## Global surgery education in Europe: a landscape analysis

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## Dear Editor

Globally, there is a large unmet need for safe, timely and affordable surgical healthcare<sup>1</sup>. Since the 2015 Lancet Commission on Global Surgery, the movement has grown, including development of National Surgical, Obstetric and Anaesthesia Plans (NSOAPs)<sup>2</sup> and increased demand for global surgery opportunities<sup>3,4</sup>; however, little is known about academic global surgery in Europe.

The authors performed an analysis of global surgery educational programmes and opportunities across Europe, which may serve as a reference for trainees and attendings interested in global surgery and benchmarks for budding programmes.

A list of medical schools in the European Economic Area, UK and Switzerland was obtained from the World Directory of

Medical Schools<sup>5</sup>. For each institution, websites and grey literature were reviewed to determine the presence of: centres/initiatives in global surgery, official educational programmes in global surgery or in global health with a surgery track, and *ad hoc* academic global surgery opportunities (defined as activities not under the umbrella of a centre or educational programme; excluding student-only groups). All opportunities were reviewed, and the following variables extracted: year of onset, partner countries, nature of activities and main working language.

The authors identified 347 medical schools across 31 countries in Europe. Sixteen (4.6 per cent) universities had a global surgery centre (Fig. 1); most (10 centres) were in the UK, followed by Sweden and Norway (2 centres each). Most (10 centres) worked primarily in English. Partner countries were listed by 10 centres,

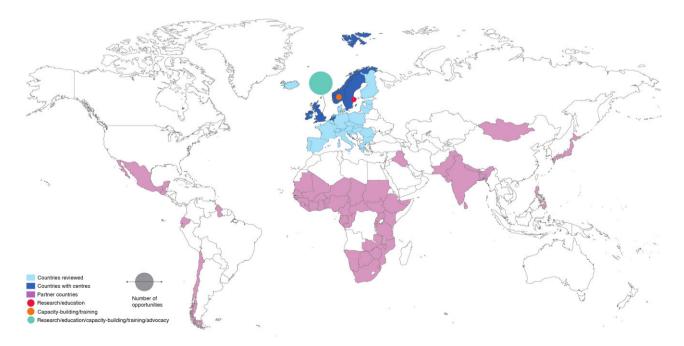


Fig. 1 Global surgery centres in Europe by country, type of activities, and partner countries

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which included 55 countries, of which 40 (73 per cent) were in the African region, five (9 per cent) in the Pan-American region, and four (7 per cent) in the South-East Asian region. The most common partner countries were Sierra Leone (n=7), India (n=4), and Ethiopia (n=4). Non-specific surgery centres or initiatives constituted five of the centres, whereas four were centres or initiatives working on specific global surgery issues, such as trauma/injury or burn injuries, and three were global health centres with a targeted global surgery group. The majority (12 centres) incorporated research in their work, seven had capacity-building components, and three had formal education opportunities (for example, electives or special study modules).

Five (1.4 per cent) universities had global surgery educational programmes, of which one had a global surgery elective, one had an elective in global surgery and paediatrics, one had a global health master programme with a surgery track, and one had an elective in humanitarian surgery. The Royal College of Surgeons in Ireland offered two programmes through the School of Medicine in Dublin: one Master programme in surgery with one module on 'Surgery in the developing world,' and one Master programme in Surgical Science and Practice with a global surgery submodule.

The authors identified *ad hoc* opportunities in 19 universities (5.5 per cent), of which 12 had structured research projects and seven had educational opportunities, such as summer schools, lecture series and conferences.

The findings suggest that academic global surgery opportunities remain relatively scarce in Europe. The authors propose expansion of global surgery education in Europe to meet the large interest among trainees and strengthen the role of European stakeholders in the global surgery discourse. It is unclear if the centres identified in this study had access to funding and limited information was available on the presence of faculty members and scholarships. Mobilizing increased funding might broaden opportunities for trainees from Europe and beyond.

Disclosure. The authors declare no conflict of interest.

## References

- Meara JG, Leather AJM, Hagander L, Alkire BC, Alonso N, Ameh EA et al. Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *Lancet* 2015;**386**: 569–624
- Sonderman KA, Citron I, Mukhopadhyay S, Albutt K, Taylor K, Jumbam D et al. Framework for developing a national surgical, obstetric and anaesthesia plan. BJS Open 2019;3:722–732
- Wilkinson KH, Bowder AN, Goldblatt MI, Olson L, Dodgion CM. General surgery applicants are interested in global surgery, but does it affect their rank list? J Surg Res 2021;257:449–454
- Scott EM, Fallah PN, Blitzer DN, NeMoyer RE, Sifri Z, Hanna JS et al. Next generation of global surgeons: aligning interest with early access to global surgery education. J Surg Res 2019;240: 219–226
- World Federation for Medical Education and Foundation for Advancement of International Medical Education and Research. World Directory of Medical Schools. https://www. wdoms.org/ (accessed 22 July 2021)