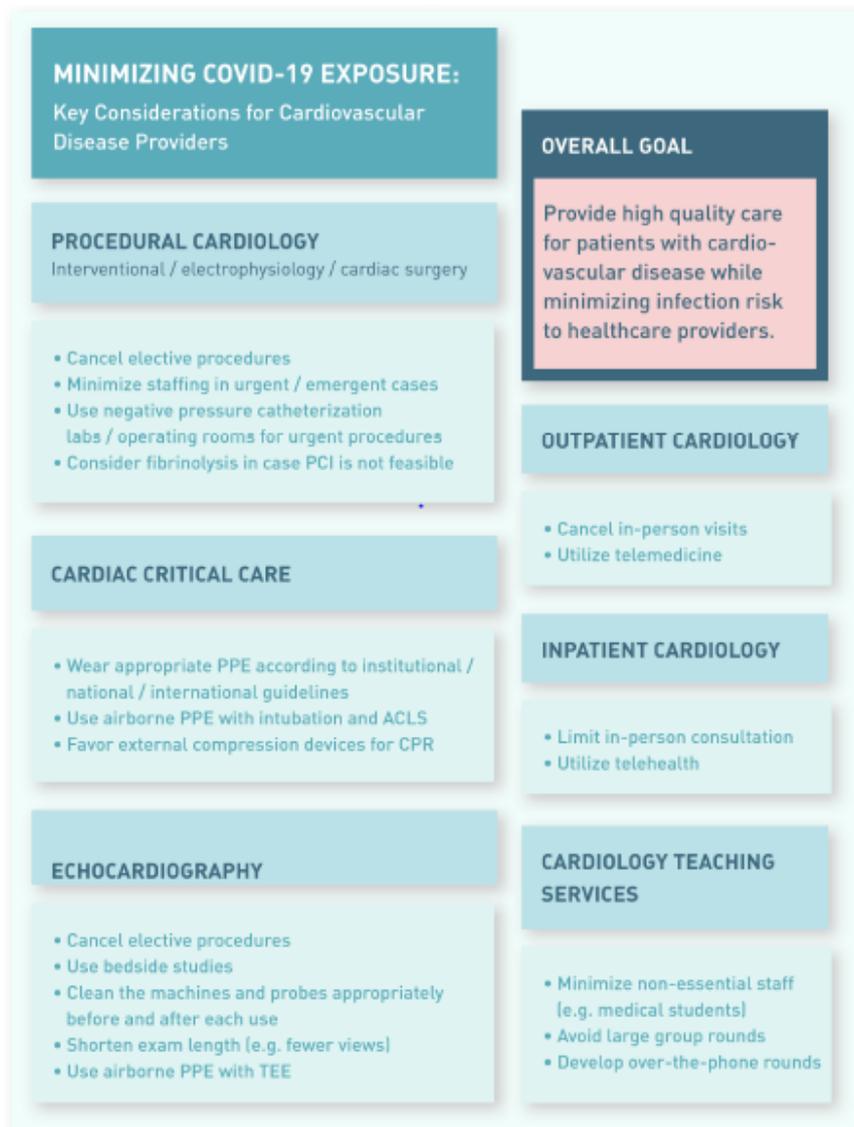


Considering this background, we wish to give the following recommendations:

1. Protection of CV health care workers²

- Hand hygiene
 - i. Perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and after removing PPE, including gloves.
 - ii. HCP should perform hand hygiene by using Alcohol-Based Hand Rub (ABHR) with 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, use soap and water before returning to ABHR.
 - iii. Ensure that hand hygiene supplies are readily available to all personnel in every care location
- Use Personal Protective Equipment (PPE) before caring for potentially exposed COVID-19 patients. This includes face mask, eye protection, gown, and gloves. Train all staff on when and how to use PPE.
- When performing certain procedures that are aerosol-generating, such as transesophageal echocardiography, endotracheal intubation, cardiopulmonary resuscitation and bag mask ventilation, additional PPE may be required including controlled or powered air purifying respirators.
- Appropriate post-intervention cleaning should be observed in the catheterization laboratory especially for potentially contaminated equipment
- Minimize exposure among trainees and non-essential staff (e.g. Medical students)

Figure 2 below summarizes key considerations for preventing infection among CV HCPs.



2. Management of CVD patients with and without COVID-19 infection^{2,4,5}

- Minimize non-essential/non-urgent in-person provider-patient interactions as much as possible.
- Consider temperature screening before clinic/facility entry
- Review current schedules days in advance with a goal of identifying established patients that:
 - i. Can be safely rescheduled >3 months
 - ii. Can be seen virtually (e.g. telephone, telemedicine) for active issues
 - iii. Must be seen face-to-face (traditional visit)
- Stagger or space out appointments for those who must be seen face-to-face to reduce the number of patients in the office and waiting areas
- Utilize telemedicine or e-visits to consult and triage patients especially those with pre-existing CVD who are higher risk. This will be minimizing exposure of patients and HCPs (especially elderly) to potential infection.



- Advise all cardiovascular patients of the potential increased risk and the need to strictly adhere to the following recommended precautions:
 - i. Wash hands often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.
 - ii. If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
 - iii. Avoid touching your eyes, nose, and mouth with unwashed hands.
 - iv. Avoid close contact with others (at least 2 meters social distance) especially those who are sick.
 - v. Clean and disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks. If surfaces are dirty, clean them using detergent or soap and water prior to disinfection.
 - vi. Immediately contact a health care worker or the nearest health facility if you have been exposed to COVID-19 and develop a fever and symptoms, such as cough or difficulty breathing.
- It is important for patients with CVD to remain current with vaccinations, including the pneumococcal vaccine given the increased risk of secondary bacterial infection with COVID-19
- Limit elective cardiac procedures such as cardiac catheterization, operations and echocardiography to only those that are necessary.
- For procedures that are necessary, numbers of personnel should be kept at minimal.
- Triage of patients with COVID-19 should take into consideration underlying cardiovascular disease as well as other comorbidities such as diabetes, cancer, respiratory and renal.
- Considering the anticipated increase numbers of patient infected with COVID-19, hospital protocols should be developed for the care of acute and chronic CV patients with and without COVID-19 in light of the stretched resources.

Figure 3 below summarizes the key considerations when managing CVD patients with and without COVID-19 infection.

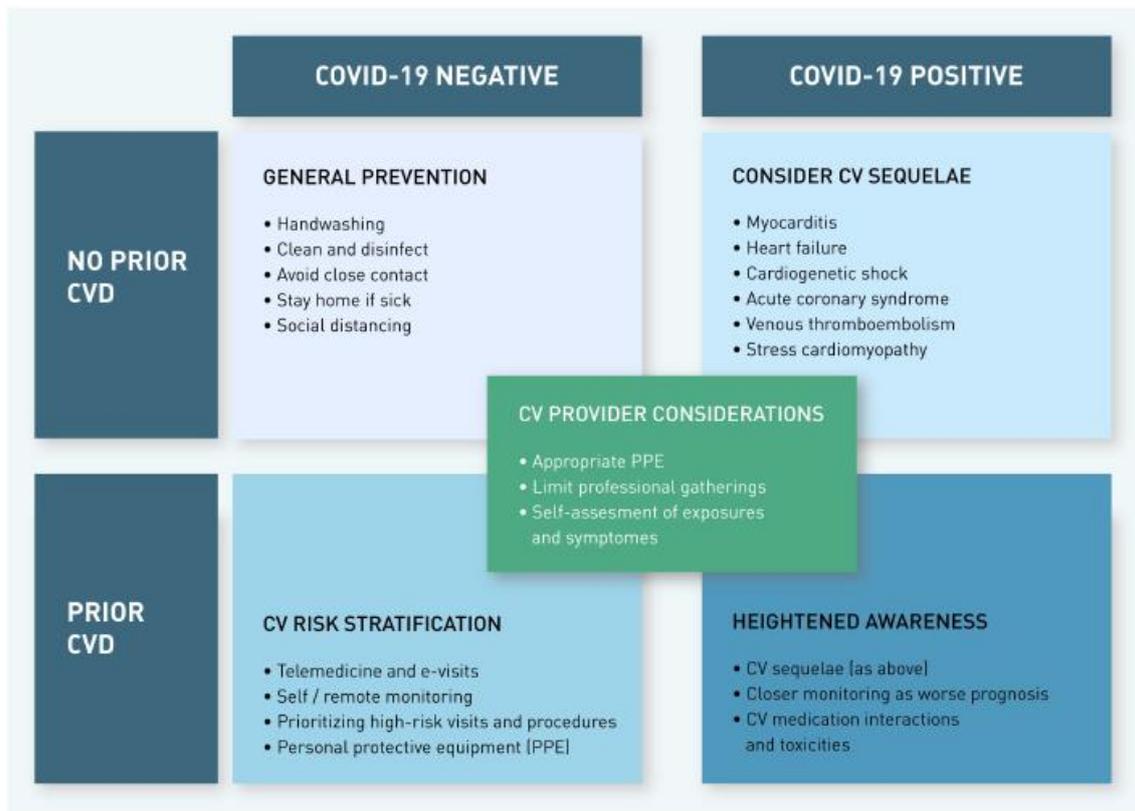


Figure 3: Key considerations for management of patients with and without CVD ¹

References

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