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# Impact of COVID-19 on Aesthetic Plastic Surgery Practice in the United Kingdom



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#### **KEYWORDS**

Aesthetic Plastics surgery; Covid19; Restart of aesthetic surgery; Cosmetic surgery and Covid; Plastic surgeons and Covid 19; United Kingdome Aesthetic plasticsurgery; Cosmetic Surgery Governance forum **Summary** *Background:* The COVID-19 pandemic has transformed the delivery of medical and surgical services globally. Subsequently, all elective and aesthetic procedures have been cancelled or deferred in accordance with government-mandated quarantine measures. The Cosmetic Surgery Governance Forum (CSGF) is a network of aesthetic plastic surgery consultants which has enabled a sharing of expertise during challenging times. We conducted a cross-sectional survey to assess the impact of the COVID-19 pandemic on aesthetic plastic surgeons and their practice in the UK.

*Methods:* On 15 June 2020, 131 respondents from the CSGF and wider aesthetic plastic surgeons in the UK were invited to respond to an online survey. An anonymised questionnaire was created using SmartSurvey<sup>™</sup> and distributed at the end of the quarantine period. Questions regarding their current scope of practice, willingness to recommence face-to-face consultations, financial loss and psychological impact were asked.

*Results*: A total of 101 Consultant Plastic surgeons (76%) completed the questionnaire. If strict protocols and adequate personal protective equipment were available, 50-55% of respondents would consider offering non-surgical treatments as soon as the private clinic was open. Furthermore, 51% would consider procedures under general anaesthetic, whilst 89% of respondents would offer local anaesthetic only in the initial phase. Moreover, 66% reported experiencing a psychological impact and 100% of respondents reported a significant financial impact.

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*Conclusions:* This survey aims to give an account of the current state (May-July 2020) of aesthetic plastic surgery in the UK. There is ongoing uncertainty and deliberation regarding the timing and organisational changes required for aesthetic practice to restart.

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## Background

A novel coronavirus termed "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)" was first reported in December 2019 in Wuhan, China<sup>1</sup>. The subsequent global outbreak of coronavirus disease 2019 (COVID-19) has recorded 2.3 million confirmed cases and 72,548 deaths in the United Kingdom on  $31^{st}$  December 2020<sup>2</sup>. The World Health Organisation declared a global pandemic on  $11^{th}$  March 2020<sup>3</sup>.

The risk of viral transmission from minimally symptomatic and even asymptomatic patients has posed a significant challenge in regard to contact tracing and isolation strategies<sup>4</sup>. The primary mechanisms of transmission are through respiratory droplets and direct human contact, but there is also a risk of spread through aerosol-generating procedures<sup>5</sup>. The first phase of COVID-19 vaccination has commenced in the UK, and we await the potential effect on infection and transmission rate<sup>6-7</sup>.

The Confederation of British Surgery echoed governmental recommendations to cease and defer all non-essential procedures on 22<sup>nd</sup> March 2020 in the United Kingdom<sup>8</sup>. As a result, almost all surgical disciplines including the plastic surgery community have instituted a self-imposed mortarium on elective practice, in an attempt to unburden the NHS, minimize viral spread and preserve resources<sup>10</sup>.

With imminent relaxation of physical distancing measures and the resumption of elective aesthetic surgery, surgeons are challenged with adapting their clinical and surgical workflow to minimize risk and safeguard patients and the clinic staff in the post-pandemic era<sup>11</sup>.

We created a cross-sectional survey to assess the consequences of the COVID-19 pandemic on aesthetic surgeons and their practice in the UK. The Cosmetic Surgery Governance Forum (CSGF) is a network of aesthetic plastic surgery consultants who communicate on a social media platform, which was set up by the senior author (TKS) in 2014. The network has enabled a collaborative approach to complex cases and a sharing of expertise. This has been particularly valuable to overcome common issues faced during quarantine and to give plastic surgeons a user friendly, supportive, and confidential environment to express their concerns and to share their solutions in these challenging times.

Our aim was not to only to collect and analyse data but also to explore the challenges aesthetic practice is facing, record current trends in working and highlight the repercussion on aesthetic surgeons in industry.

## Methods

As the pandemic started to decline on 15<sup>th</sup> June 2020, 131 members of CSGF were invited to complete an online sur-

vey. The group comprised a network of Consultant Plastic Surgeons, all of whom perform aesthetic surgery.

An anonymised online questionnaire was created with 16 questions regarding their current scope of practice, willingness to recommence face-to-face consultations, readiness to offer a variety of surgical procedures post-pandemic, financial loss and the psychological impact of COVID-19. The questionnaire was produced in English and comprised multiple-choice and open-ended questions. The survey questions were piloted, redesigned, and circulated through the forum prior to wider circulation.

An internet link to the survey was circulated by e-mail via personal invitation and WhatsApp<sup>TM</sup>. The authors also requested the respondents to distribute the questionnaire with consultant colleagues in the aesthetic surgery field in the UK.

#### Results

A total of 101 consultant plastic surgeons completed the survey, with a resultant 76% competition rate (101/131). Only complete responses were received, and all questions were mandatory to complete the survey.

In total, 27% of respondents were clinic owners and in full time private practice. Prior to the COVID-19 pandemic, 67% of respondents performed non-surgical cosmetic treatments and Lasers. All respondents had voluntarily closed their clinic and ceased elective aesthetic practice due to the COVID-19 pandemic.

When respondents were asked whether they felt ready to re-commence consultations, 57% felt appropriate to commence with virtually prior to face-to-face consultations (Figure 1). However, 7% stated that they were not willing to restart consultations in the current circumstances, whilst 8% would opt for exclusively video or virtual consultations.

Regarding non-surgical cosmetic treatments, 55% of respondents would consider offering muscle relaxing injections as soon as their private clinic was open and if strict protocols and adequate provision of PPE were available. Similarly, 50% would consider offering facial fillers. However, only 37% would consider offering lip fillers whilst 21% would wait for private corporate hospitals to start offering the treatment first.

At the time of the survey, 89% of respondents would offer local anaesthetic (LA) only for aesthetic surgical procedures whilst 72% would offer LA and sedation (Figure 2). Moreover, 51% would consider cosmetic procedures under general anaesthetic.

A total of 55% of respondents reported that they would consider offering minor cosmetic procedures (up to 60 min) under LA as soon as their hospital/clinic re-opened. Furthermore, 35% preferred to wait until the corporate groups

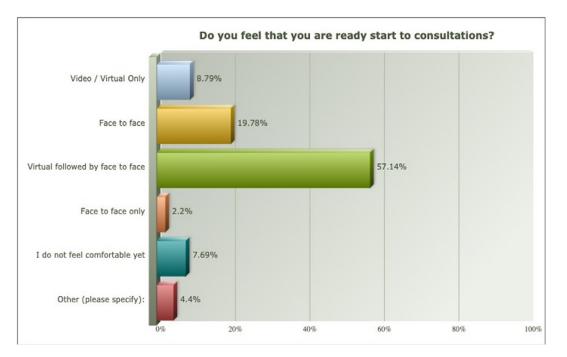


Figure 1 Restart of Consultations.

LA ONLY

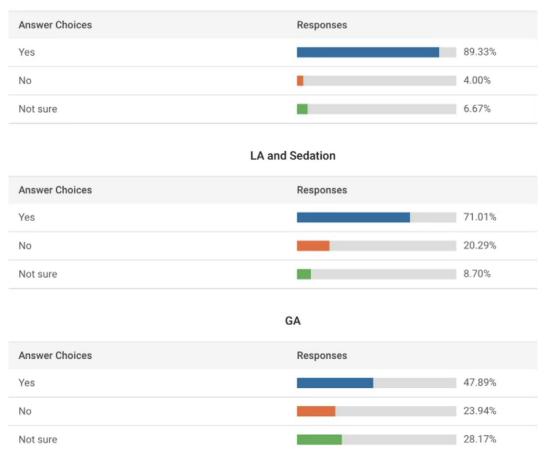


Figure 2 Survey responses to "When would you offer cosmetic surgical procedures under LA only, LA & Sedation or GA?"

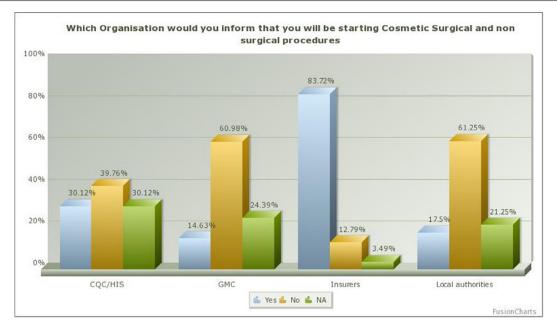


Figure 3 Restart information sharing.

 Table 1
 Percentage of respondents who would consider restarting minor cosmetic surgery procedures

Procedure	Yes	No
Cysts/Lipoma	90.8%	2%
Minor fat grafting to the face	75%	12%
Laser resurfacing	44%	27%
Lower eyelids	45%	50%
Mole removal	<b>9</b> 1%	5%
Pinnaplasty	64%	27%
Scar Revision	83%	4%
Skin tags	<b>95</b> %	2%
Submental liposuction	63%	26%
Tip Rhinoplasty	23%	63%
Upper eyelids	81%	17%
Labiaplasty	46%	37%

of private hospitals resumed their service. Table 1 delineates types of minor cosmetic procedures and percentage of respondents who would undertake them.

Perception of informing regulatory bodies varied amongst cosmetic surgeons. A total of 83% would inform insurers on restarting their practice, whilst only 14% of respondents would inform the General Medical Council (Figure 3).

All aesthetic consultants sustained a significant financial impact ranging from 60 to 100% reduction of their prior income. In contrast, full-time private consultant plastic surgeons who are business owners encountered a 100% reduction of their income.

Furthermore, 66% of respondents reported a experiencing a psychological impact in response to the consequences of COVID-19. Also, 27% reported anxiety with the remaining respondents experiencing stress (25%), depression (8%) and insomnia (6%) (Figure 4).

## Discussion

The study aimed to provide an account of the current state of aesthetic surgeons and their practice during the COVID-19 pandemic. This is likely to be the first and largest survey of the impact of coronavirus on the aesthetic private clinics and aesthetic plastic surgeons across the UK. (Figure 5).

Significant efforts have been made by regulatory and international societies to develop guidelines and position statements for aesthetic practice during the pandemic from British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS), British Association of Aesthetic Surgeons (BAAPS), International Society of Aesthetic Plastic Surgery (ISAPS), United Kingdom Association of Aesthetic Plastic Surgery (UKAAPS) and a newly formed organisation: Consortium of Aesthetic Plastic Surgery Clinic Owners (CAPSCO) during the COVID-19 lockdown. Furthermore, numerous evidence-based guidelines have been published on recommended practice modifications during the pandemic<sup>8,10</sup>.

This survey demonstrated a high adherence and acceptance rate amongst UK aesthetic surgeons to these recommendations. This restrictive policy is important to protect both patients and practitioners in order to reduce risks of cross infection, especially when operating in the high risk region of the face with potentially aerosol generating procedures<sup>9</sup>.

Aesthetic surgeons, many of whom also work the public sector, face significant uncertainty in regards to the future of their aesthetic practice<sup>11</sup>. The mandatory and rational suspension of all elective and aesthetic plastic surgery has inevitably resulted in detrimental financial consequences on the plastic surgery community, especially those whose livelihood depend on a practice which is purely in the private sector. The substantial impact on the aesthetic sector cannot be underestimated, with a reported reduction in income ranging from 60% to 100% resulting from the closure of clinics.

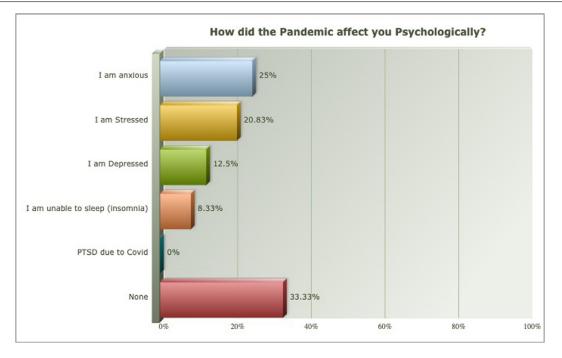


Figure 4 Psychological Impact.

A pandemic often culminates in a global recession, and economic analysts have predicted that enforced social distancing protocols during a pandemic, such as country-wide quarantines and travel prohibitions, will contribute to a decline in consumer and business spending until the end of 2020<sup>12</sup>. The effect is exacerbated by the reduction in disposable income as the public attempt to recuperate from a prolonged period of lost earnings<sup>13</sup>. The significant economic downturn imposed by the social-distancing measures will inevitably lead to long-term repercussions enduring well past the ban being lifted on elective surgery<sup>14,15</sup>.

The NHS has undergone significant reconfiguration to create new space for critically ill patients. Consequently, 33 000 hospital beds and 1200 ventilators have been provided by private hospitals<sup>16</sup>. Despite currently declining rates of COVID-19 and easing of the UK Government lockdown restrictions into a phased period of relaxation, aesthetic plastic surgery procedures are classified as non-urgent (Category 4)<sup>17</sup>. The deferral of non-urgent elective procedures will exacerbate the already growing backlog of cases<sup>10</sup>. Therefore, with an increasing demand for surgical services as elective surgery recommences, combined with finite facility resources available, it is unlikely that elective aesthetic plastic surgery will take place in the near future in private hospitals, especially in those that provide a broad range of speciality services<sup>19</sup>. However, focused aesthetic plastic surgery units may be in a different position but will have to comply with stringent UK Government regulations and local healthcare provider recommendations regarding patient testing, procedure triage, decontamination as well as reconfiguring facilities to comply with social distancing measures<sup>19</sup>.

The long-term effects of COVID-19 outbreak on individual businesses and the cosmetic industry is unclear. However, it is apparent that aesthetic surgeons share similar concerns regarding the on-going and potential consequences on their business, client base and long-term prospects. Because of the uncertainty regarding availability of operating facilities within the private-corporate sector, it is feasible that aesthetic surgery may have to be delivered from small independent operating facilities primarily owned and run by consultant plastic surgeons. CAPSCO is currently undertaking a survey to ascertain the feasibility of this model in the UK.

The unprecedented nature of the COVID-19 pandemic has forced businesses to adapt rapidly over a short period. Many aesthetic practices were understandably unprepared for disruption to such an extent, and many surgeons have reported that their standard contingency plans were illequipped for the situation of being unable to carry out aesthetic procedures for an extended period.

The mandatory reshaping of treatment priorities will transform the delivery of aesthetic practice and will certainly not return to 'business as usual' in the near future. The COVID-19 crisis presents a unique opportunity to embed the positive changes adopted during the pandemic such as the greater use of telemedicine, increased efficiency, and digital outpatient services.

A large number of participants introduced telemedicine (audio and video calls), which had often not been embraced as extensively as during the pandemic and can be considered as a "silver lining" or a "lesson learned" from the pandemic. It confers numerous advantages including maintaining relationships with patients virtually and reassuring patients regarding continuation of their care, instead of cancelling or rescheduling appointments<sup>18</sup>. A key restriction is the inability to perform a full physical examination and assessment<sup>19</sup>. As a result, virtual consultations are usually costed based on time spent with the patient, including counselling and co-ordination of care<sup>20</sup>.



Figure 5

Furthermore, live teleconsultation also requires synchronisation of the schedules of both the patient and surgeon, availability of audio-visual equipment with the capacity to stream seamlessly with high speed internet, to which patients may not always have access. Therefore it is important to emphasise that digital consultations are not a replacement for face-to-face consultations, but an adjunct to mitigate exposure to potential contagions by facilitating compliance to social distancing protocols and reduced travel costs<sup>19</sup>. Telemedicine can also enable a greater frequency of follow-up appointments during aftercare by eliminating the need for patients to travel to attend consultations, whilst also providing reassurance in otherwise lengthy intervals between appointments.

The loss of educational opportunities including conferences has also catalysed the widespread adoption of virtual training through webinars<sup>21</sup>. The British Association of Aesthetic Surgeons (BAAPS), British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS) and the Consortium of Aesthetic Plastic Surgery Clinic Owners (CAPSCO) amongst other aesthetic societies have delivered excellent webinars series on practical tips for restarting aesthetic practice.

In addition to the considering the financial ramifications of the crisis, it is equally important to acknowledge the significant psychological burden imposed by the uncertainties of the coronavirus<sup>22</sup>. Aesthetic plastic surgeons, especially those who work purely in the private sector, face a challenging and unpredictable future for their aesthetic businesses. Therefore, it is unsurprising that 66% of respondents reported suffering with stress, anxiety, depression or insomnia during the COVID-19 pandemic. These staggering figures highlight the substantial effect and legacy of virus on the aesthetic sector and the lives of those working within it. This survey has highlighted this under-explored area and an important topic for future research to further delineate whether these effects as reactive to the pandemic or lasting effects. Many respondents have also reported increased stress stemming from uncertainty in restarting their practice and the safety of performing procedures under general anaesthesia. Plastic surgeons could be understandably more anxious due to the greater occupational risk of infection.

It is imperative that plastic surgery as a speciality facilitates an open dialogue to allow us to anticipate and mitigate the inevitable surgical and psychological challenges facing aesthetic practice in the future. This pandemic is far from over, and plastic surgeons will be required to adapt and surmount obstacles to practice as a united profession, together with the support and camaraderie of our colleagues. The shared collective anxiety of aesthetic surgeons demonstrated in this survey highlights a real need for evidence-based studies conducted on in the field of aesthetics to enable a safe return to practice.

We believe creating a platform such as the Cosmetic Surgery Governance Forum is an accessible means to create solidarity and share innovation within the speciality.

# Limitations

The study has some limitations, namely that it was reliant on personal reports of respondents, and therefore, it may not be representative of all aesthetic surgeons working in the UK. However, CSGF has members with diverse affiliations, backgrounds and geographical locations across all four nations of the United Kingdom backgrounds and geographical locations across all four nations of the United Kingdom. Because the questionnaires were distributed by respondents to consultant colleagues, the overall survey population is undefined. However, the authors specifically requested the questionnaires to be distributed to fellow consultants in the aesthetic surgery field in the UK, thus enabling greater representation of aesthetic surgeons in the UK as opposed to exclusively members of the CSGF.

The survey was conducted in the midst of the pandemic, and therefore, it represents a snapshot of the mood and opinions of respondents during the COVID-19 pandemic, which is dynamic and evolving. Conversely, its timely collection is likely to garner current opinions with less recollection bias as responses were not collected retrospectively.

# Conclusion

As the pandemic evolves and hopefully declines, the scope of aesthetic practice can be extended safely with sufficient protective measures. The prioritisation and adaptation of aesthetic procedures with a risk-minimizing approach in the post-pandemic era will present likely represent the next challenge for the aesthetic surgery community. The Cosmetic Surgery Governance Forum is a network of aesthetic plastic surgery consultants which has enabled a collaborative approach to discuss complex cases and a sharing of expertise during challenging times. Solidarity with the exchange of ideas and innovations in an open forum will ensure that the speciality can overcome challenges with evidence-based measures.

# Ethical Approval

Not required

## **Conflict of Interest**

None

## Funding

No funding was received for this study.

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