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Commentary on Benjamin et al.'s "Assessing the Prevalence of Craniomaxillofacial Injuries Among Helmeted and Unhelmeted Electric Scooter Users": A Call to Action for Logical Protection

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Electric scooters (e-scooters) continue to be more frequently utilized in major metropolitan areas. Not unlike bicycle use, with the increase in e-scooter use comes associated injuries with an, as of yet, unmeasured amount of morbidity. With unknown morbidity, there are limited regulations or recommendations for e-scooter safety.

The study by Benjamin et al.¹ in this issue identifies patients presenting to San Francisco General Hospital who presented with head or facial injuries while using e-scooters. They found a 58% increase in e-scooter-related emergency department visits over 3 years with a low prevalence of riders using helmet. More specifically, helmeted e-scooter riders had fewer head fractures and soft tissue head injuries when in a collision. With limited regulations from California and other state's law, the authors recommend legislation and law enforcement surrounding mandatory helmet use.

This is an extremely worthy investigation and call to action. As modes of transportation continue to advance, e-scooters have appeared as a more environmentally and economically conscious option. In the last 5 years, emergency departments around the country have noted a substantial increase in e-scooter-related trauma, leading to significant head and musculoskeletal injury.^{2,3} Additionally, the helmet usage among injured e-scooter users is less than 5%.⁴

The longstanding history of laws surrounding helmet use for motorcyclists demonstrate an uphill battle for similar legislation for e-scooter users. Universal helmet laws require users of a specific mode of transportation to wear a helmet, regardless of the rider's age, while partial helmet laws apply to riders below a certain age. The US Department of Transportation sets federal safety standards for riders and their appropriate helmet use.⁵ In the context of motorcycle helmet use, once universal helmet laws are passed, the effect is expedient, the cost of implementing helmet laws is minimal, and the law should be relatively enforceable. However, only 18 states have universal laws, and 29 states have partial laws for helmet use for motorcyclists.

Similar conversations can and should be implemented for helmet use for bicyclists and e-scooter users. Opponents of such legislation may suggest an infringement on personal freedoms. Hypothetically, a paradoxical effect and unintended consequence of helmets might be inducing risking behavior by riders who could feel empowered by the protection of the helmet.

As craniomaxillofacial trauma specialists, we should support known methods for preventing devastating and morbid injuries which may occur from e-scooter use.³ Helmets are known protectors of such morbid craniomaxillofacial injury. Patient advocates, victims, emergency medicine physicians, trauma surgeons, craniomaxillofacial

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surgeons (oral maxillofacial surgery, otolaryngology—head and neck surgery, and plastic surgery), and other stakeholders should encourage legislative support for e-scooter safety, helmet use and therefore, a reduction in injuries for this patient population.

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