Recommendations:

Maintaining capacity in the healthcare system during the COVID-19 pandemic by reinforcing clinicians’ resilience and supporting second victims
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Version: 18.06.2020, photo credit cover: © maridav - stock.adobe.com

Acknowledgments
The authors gratefully thank the German Coalition for Patient Safety (Aktionsbündnis Patientensicherheit e.V.) and the Austrian Network for Patient Safety (Österreichische Plattform Patientensicherheit) for publishing these recommendations.

Please cite as follows:
Objective of the recommendation:

These recommendations are intended for healthcare leadership in clinical and administrative fields. The aim is to increase awareness of the issue of globally occurring traumatization among clinicians arising from their current psychological stress during the COVID-19 pandemic as well as from their risk of becoming infected themselves.

By optimizing management instruments and crisis communication it is hoped that clinicians’ and managers’ resilience can be reinforced, so helping to minimize the risk of overwhelming the healthcare system.

Recommendations for practical procedures on the frontline are provided in brief form after appraising available evidence and accepted recommendations as well as reports on the current situation in crisis regions.

This document focuses on acute inpatient care, particularly because of the evidence currently available. Implementing corresponding strategies for reinforcing resilience is strongly encouraged for all areas of healthcare because the current extraordinary demands on the system are not limited to acute inpatient care.

The document reflects the current state of knowledge. Given current dynamic developments, this can change rapidly. We expressly welcome new and additional evidence, please send it to the contact address above. In addition, feel free to distribute and/or translate the paper, but please include its source.

The authors

Wiesbaden, Berlin, Vienna and Mannheim,

14. April 2020
Executive Summary

The term second victim describes a person involved in patient care who, due to an extraordinary patient care situation, becomes traumatized him/herself. This phenomenon is largely unknown to the general public, although it is widespread, and is being exacerbated by the COVID-19 pandemic. Pronounced psychological strain among clinicians entails the risk of further increasing pressure on the healthcare system. The ensuing threat to the safety of both patients and staff needs to be taken seriously.

The second victim phenomenon is well researched and requires a two-pronged strategy. On the one hand, second victims need fast, personal and confidential support within a comprehensive, easily accessible, stratified system. On the other hand, reinforcing clinicians’ resilience is crucial. Leadership and appropriate crisis communication can sustainably support clinicians’ resilience, and thus their ability to function effectively in the long term. Consequently, management can make both a short-term as well as a sustainable contribution to patient safety, increasing the chances of survival for many patients during and after the COVID-19 pandemic.

What is a second victim?

Albert W. Wu introduced the term second victim in 2000 to describe clinicians who were traumatized by their own errors (Wu 2000). In 2009 Scott et al. expanded the term so that it now describes “Second victims are healthcare providers who are involved in an unanticipated adverse patient event, in a medical error and/or a patient related injury and become victimized in the sense that the provider is traumatized by the event” (Scott et al. 2009).

Given this context, the current COVID-19 pandemic and the exceptional circumstances arising in treatment facilities can be considered an unanticipated adverse event (Dewey et al. 2020; Adams und Walls 2020), even if currently the local situation is not so extreme that triage has become necessary. This assessment is congruent with a study by Waterman et al. which showed that for a large proportion of respondents, near misses led to comparable stress (Waterman et al. 2007). Exceptional measures, high infection numbers, especially the increased risk of infection among clinicians, the growing number of cases with a severe and lethal course are causing not just physical but also especially emotional stress among clinicians in all areas of provision (Tam et al. 2004; Wu et al. 2020).

How many clinicians are second victims?

The second victim phenomenon has been well researched in the English language literature on acute inpatient care. While a meta-analysis by Seys et al. from 2013 found the prevalence of second victims to be 10–42% of respondents (Seys et al. 2013), current studies and several surveys conducted during the COVID-19 pandemic that are currently in press report a prevalence of over 50% just within the framework of medical specialty training (Harrison et al. 2014). According to experts’ estimates, all clinicians will sooner or later in their professional life become a second victim (Laue et al. 2012).

Studies on previous crisis situations such as the SARS pandemic of 2003 report that up to half of the clinicians who treated SARS patients showed acute psychological distress, burnout or post-traumatic stress disorder (Tam et al. 2004).

On the basis of current reports from physicians in Italy it can be assumed that the prevalence described in the literature, which usually arises over a period of several years or even the entire professional life, is being reached within a few weeks. Furthermore, not only the health of those affected but also the ability of the entire healthcare system to function effectively has been massively compromised.
On the basis of experiences from other crisis situations (SARS, 9/11 etc.) and current reports from COVID-19 hotspots e.g. in Italy, Spain and USA, it can be assumed that the number of clinicians in many countries who have already been traumatized as second victims or are acutely threatened by such a trauma is significant enough to have an impact on the functioning of the healthcare system.

What are the consequences of a second victim traumatization?

According to information provided by second victims, two-thirds of all respondents process the underlying event dysfunctionally (Waterman et al. 2007; Scott et al. 2010; West et al. 2006; Burlison et al. 2016; Schwappach and Boluarte 2009). This can be expressed as, for example:

- sleep disorders
- reduced professional confidence
- feelings of guilt, isolation, depression
- flashbacks
- medication and/or alcohol consumption

In a study conducted by Gazoni et al. among anaesthetists, 10% of all second victims claimed to have never recovered from the event (Gazoni et al. 2012). The consequences for those affected individuals are dramatic and can lead to post-traumatic stress disorder, leaving the profession and in the worst cases even to suicide (Grissingere 2014). In addition to the second victims themselves, their future patients may also be affected. Since second victims are continuously preoccupied with the past event and their ability to function effectively is compromised, they are more likely to make errors (Tawfik et al. 2019). There are also reports of changes in professional behaviour up to defensive medicine and protective behaviour, which in the context of the COVID-19 pandemic can lead to errors of clinical judgement to the detriment of all those involved (Vincent and Amalberti 2016).

Given the current state of knowledge it can be assumed that insufficient acknowledgement of clinicians' psychological stress can significantly accelerate the point at which the healthcare system becomes overwhelmed or significantly reduce total capacity within the healthcare system.

What support is available to second victims?

As a result of qualitative patient safety research in the USA on the topic of second victims, in the last few years an increasing number of healthcare facilities have established support programs for second victims. Examples include the RISE Program developed by the Johns Hopkins University (Edrees et al. 2016), the forYOU Program at the University of Missouri (Scott et al. 2010) or the Medically Induced Trauma Support Services (MITSS) (Medically Induced Trauma Support Services (MITSS) 2010).

Evaluations of individual programs have shown both a positive medical effect (Edrees et al. 2016) as well as cost efficiency (Moran et al. 2017) when the costs of the support program are compared with the reduction in costs for clinicians’ turnover or time off. Until today, in German-speaking as well as other European countries (Mira et al. 2015; Ullström et al. 2014) there have only been isolated voluntary initiatives, in Germany for example the association PSUakut e.V. (Hinzmann et al. 2019) or the EMPTY Program developed by Young DGINA.

Universal and easily accessible support programs for clinicians are currently not available in German-speaking and many other European countries.

The objective and common core of all previous support programs has been to offer swift support to second victims by means of an easily accessible, round the clock, stratified crisis intervention strategy so that clinicians can cope with their experiences in the best possible fashion. All of this should be
offered within an appreciative environment that understands stress as a human reaction and not as an expression of weakness in character. In a study on the natural history of the second victim phenomenon it could be shown that with optimal support many second victims could even experience personal growth after the traumatising event and could move forward at full capacity. The characteristics of these support programs are based on the model illustrated in Figure 1 that, as required, can be advanced to the next stage.

Drawing on general recommendations, implementing the following measures can help to reduce the effects of second victim trauma (Scott et al. 2010; Schwappach and Boluarte 2009; Strametz 2019):

- Offer a short break from clinical work and guarantee it even if there are staff shortages (a long-term break would be a worse solution)
- Actively offer peer support, not only if adverse events are suspected but at regular intervals
- Make short but effective debriefings after stressful situations or shifts routine
- Use empathic but unambiguous and clear language
- Confirm underlying professional competence and reinforce self-esteem among staff
- Allow expressions of emotions and anxiety
- Offer professional support and reassurance in clinical work
- Offer those involved in medical errors a role in analysing the error; inform them of the results
- Observe attentively for early recognition of isolation and withdrawal
- Avoid and condemn teasing, bullying, blaming and belittling of those involved (asking for support is not a sign of weakness but is human and evidences a sense of responsibility towards patients).

How can second victim traumatization be avoided?

In their Framework for High Reliability Organizations, the Agency for Healthcare Research and Quality (AHRQ) names resilience as one of five crucial factors (Agency for Healthcare Research and Quality (AHRQ)). Our understanding of resilience, that is the ability of individuals to withstand stressful situations, has been significantly shaped by the work of Aaron Antonovsky. He defined the sense of coherence as a prerequisite for resilience that is based on three components: viewing the world as comprehensible, meaningful and manageable. With regard to the COVID-19 pandemic and drawing on Wu et al.’s current recommendations, leadership is urged to consider the recommendations illustrated in Figure 2.
Fig. 1: Three stage model for supporting second victims, based on Scott (2009)

**Tier 1:** Peer support in the department
- Identifying the stress situation (mindfulness)
- Showing understanding for colleagues needing support
- If necessary, notifying the crisis intervention team

**Tier 2:** Specialized crisis intervention team
- Easily accessible (24/7)
- Direct and confidential support
- Debriefings after stressful situations
- If necessary, referral to a professional support network

**Tier 3:** Professional support network
- Integration with local structures, both inside and outside the organization, e.g. pastoral care, social workers, external crisis intervention teams

## Reinforcing clinicians’ resilience during the COVID-19 pandemic

### Illustrative attitudes of resilient clinicians

| Meaningfulness | I can put the current situation and the exceptional circumstances into context. Even if I do not know all of the details of the crisis all the time, I consider the underlying approach to be appropriate and trust the measures currently in place. |
| Comprehensibility | I understand why I am experiencing stress and that this is happening to many colleagues both here and all over the world. It is not that I am too weak or not good enough. It could have happened to anyone, it is human to err and I am allowed to. |
| Manageability | I can report being overwhelmed without fear of ridicule or bullying and will be supported by superiors, colleagues and, if necessary, other people in coping. Even if the situation is far removed from normalcy, I am confident that with this support I can cope with it. |

### Challenges for management

- **Focus leadership on resilience:**
  - clear, optimistic vision
  - plan realistically
  - act decisively
  - express gratitude

- **Crisis communication** – clear, informative and uplifting information reduces anxiety, so provide up-to-date information on:
  - effects of the pandemic
  - protecting staff
  - handling staff infections
  - guidance for self-help

- **Continually support staff!**
  - allow expression of concerns and fears
  - support self-care
  - communicate that support is available
  - make crisis intervention possible 24/7

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