

## Surgeon Stress and Its Impact on Outcomes: Coping Strategies in Complex and Emergency Surgeries

**Manal Othman**

Sudan Academy of Sciences, Khartoum, Sudan

**Zawra Mohamedsaeed**

Sudan Academy of Sciences, Khartoum, Sudan

**Nisreen Alfayad**

Sudan Academy of Sciences, Khartoum, Sudan

**Hatim Ahmed**

Sudan Academy of Sciences, Khartoum, Sudan

**Mashel Idris**

Sudan Academy of Sciences, Khartoum, Sudan

**Adam Salama**

Sudan Academy of Sciences, Khartoum, Sudan

**Abstract**

**Introduction:** Surgery is a high-stress profession, with complex and emergency procedures intensifying surgeon stress, leading to adverse effects on decision-making, performance, and overall well being.

**Purpose & Research Questions:** This review explores the impact of surgeon stress on surgical outcomes, identifies key stress inducing factors, and evaluates effective coping strategies to mitigate its effects.

**Methods:** A systematic review was conducted using PRISMA guidelines, analyzing studies on surgeon stress and its impacts. Data sources included PubMed, Scopus, and institutional reports. Results were synthesized thematically.

**Results:** Surgeon stress impairs decision-making, increases error rates, and contributes to burnout. Effective coping strategies include institutional interventions, team-based approaches, and individual practices such as mindfulness and resilience training.

**Conclusion:** Mitigating surgeon stress through multi-level interventions enhances surgical performance, improves patient outcomes, and promotes the sustainability of surgical practices and surgeon well-being.