

Neuromarketing at the Scalpel's Edge

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Abstract

Surgical practice has traditionally emphasized biological and physiological dimensions of health. Yet patients are not only organisms to be repaired; they are social beings whose emotions influence pain perception, treatment adherence, and recovery trajectories. Neuromarketing, a field that investigates how emotions and expectations shape decision-making and bodily experience, offers unique tools to bridge this gap. By acknowledging patients' emotional responses as integral rather than peripheral, medicine can align more closely with the human condition. This editorial argues that integrating neuromarketing insights into surgical communication and perioperative care highlights the transformative potential of treating patients not only as biological systems but as emotional and social selves.

Keywords: neuromarketing; surgery; emotions; recovery; patient communication; social dimension of health

Introduction

Surgery is often narrated in clinical terms: anatomy, physiology, pharmacology. Yet the patient on the operating table brings not only a body but a biography, not only cells but sentiments. Neuroscientific research demonstrates that expectations, framing, and emotional context can change how pain is felt and how recovery unfolds (Wager et al., 2013; Plassmann et al., 2008). Ignoring this is like repairing a musical instrument while disregarding the resonance of its sound. The scalpel may cut tissue, but emotion shapes the healing.

Emotions as Physiological Allies

Emotions are not simply epiphenomena. Placebo studies reveal that positive expectation activates endogenous opioid pathways, reducing reported pain and neural markers of nociception (Wager et al., 2013). Conversely, anxiety can amplify sympathetic responses, slowing recovery. In this sense, emotions are biological allies, not distractions. Surgical success therefore depends not only on precision of incision but also on the emotional environment constructed around the patient.

Reading the Emotional Brain

Neuromarketing tools such as EEG and fMRI have been widely used to decode how consumers evaluate brands, risks, or prices (Plassmann et al., 2015). The same methodologies can help surgical teams pre-test consent forms, perioperative communication, and recovery guidelines, ensuring they resonate emotionally and cognitively. Patients are more likely to adhere to instructions that are framed empathetically and tested for clarity and affective response.

Bridging Social Sciences and Medicine

Medicine has excelled at mapping the body, but social sciences excel at mapping meaning. When combined, they offer a fuller topography of the patient's reality. Neuromarketing demonstrates how social framing, trust, and cultural narratives shape biological outcomes. By collaborating across disciplines, surgical practice can move from "fixing the body" to "healing the person." This synergy respects patients not just as subjects of biology but as partners in meaning-making.

Ethical Reflection

The use of neuromarketing in surgery must not slip into manipulation. Ethical transparency is crucial: communication strategies should be disclosed, aimed at empowering patients, not controlling them. As Murphy, Illes, and Reiner (2008) emphasized, neuromarketing's legitimacy rests on respecting autonomy. In surgery, this means using emotional insights to reduce fear and pain, not to coerce consent.

Conclusion

At the scalpel's edge, emotions and biology meet. By embracing neuromarketing insights, surgical practice can honor the patient as a social and emotional being, not only a physiological case. Integrating these perspectives promises more humane care, better adherence, and potentially improved recovery. The future of surgery may well depend not only on sharper instruments but on deeper understanding of the human heart and mind.

References

1. Plassmann H., et al. "Marketing actions can modulate neural representations of experienced pleasantness". PNAS 105.3 (2008): 1050-1054.
2. Plassmann H., et al. "Consumer Neuroscience: Applications, Challenges, and Possible Solutions". Journal of Marketing Research 52.4 (2015): 427-435.
3. Wager TD., et al. "An fMRI-Based Neurologic Signature of Physical Pain". New England Journal of Medicine 368.15 (2013): 1388-1397.
4. Murphy ER, Illes J and Reiner PB. "Neuroethics of neuromarketing". Journal of Consumer Behaviour 7.4-5 (2008): 293-302.
5. Ebru Bağcı. "Neuromarketing at the Scalpel's Edge".
6. Lees CC., et al. "2 year neurodevelopmental and intermediate perinatal outcomes in infants with very preterm fetal growth restriction (Truffle): a randomised trial". Lancet 385.9983 (2015): 2162-2172.