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Flexibility and Safety in Times of COVID-19: Implications for Nurses and Allied Professionals in Cardiology

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Never before have so many health care professionals been on the daily news worldwide as now, during the COVID-19 pandemic. Hospitals are intensifying their resources for patients in need for intensive care and respiratory support, converting wards into COVID-19 units and in parallel stopping or restricting non-life threatening diagnostic procedures and treatment, for instance elective surgery. For the health care professionals working in cardiology, the COVID-19 pandemic has many consequences that might not be directly visible in the day-to-day news coverage. Still, we struggle with similar issues in many countries around the world and this editorial addresses some aspects related to COVID-19 with the goal to enlarge our feelings of unity and solidarity in this field and learn from each other’s experiences.

Cardiology is a broad medical field including both acute and chronic aspects of care that are all affected by COVID-19. For health care providers, a lot of flexibility is asked because of changes in schedules, job assignments, working place, etc. But at the same time, cardiac patients ask stability and security in care too; patients still need adequate diagnostics, treatment, education and follow-up.

**Challenges to cardiac patients and families during the COVID-19 pandemic**

Although a lot of patients can be managed well with support from a distance and are practicing optimal self-care, many cardiac patients have problems and worries that are specially caused by the restrictions that the COVID-19 pandemic lays on society as well as the health care system.

Some of them are:

- Worrying about delayed or cancelled diagnostics and treatment. For example, will my ICD be replaced timely or is it safe to delay my intervention or cardiac surgery. Others worry about their diagnostic angiogram that is postponed and wonder if it is safe or if they will have a heart attack.
- Worrying about optimal care and readmission when out-patient follow-up visits are postponed or delayed, or when they are not admitted to hospital or discharged earlier than in a normal situation without COVID-19.
- Feeling extra vulnerable and anxious as a cardiac patient and being advised for total social distancing since they are at risk of becoming very ill or die if affected by the corona virus or on the other hand feeling frustrated by being considered a ‘risk group’, while not feeling different than yesterday.
- Being restricted in the ability to exercise in, for example, the rehabilitation center at the hospital or the local gym
- Being afraid to get infected from COVID-19 and not knowing how to handle daily issues (for instance, what to disinfect and how often)
- Becoming angry and frightened when others do not adhere to advice given by the government and health care authorities (for instance keep distance)
- Feeling anxious and stressed when met by health care professionals in protective clothing or when met by health care professionals with no protection because of lack of protective equipment.
- Worrying about deterioration while having acute severe symptoms of chest pain and shortness of breath and need to be tested before receiving acute treatment or being hospitalized
- Delaying seeking health care with acute chest pain and not knowing if their complaints are severe enough to burden the health care system.
- Worrying about if there will be enough resources to be treated with for example an acute PCI
- Getting worried or feeling panic from browsing the internet for COVID-19 information without any guidance.
- Having no realistic insight in the situation and feeling strong and immune for everything, for instance feeling unrealistically safe on antibiotics and prednisolone
- Wondering about if they should increase, stop or decrease their medications for example ACE-inhibitor or ARB or do other self-care activities if infected by COVID-19.

**Challenges to cardiac health care professionals**

Health care professionals constantly need to stay updated and adapt their advice to patients and also change their own professional and private behaviour. Some of our colleagues need to stay at home
because of social distance restriction of family members, COVID-19 symptoms, preventive quarantine or mental stress. Some colleagues are afraid to go to work endangering themselves or their family. A substantial number of professionals working in the department of cardiology and department of cardiothoracic surgery prepare for altering (are already altered) their daily clinical work, some experience having their ward rebuilt to be suitable for COVID-19 patients, some wards close completely to relocate staff to other acute care units. Staff is educated to take care of other patient groups than they usually treat (and have expertise in). ICU’s are reorganized and rebuilt to the maximum of respiratory beds. Health care providers from medical, cardiology and cardiothoracic ICU’s create large teams that can work across ICU COVID-19 units with similar equipment and protocols.

In a lot of cardiology out-patient clinics obvious changes include moving to distance follow-up instead of a clinic visit and also extending the length of follow-up phone calls, since many patients want to talk about COVID-19 and what it means to them. In some hospitals, the pacemaker control period is extended from bi- or tri-monthly to yearly, most angiograms and electrophysiology procedures are cancelled. ICDs are monitored using tele-monitoring systems, preventing patients from coming to hospital after receiving a shock therapy and reassuring them by telephone. It is amazing how quick telecare and distance monitoring have become almost ‘the new normal’ and how flexible patient and health care professionals are to adopt this.¹

However, specific challenges of distance follow-up have also become painfully clear and need creative solutions.² For example, it is more difficult to estimate whether a newly referred patient or his or her family can recognize signs and symptoms, for instance leg oedema in heart failure patients or if they are able to decide whether it is necessary to come to the hospital. In addition, in patients with visual or auditory impairments it can also be difficult to change medication by phone, especially when a patient does not have email or cannot read very well. For patients who are very lonely and feel socially isolated and/or elderly patients, extra telephone contact with the clinic can be very important to ask questions and help to solve problems.

Uptitration of medication can be complicated without appropriate lab tests or physical examination of a patient. Every time one orders a lab test (at home or in an office) one has to balance the risk of
exposing the patient to possible COVID-19 infection (or the health care professional taking the blood)
and really needing the lab value to adapt medication, for example to make that last step in an
uptitration schedule.

**Valuable moments and creativity**

Professionals and patients are constantly trying to find practical solutions, such as:

- Use video conference with patients or their family or if this is too difficult, use a picture on the
  phone to show for instance a wound or oedema
- Have ECG and lab tests done close to the patients (for instance at the GP because of fast AF)
- More contact by email and regular mail
- Closer collaboration with primary care
- Send information about websites when people can see how the heart works, what happens in case
  of fluid retention etc.
- Emphasize that patients and their family can contact the clinics and when necessary, they can
  come to the hospital and will be treated

Meanwhile, there appears to be a collaboration within and between disciplines and professions as
never before. All health care workers must adapt to this new situation, and this is accompanied by fear,
stress but also solidarity and heroic work. Similarly, in talking to patients and family members also
valuable moments occur, for example talking about life and death which seems to be easier for some
patients and family members in this exceptional situation. While patients feel much more vulnerable,
health care workers in cardiology need to give flexible, and secure patient care on an optimal level.