

## Letter to Editor

# Pre-Procedural Patient Anxiety in Dermatologic Procedures: A Cross-Sectional Study of Dermatologists

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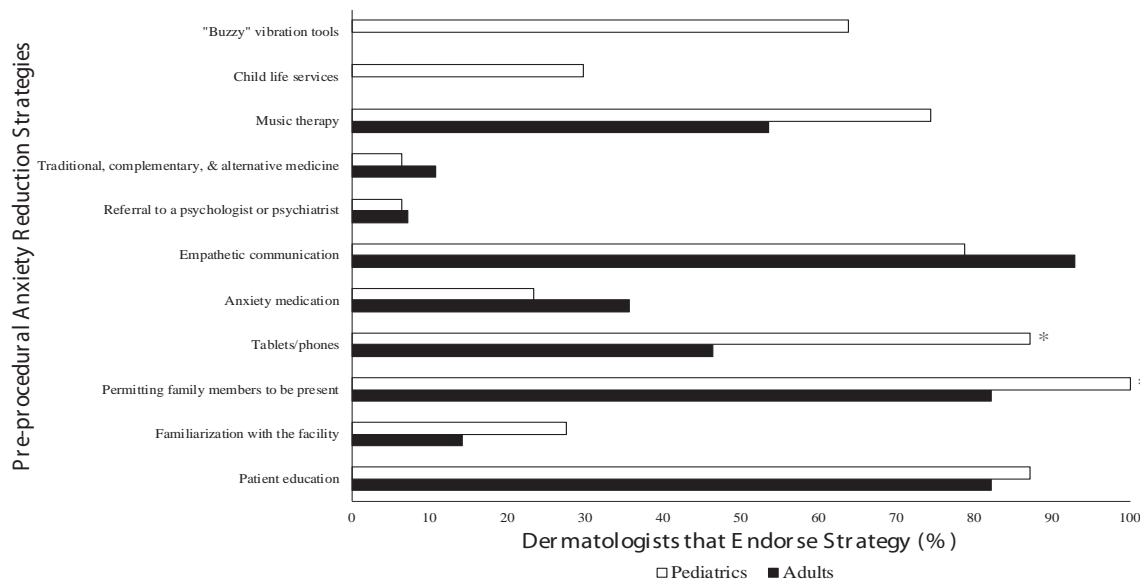
## Letter to the Editor

As many as 73% of patients scheduled to undergo surgery have substantial preoperative anxiety [1]. Significant preoperative anxiety has also been reported in fast track and day-care patients [2]. Dermatologists perform a number of procedures ranging from skin biopsies to Mohs micrographic surgery. Patients may experience anxiety prior to such procedures, termed pre-procedural or preoperative anxiety. Patient anxiety prior to dermatologic surgery may be influenced by factors such as the sight of blood, perception of pain during the surgery, and potential complications of surgery. Given the role of preoperative anxiety in affecting tolerance of the procedure, intra- and postoperative complications, and overall satisfaction, further research is warranted to determine how best to reduce preprocedural anxiety in dermatologic procedures.

Notably, the management of patient anxiety may differ between adult and pediatric patients. For example, a child's unwillingness to cooperate with the dermatologist, inability to understand the reason for the procedure, and even parental anxiety may affect preprocedural anxiety in pediatrics [3]. Moreover, pediatric patients may experience substantial anxiety during procedures that would be otherwise less anxiety provoking in adults, such as during laser procedures [4].

However, little is known regarding the preferences of dermatologists regarding how best to assess and reduce pre-procedural anxiety. As a result, this cross-sectional study was performed to determine the attitudes of dermatologists regarding pre-procedural patient anxiety, including how they measure and manage it in both adult and pediatric patients for a variety of dermatologic procedures. The questionnaire used in this survey was based on a previous study by Musa et al [5]. Fisher's exact test was used to compare which strategies were preferred to reduce pre-procedural anxiety in adult and pediatric patients. After obtaining Institutional Review Board approval, we surveyed the Association of Professors of Dermatology (APD) and Pediatric Dermatology Research Alliance (PeDRA).

A total of 50 responses were analyzed, including 21 responses from APD, constituting a 3.61% response rate, and 29 responses from PeDRA, constituting a 5.95% response rate. Dermatologists practicing in academic practice (n=44, 88.0%), private practice (n=3, 6.0%), hybrid academic/private practice (n=2, 4.0%), and outpatient facilities (n=1, 2.0%) were represented. Respondents' number of years



**Figure 1:** Percentage of dermatologists endorsing the following strategies to reduce preoperative anxiety in adult and pediatric patients: "buzzy" vibration tools, child life services, music therapy, traditional, complementary, and alternative medicine, referral to psychologist or psychiatrist, empathetic communication, anxiety medication, tablets/phones, permitting family members to be present, familiarization with the facility, and patient education.

**Table 1:** Pre-procedural Patient Anxiety Assessment.

Importance of Pre-procedural anxiety management to practice	% (n)
Very Important	62.0 (31)
Somewhat Important	32.0 (16)
Not So Important	6.0 (3)
Importance of Pre-procedural Anxiety Management to Patient	
Very Important	82.0 (41)
Somewhat Important	18.0 (9)
Not So Important	0.0 (0)
How often pre-procedural Anxiety Interferes with Delivery of Care?	
Always	6.0 (3)
Sometimes	78.0 (39)
Rarely	16.0 (8)
Never	0.0 (0)
Is pre-procedural anxiety measured?	
Yes	26.5 (13)
No	73.5 (36)
If pre-procedural anxiety is measured, how so?	
Discuss pre-operative anxiety with patients	100.0 (13)
Give a pre-operative anxiety rating scale or survey	0.0 (0)

in practice varied from 0-9 (n=18, 36.0%), 10-19 (n=20, 40.0%), 20-29 (n=9, 18.0%), to 30 or more years (n=3, 6.0%). Most respondents were attending/faculty (n=49, 98.0%) followed by fellows (n=1, 2.0%). Procedures performed by the dermatologists were extensive with biopsies (n=48, 96.0%), cryotherapy (n=42, 84.0%), excision of lesions (n=39, 78.0%), and laser surgery (n=28, 56.0%) being the most common.

Our survey revealed that while dermatologists recognized the importance of pre-procedural anxiety management for their practice (94.0%) and patients (100.0%), most did not measure preoperative anxiety (73.5%). Of the remaining respondents (26.5%), all preferred verbal discussion (100.0%) to assess anxiety rather than a scale or survey (Table 1).

Overall, the three most popular methods to reduce anxiety preoperatively in adults were empathetic communication, (n=26, 92.9%), patient education (n=23, 82.1%), and family member presence (n=23, 87.1%). Overall, in the pediatric population, the three most common methods to manage anxiety preoperatively were family member presence (n=47, 100.0%), patient education (n=41, 87.2%), and tablets/phone use (n=41, 87.2%) (Figure 1). Two strategies were significantly more preferred by dermatologists to reduce anxiety in their pediatric patients compared to adults: the presence of family members (100.0% vs 82.1%, p=0.0057) and use of tablets and smart phones (87.2% vs. 46.4%, p=0.0004).

The findings of this survey revealed that dermatologists recognize the importance of pre-procedural anxiety to overall patient care, although the majority of dermatologists do not appear to formally assess patient anxiety in practice. Dermatologists prefer a variety of diverse strategies to reduce patient anxiety, particularly patient education and family member preference. Family presence and using tablet or smart devices were strategies that dermatologists used more commonly in pediatric patients compared to adults. Future research is needed to identify valid and reliable scales to measure pre-procedural anxiety in dermatologic procedures, evaluate utility of those scales, and encourage dermatologists to incorporate the use of anxiety scales into their practice.

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