The COVID Pandemic - Potential Collateral Damage in a Less Focused Dimension

Hans-Joachim Schäfers[1], Carolin Kunz[2], and Volker Köllner[3]

[1]University Hospital of Saarland
[2]University Hospital of Saarland, Thoracic and Cardiovascular Surgery
[3]2 Department of Psychosomatic Medicine, Rehabilitation Center Seehof, Research Group Psychosomatic Rehabilitation, Charité University, Berlin, Germany

July 22, 2020

Abstract

Protective measures against Covid have a relevant impact on communication. This will have be to be considered in the future.

The COVID Pandemic - Potential Collateral Damage in a Less Focused Dimension

Hans-Joachim Schäfers, MD[1], Carolin Kunz[1], Volker Köllner, MD[2]

[1] Department of Thoracic and Cardiovascular Surgery, Saarland University Medical Center, Homburg/Saar, Germany

[2] Department of Psychosomatic Medicine, Rehabilitation Center Seehof, Research Group Psychosomatic Rehabilitation, Charité University, Berlin, Germany

Address for correspondence

Prof. Dr. H.-J. Schäfers

Department of Thoracic and Cardiovascular Surgery,

Saarland University Medical Center,

66421 Homburg Saar, Germany

Fax: +49-6841-1632005

Email: h-j.schaefers@uks.eu

In the past 60 years cardiac surgery has become such a routine part of the portfolio of treatment options offered to the patient that we rarely think about medical and psychological basic aspects.

The Covid pandemic has interfered with many aspects of daily life that have been taken for granted. Travelling or going to a restaurant seems to be more affected than cardiac surgery. The concern of many cardiac surgeons has been that - due to a “medical lockdown” – they could not continue their regular activities but had to wait for the initial onslaught of the pandemic to pass by. In some institutions cardiac participated in the ICU management of Covid patients, in others they ended up idling because units were closed or patients too afraid to have their acute cardiovascular diseases treated in-hospital. With the first wave having passed in most European countries, life seemingly continues as normal. Protective measures, however, are still part of

our routine, such as wearing masks, distancing, or variable travel restrictions. Since we cardiac surgeons are used to working with masks, we may believe that at least our professional lives have returned to normal.

A careful look at some details regarding our patients will give us a different view, and this is primarily related to the psychologic aspects of having a cardiac disease and requiring surgical treatment. Most operations in cardiac surgery are performed for vital, i.e. life-threatening reasons. It is well known that patients will develop a high anxiety level once they are understand their diagnosis. The anxiety increases even further when they hear they have to undergo cardiac surgery (1). The moment the surgeon first sees the patient, he is therefore faced with a patient who has a high level of anxiety. Among other things it is the responsibility of the surgeon to overcome this anxiety and to generate trust in order to bring the patient to the point where he or she agrees to undergo the necessary treatment.

Anxiety has different facets. It does have a rational part, related to the objective risks of an intervention. In addition, there is the subconscious part which is more difficult to deal with. The patient experiences loss of control over his situation; there may be cognitive incongruence in that the patient wants the positive aspects of his therapy but wants to avoid risks or consequences of the intervention. This psychological internal conflict may lead to irrational decisions, such as preferring PCI over coronary surgery irrespective of the facts, or believing that a TAVI is the best solution despite young age and objective facts speaking a different language.

During the first encounter with the patient the cardiac surgeon has to inform him in a rational and understandable way, in addition he also has to build up trust. This is done through adequate communication, both verbal and nonverbal. Both protective masks and distancing may present as difficulties in verbal communication, both to the patient and the surgeon. Through a mask the voice loses in clarity, it sounds muffled. Even more important, a variable part of understanding speech comes through watching lip motion (2, 3), which is lost when wearing a mask. Such problems are aggravated by hearing deficits and communication in a non-native language. It can be expected that a variable degree of information is lost by communication under these circumstances.

Also the nonverbal communication is limited by masks and distance. This nonverbal communication is an essential part of dealing with emotions, such as the anxiety that the patient presents with. Trust develops on the basis of verbal and nonverbal communication. Wearing a mask may limit the “first impression”. First impression formation has been shown in general and occupational psychology to have an important and lasting influence on judgment and further reception (4, 5). This is formed by the initial reception, in which facial mimics play an important role. (6). It has not been studied yet but appears conceivable that first impression formation is influenced by not being able to see the other person’s face fully. More importantly, unconscious reading of the facial movements contributes to nonverbal communication by sensing the emotional components of the sender of a message, and also the recipient (7). It is thus more difficult for the surgeon to sense fears, excitement, hope, or other emotional states. More importantly, the surgeon will have difficulty to transmit confidence and empathy to the patient.

Thus, wearing the mask will limit communication for the patient and the cardiac surgeon. Having said this, it is clear that certain protective measures have to be taken, and masks are an apparently effective means of limiting Covid spread. On the other hand, we have to focus on dealing with communication under these circumstances. Regarding verbal communication, the hurdle can theoretically be overcome by speaking more slowly and louder. We will have to investigate how we can best minimize the limiting effect on nonverbal communication. It is unclear whether, for instance, transparent masks facilitate reception of facial movements while still providing protection against the current viral challenge.

Thus, Covid has been and still is a challenge to human interaction. It affects the patient-physician interaction, it also limits the traditional ways of information transfer, such as travelling to a meeting in order to hear someone speak rather than follow her or his message from a distance, i.e. through a publication or a blog. We should focus on these hurdles to communication, and incorporation of psychological research results into our daily practice appears as a promising way to maintain interaction while allowing epidemiological safety.

References

1. Hoyer J, Eifert GH, Einsle F, Zimmermann K, Krauss S, Knaut M, Matschke K, Köllner V. Heart-focused anxiety before and after cardiac surgery. Journal of Psychosomatic Research. 2008, 64: 291-297
2. Jaha N, Shen S, Kerlin J, Shahin A. Visual Enhancement of Relevant Speech in a 'Cocktail Party'. Multisens Res. 2020;33(3):277-294.
3. Bourguignon M, Baart M, Kapnoula EC, Molinaro N. Lip-Reading Enables the Brain to Synthesize Auditory Features of Unknown Silent Speech. J Neurosci. 2020;40(5):1053-1065.
4. Willis J, Todorov A. First impressions making up your mind after a 100-ms exposure to a face. Psychol Science 2006; 17: 592–598
5. Schmid Mast A, Bangerter A, Bulliard C, Aerni G. How Accurate are Recruiters' First Impressions of Applicants in Employment Interviews? Intern J Selection Assessment 2011; 19: 198–208
6. Linden M, Dymke T, Hüttner S, Schnaubelt S. Impression Formation in the Diagnosis and Treatment of Mental Disorders. Psychother Psych Med 2016; 66: 221–226
7. Carbon CC. Wearing face masks strongly confuses counterparts in reading emotions. Frontiers of Psychology, in press.