

AB063. SOH21AS223. Trends in body mass index over the past decade for primary hip and knee arthroplasty

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Background: Obesity and its increasing prevalence is a pressing public health concern. Obesity is a significant risk factor for developing osteoarthritis. Pain and loss of function associated with end-stage osteoarthritis is best managed with arthroplasty. Following these procedures, there is evidence to support that obese patients are more likely to suffer complications. With the WHO projecting that Ireland will see the highest obesity incidence in Europe by 2025, we looked at 10-year trends in body mass index (BMI) of the primary arthroplasty cohort at the NOHC, aiming to discern whether the average BMI of these patients has risen over time.

Methods: In this retrospective cohort study, we collected BMI data of patients who underwent primary hip and knee arthroplasty in the National Orthopaedic Hospital Cappagh (NOHC) from January 2010 to December 2019 (n=11,970). We analysed trends in BMI over this period with respect to different gender and age categories.

Results: The percentage of patients in any given BMI category remained relatively unchanged over the decade, despite the number of surgeries doubling during this time. The only statistically significant rise in BMI trend was seen in women under 45 in both arthroplasty groups.

Conclusions: While the BMI of the nation is increasing,

the BMI of patients undergoing primary hip and knee arthroplasty in NOHC has remained constant over the past 10 years. It is clear that the orthopaedic service is caring for a greater number of overweight and obese patients. This will have significant implications on health care expenditure and infrastructure going forward which further emphasises the importance of ongoing national obesity prevention strategies.

Keywords: Body mass index (BMI); arthroplasty; Ireland

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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