“Sometimes wrong, never in doubt” or “fake it till you make it”?

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The classically quoted refrain of the surgeon, “sometimes wrong, never in doubt,” is called into question in the study by Zaed and co-authors, who examine the prevalence of the imposter syndrome (IS) in a cohort of young Italian neurosurgeons and neurosurgical trainees.¹ As the authors note, the imposter phenomenon is characterized by doubt in personal ability and a sense that accomplishments are fraudulent and ill-deserved. Through a survey of neurosurgeons/trainees ≤ 40 years old, the authors examine scores on the Clance Imposter Phenomenon Scale and define scores > 40 (on a range of 6 to 100) to be indicative of IS. They find a substantial percentage of the 103 respondents (who represent approximately 25% of those surveyed) to meet the stated threshold, with 82% scoring in the defined range of reporting moderate to intense signs of the syndrome. It would appear, therefore, that many of the cohort feel that they have to “fake it till you make it” despite the implicit accomplishment of undertaking neurosurgery as a profession.

This paper raises a number of issues worth examining in further detail.

Does IS Matter?

Although this paper does not directly examine presumed downstream effects of IS, high levels of imposter characteristics have been linked to loss of well-being and burnout, which in turn have been linked to negative effects on quality and safety of patient care. Furthermore, individuals suffering from intense feelings characterized by the syndrome are less likely to be able to fulfill their full potential.² The predilection for affecting women was highlighted in the original article by Clance and Imes, which specifically characterized the syndrome as a phenomenon experienced by “high achieving women.”³ It is disheartening, if not surprising, that gender is still being identified as associated with this phenomenon more than 40 years later, although notably, the phenomenon is not uniquely gender-based. Data from other realms tend to support the notion that women surgeons may judge themselves more harshly than their men counterparts. Correspondingly, a tendency for women neurosurgery residents to underestimate their abilities has been noted in the context of self-evaluation of operative skills. In the Surgical Autonomy Program launched at Duke University,⁴ which allows neurosurgery residents and their supervising faculty to independently grade progress on a spectrum from novice observer to independent operator during different “zones” of a given operation, women tended to more frequently grade themselves lower than faculty, compared to men, for the most critical zone of the procedure; i.e., representing the key portion of the operation (Haglund MM et al., unpublished data, 2022).

Are These Findings Valid and Generalizable?

A number of issues may impact the validity of the results, including the relatively low response rate in a setting in which the characteristics of respondents and non-respondents are not examined and are likely to differ. The survey focuses only on younger neurosurgeons and trainees, whereas casting a wider net across the full range of experience levels may have provided more insight regarding the role of experience; interestingly, although residents appeared to have a higher prevalence of the syndrome than graduates, no difference was noted between junior and senior residents. The rate of IS identified is higher than in other reports of physicians and physicians in training, which show rates ranging from 22% to 60%.⁵ This could relate to the threshold applied by the authors for dichotomizing presence or absence of the syndrome. In fact, if the threshold of frequent or intense symptoms is
applied instead, the prevalence of the condition is substantially lower at 39%, with only 12% falling into the intense category. Alternatively, neurosurgical trainees and neurosurgeons may be more prone to the syndrome by nature of being in a high-achieving profession.

Is the Alternative Worse?

Inasmuch as IS signifies excessive doubt in one’s abilities, the opposite end of the spectrum (i.e., excessive confidence) can be as or more injurious in the context of patient care. These relatively opposing states are expressed by the Dunning-Kruger effect, a cognitive bias whereby those with relatively little knowledge and skill tend to overestimate their abilities, and those with a high level of expertise underestimate their relative abilities. Both excessive doubt and supreme confidence carry risk. Ultimately, as with many psychosocial behaviors, moderation is likely to be warranted, and different situations may call for differing degrees of confidence. In the context of patient care, a modicum of self-doubt underlies the humility to critically examine our choices and abilities, whereas steadfast confidence is essentially a requisite to subjecting any patient to the cut of our knife. Similarly, in the context of academic development, a little self-doubt may spur our drive to prevail, whereas committed confidence can convey our capability to succeed.

Importantly, although the article by Zaed et al. does not probe ways to approach or mitigate severe forms of IS and its potential negative consequences, it does highlight the existence of the phenomenon. Recognition of these signs offers a potential opportunity for supervisors and faculty to positively impact affected trainees by providing feedback and mentoring. As a real-world example, in the Surgical Autonomy Program described above, the mere sharing of supervisory grading of surgical performance with the trainee resulted, over time, in a substantial correction of self-perception by women residents, and to a lesser degree in men residents. Although later-career neurosurgeons are not examined in this paper, it is unlikely that any of us is immune to impostorism in some aspects or stages of our careers. Ongoing mentorship and constructive feedback would appear to be the obvious cornerstones in addressing the syndrome and countering negative effects.

References

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