Covid-19: UK saw largest fall of 25 European countries in orthopaedic surgery rates during pandemic

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Rates of hip and knee replacements fell by 46% and 68% respectively during the covid-19 pandemic in 2020 compared with the year before, at a far greater rate than 25 other European countries, a report has shown.

The overall rate of hip and knee replacements fell by 14% and 24% respectively across all the European countries studied while some nations kept the disruption to a minimum. Germany, for example, only reduced its hip and knee replacement rates by 7% and 11% in 2020 compared with 2019, found the Health at a Glance: Europe 2022 report by the Organisation for Economic Co-operation and Development (OECD) and European Commission.

The report authors said, “The reduction in surgical activities in 2020 was influenced by the duration of the suspension of elective surgery and how quickly hospitals were able to resume their activities once the suspension was lifted.”

Robin Paton, orthopaedic surgeon and honorary secretary of the Royal College of Surgeons of Edinburgh, said there were several reasons for the reduction in elective orthopaedic surgical procedures in the UK during this period.

“The pandemic, which resulted in the closure of elective beds and the reallocation of trauma and orthopaedic staff to wards, played a major role in this reduction,” he told The BMJ. “Throughout the pandemic, there was a need for ‘green zones’ where surgery could be safely carried out while protecting vulnerable patients, but this was incredibly challenging because of the way many UK hospitals are designed.

“In many European countries there is a greater separation of elective surgical facilities from emergency provision. This difference in addition to more hospital beds per head of population may have facilitated the continuation of more complex inpatient orthopaedic surgical procedures than in the UK.”

Paton said that there are fewer doctors, nurses, and hospital beds in the UK than in most European countries, which also contributed to the significant interruption of elective surgery.

Drop in life expectancy

The report found that the pandemic led to a reduction of more than one year in life expectancy in the EU in 2021 compared with the pre-pandemic level—the largest drop observed in most EU countries since the second world war.

By the end of October this year, more than 1.1 million covid-19 deaths had been reported across 27 EU countries. In absolute numbers, covid-19 mortality was highest in Italy (179 000 deaths), France (171 000), Germany (154 000), Poland (117 000), and Spain (115 000). In the UK more than 200 000 people died from covid-19.

EU countries had carried out two million fewer elective procedures in 2020 than in 2019, said the authors, which was a decrease of a sixth compared with pre-pandemic volumes.

The UK was recorded as being one of only four countries studied that had a “large disruption” to its diagnostic computed tomography and magnetic resonance imaging scans, which fell by 14.8% from 2019 to 2020.

In addition, cancer related surgery numbers in the UK fell by 26% in 2020 compared with 2019, which was the second highest reduction among 30 countries analysed, only slightly better than Romania.

In contrast, Germany’s cancer surgery numbers only fell by 6.5% over the same period and France’s by 8.6%.

A spokesperson for NHS England said, “It is simply wrong to suggest that the NHS shut down services during the pandemic. In fact, over 780 000 people in England have started treatment for cancer since March 2020—94% within a month—while breast and cervical cancer screening were around a fifth higher than the EU average during the pandemic and waiting times for hip and knee replacements in the UK were the third lowest.”


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