

## Influence of Complications on Dentists: A Review

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### Abstract

All dental procedures carry the potential for adverse events. Dealing with the sequelae of the complications and errors that arise in the course of normal practice is therefore part and parcel of a dentist's working life. The challenges and stresses that this creates are now well recognized, although dental training has, until recently, done little to help dentists prepare for such events, and ongoing professional and personal support is limited.

**Keywords:** dental procedures, practice, dentist.

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### INTRODUCTION

Healthcare professionals can be seriously affected when they are involved in major clinical incidents. The impact of such incidents on staff is of particular relevance to dentistry, as the dental chair is one of the highest-risk areas for serious complications. Although it is crucial to focus on the needs of patients and their families when errors occur, it is also important to recognize that dentists may be the 'second victims' in such circumstances [1, 2]. Although there are often standard protocols in place regarding how to manage patients and families, it is far less clear how, and to what extent, dentists need support [3,4]. This paper explains the evidence on the nature of the impact that adverse events have on the professional and personal lives of dentists, whether there may be differences in that impact for complications versus errors and the nature of the support that dentists might require as a result.

Humans make frequent errors and misjudgments in every sphere of activity, but some environments are less forgiving than others. Failures in academia, law or architecture, for instance, can mostly be remedied with an apology or a cheque. Those in medicine, or in the air, may have severe or even catastrophic consequences. This is not to say that the failures of doctors, nurses or pilots are more reprehensible, only that they bear a greater burden because their errors have greater consequences. Making an error, particularly if a patient is harmed, may

therefore have profound effects on staff involved, particularly if they are seen, rightly or wrongly, as responsible for the outcome [5]. Healthcare professionals have been called the second victims of adverse events in healthcare [4].

#### Dentists as second victims

Prevalence of second victims after adverse events varied from 10% to more than 40%, depending on the study. 'Victims' reported strong negative reactions such as anger and irritation, sadness and depression, and shame and self-blame [4]. The definition of a 'second victim' is imprecise and based on the assumption that individuals have made a major error for which they feel personally responsible. The perspective presented in this review may therefore reflect some but not all dental experiences.

#### Dentists as resilient individuals

There is considerable variation in both the nature and extent of dentists' reactions to adverse events, with some being much more affected than others [5]. In addition to personal resilience, effective coping strategies are another part of the armory that dentists have to enable them to deal effectively with adverse events. The problem focused coping strategies that were most commonly reported by dentists were discussing the complications with peers for advice, deconstructing the complication to identify lessons that could be learnt and ensuring skills are up to scratch [5]. Common emotion-focused strategies included

rationalizing by putting what happened into perspective, talking openly to patients as a way of finding closure, and seeking reassurance from colleagues.

#### **Adverse events: errors, complications and systems**

Dentists' responses also appear to depend on the nature of the adverse event. For example, the severity of the outcome and the reactions of the patient or his or her family are commonly reported determinants of a dentist's reaction [5, 6]. Despite obvious variation in the severity and nature of adverse events, the overwhelming majority of research has treated errors in an undifferentiated way. It has also focused on errors rather than complications. Despite the fact that complications occur much more frequently and are an inevitable part of dealing with the risks inherent in dental procedures, very little is known about their impact on dentists. Relevance of stress immunity as the overriding personality trait in consultants may better facilitate patient care<sup>7</sup>.

Dentists can be affected by serious complications and the implications of this impact concern all parties: dentists themselves, their colleagues, patients and the wider organization. Emotional reactions range from guilt and crisis of confidence, to anger and worry about a career. Even though the intense emotional impact fades progressively, there are certain cases that dentists recollect many years later. These findings reflect earlier studies of major railway accidents, which show that the psychological well-being of drivers who are involved in serious accidents that cause major injuries or death is significantly impaired in the short term<sup>7</sup>, whereas a smaller number continue to experience significant distress in the longer term<sup>8</sup>. Longitudinal quantitative designs could elucidate the degree, types and duration of the psychological impact of dental complications on dentists. Dentists at any stage could benefit from structures aimed at facilitating coping with serious complications. The following initiatives could be considered:

**Dental training:** Dental training could place more emphasis on the challenges of dental complications. Early guidance on the potential personal, institutional and patient/family reactions to dental complications, as well as on the availability of support, may be particularly helpful for young dentists and may prevent symptoms of severe psychological distress.

**Mentoring:** A better mentoring system was the most commonly suggested type of support for dentists in the aftermath of major complications [9].

**Mortality and morbidity meetings:** These need urgent review to consider how to re-establish them as educational forums rather opportunities for personal rivalries and blame passing.

**Teamwork:** Teamwork approaches in the management of complex cases with joint working could facilitate coping and prevent reactive decision-making.

**Psychological interventions:** A toolkit to help healthcare organizations implement support programs for clinicians suffering from the emotional impact of errors and adverse events [10]. Structures with a psychological focus may also be of value for dentists who are seriously affected in the aftermath of major complications.

#### **CONCLUSION**

Dentists are often affected by major complications that happen early in their careers, and interviews with very junior trainees would be informative. Nevertheless, published literature on healthcare professionals' experiences of adverse events has allowed the present findings to be cross-checked against existing research data. It is worth noting there is evidence that dentists suffer particularly from high levels of burn-out, and that their well-being and quality of patient care may be affected by a range of factors. Such factors include demographic (sex, family status), personal (alcoholism, conflicts between personal life and work, use of wellness promotion practices), or wider work-related influences (hours worked per week, work location, institution) [11-13]. Future quantitative studies should try to identify the psychological impact of serious dental adverse events on dentists in the context of the wider influences that seem to affect their (or indeed other healthcare professionals') psychosocial well-being.

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