

SUPPLEMENTARY MATERIAL

A systematic review of cosmetic surgery trends and its influence on mental health of adolescents and youths in Nigeria

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Key words: cosmetic surgery, adolescents, youths, mental health, body image, Nigeria.

Supplementary Table 1. Quality appraisal and risk of bias scores of included studies.

Authors (year)	Risk of bias score	Quality assessment score
Michael <i>et al.</i> (2023) ¹²	Low	High
Akinboro <i>et al.</i> (2019) ¹⁵	Low	High
Waliu <i>et al.</i> (2025) ¹⁶	Moderate	Moderate
Isiguzo and Nwachukwu (2016) ¹⁷	Moderate	Moderate
Abubakar <i>et al.</i> (2016) ¹⁸	Moderate	Moderate
Odonmeta <i>et al.</i> (2016) ¹⁹	High	Low
Ipinnimo <i>et al.</i> (2022) ²⁰	Moderate	Moderate
Nwakamma (2022) ²¹	Moderate	Moderate
Okoro <i>et al.</i> (2021) ²²	Moderate	Moderate
Omotosho <i>et al.</i> (2025) ²³	Moderate	Moderate
Ajayi <i>et al.</i> (2025) ²⁴	Moderate	Moderate
Ogunbamowo <i>et al.</i> (2025) ²⁵	High	Low

Supplementary Table 2. Summary of included studies.

Authors (year)	Objectives	Study design	Study settings and sample size	Key findings	Conclusion
Michael <i>et al.</i> (2023) ¹²	To determine the types of cosmetic surgery procedures accessed by Nigerian women	Retrospective review	Private cosmetic surgery practice, Lagos, South-West Nigeria; n=392	Liposuction was the most common procedure, followed by bilateral buttock augmentation. The abdomen, back, and arms were the most common liposuction sites	Liposuction and bilateral buttock augmentation are the predominant cosmetic procedures accessed by this cohort of Nigerian women. Barriers such as culture, religion, and cost appear to be diminishing
Akinboro <i>et al.</i> (2019) ¹⁵	To evaluate the prevalence of BDD and symptoms of anxiety/depression among dermatology patients	Cross-sectional clinical study	Dermatology clinic, Osogbo, South-West Nigeria; n=114	Presence of anxiety/depression was predictive of BDD. Facial disorders carried the highest burden of anxiety/depression. Factors associated with BDD included age below 50 years and anxiety/depression	Prevalence of BDD is high among dermatology patients, and most prevalent in facial disorders. Routine assessment for BDD and appropriate referral to mental health services are essential in cosmetic and dermatology settings
Waliu <i>et al.</i> (2025) ¹⁶	To investigate liposuction and BBL trends and their implications on mental health and behaviours of female undergraduates	Cross-sectional survey	Lagos State University, South-West Nigeria; n=200	A significant relationship was found between the physiological effects of liposuction and BBL and the mental health of female undergraduates. A significant relationship also existed between potential consequences of body augmentation and mental health and behaviors	Body augmentation procedures have measurable implications for the mental health of female undergraduates. Integrating body image and mental health education into university curricula is recommended.
Isiguzo and Nwachukwu (2016) ¹⁷	To assess knowledge, awareness, and acceptance of plastic surgery among tertiary education students in Enugu	Cross-sectional survey	Enugu, South-East Nigeria; n=119	Electronic media was the most common source of awareness. Less than half of the sample knew about the existence of plastic surgeons in Enugu, although awareness of plastic surgery as a specialty was higher. Tattoo removal and scar refashioning were the most common aesthetic procedures reported	Awareness of plastic surgery is high among the sampled population, but knowledge of locally available services remains limited. Public hospitals should employ plastic surgery services to improve access
Abubakar <i>et al.</i> (2016) ¹⁸	To explore the perception of cosmetic surgery among university students in Nigeria	Cross-sectional survey	Multi-university, Nigeria; n=1300	Over half of respondents associated cosmetic surgery with surgery for beauty. A significant association was found between attitude in the 15–25 age group and willingness to undergo cosmetic surgery	Attitudes toward cosmetic surgery are positively related to age, level of study, and marital status. Awareness of cosmetic surgery exists, but understanding of its meaning is limited
Odonmeta <i>et al.</i> (2016) ¹⁹	To document knowledge, attitude, and practice of cosmetic surgery among basic science students	Cross-sectional survey	Delta State University, South-South Nigeria; n=166	Many respondents demonstrated limited knowledge of cosmetic surgery. A generally negative attitude toward cosmetic surgery was observed, significantly influenced by cultural and religious factors	Knowledge and attitudes toward cosmetic surgery in the study environment are shaped substantially by culture and religion
Ipinnimo <i>et al.</i> (2022) ²⁰	To identify the level of knowledge,	Cross-sectional online survey	National, Nigeria; n=197	The majority of respondents had good knowledge of cosmetic surgery and	Knowledge of cosmetic surgery is high among online media users, but attitude remains

	determinants of attitude, and willingness for cosmetic surgery among online media users			positive attitude towards cosmetic surgery. More than three-quarters of participants were unwilling to undergo cosmetic surgery, with satisfaction with body image as the most frequent reason. Age, and religion are predictors	relatively poor. Age, religion, ethnicity, and income are important determinants of attitude
Nwakamma (2022) ²¹	To investigate trends in liposuction and BBL and their implications for courtship behavior	Cross-sectional mixed-methods	Four states, Nigeria; n=410	Women reported diverse psychosocial reasons for opting for cosmetic surgery, including body dissatisfaction and desire for social acceptance. The trend unintendedly shaped male perceptions of women and courtship dynamics	Cosmetic surgery trends have psychosocial drivers and consequences extending to interpersonal relationships. Psychological screening should be introduced in cosmetic surgery procedures
Okoro <i>et al.</i> (2021) ²²	To assess body image dissatisfaction and its relationship to cosmetic surgery attitudes among university students	Cross-sectional survey	Nasarawa State University, Keffi, Northcentral Nigeria; n=238	Body image dissatisfaction was prevalent among female students and was significantly associated with positive attitudes toward cosmetic surgery. Social media exposure moderated the relationship between body dissatisfaction and surgery intentions	Body image dissatisfaction is a key predictor of cosmetic surgery interest among university students. Social media amplifies this relationship
Omotosho <i>et al.</i> (2025) ²³	To explore psychosocial experiences of young women following BBL surgery	Qualitative phenomenological study	Lagos, South-West Nigeria; n=18	Participants reported initial satisfaction followed by psychological distress, including post-surgical regret, social stigma, body dysmorphia, and financial strain. Peer and partner reactions played a significant role in post-surgical psychological adjustment	BBL surgery carries substantial psychosocial risks, including regret and body image disturbances. Pre-surgical counseling and post-surgical psychological support are needed
Ajayi <i>et al.</i> (2025) ²⁴	To assess medical students' awareness of plastic surgery and interest in the specialty	Cross-sectional online survey	Multi-university, Nigeria; n=223	Almost all students were aware of plastic and reconstructive surgery. Only a few expressed interests in specializing in plastic surgery. Intention to undergo cosmetic surgery in the future was a determinant of interest in the specialty	Medical students' perception of plastic surgery depends on exposure to the specialty. A decline in teaching may perpetuate misunderstanding of the scope of plastic surgery
Ogunbamowo <i>et al.</i> (2025) ²⁵	To examine trends in body augmentation and mental health implications among female undergraduates	Cross-sectional survey	Lagos State University, South-West Nigeria; n=200	Significant relationships were demonstrated between physiological effects of undergoing body augmentation and mental health and behavior, and between potential consequences of these procedures and mental health outcomes	Body augmentation trends are associated with adverse mental health outcomes among female undergraduates. Curriculum integration of body image education is recommended