



Global Surgery Research & Why It's Important!

Alexandria D. McDow, MD, Clinical Instructor of Surgery
Kristin L. Long, MD, Assistant Professor of Surgery
University of Wisconsin

Disclosures

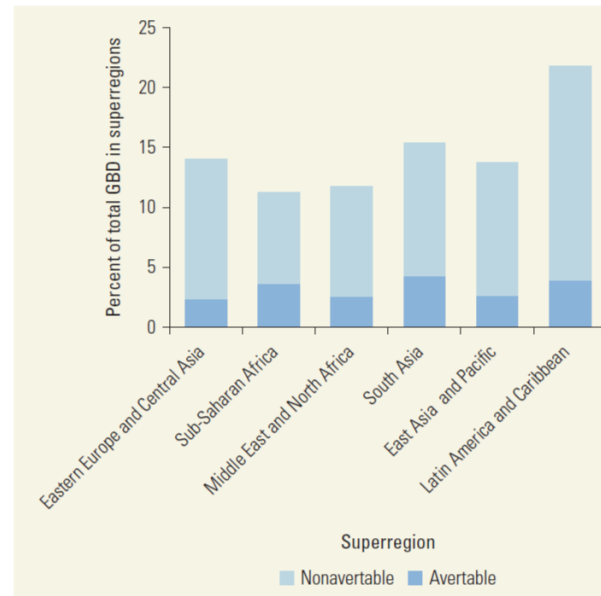
- None
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Outline

- Global Burden of Surgical Disease
- What is Academic Global Surgery?
- Why are research endeavors important?
- Types of AGS research

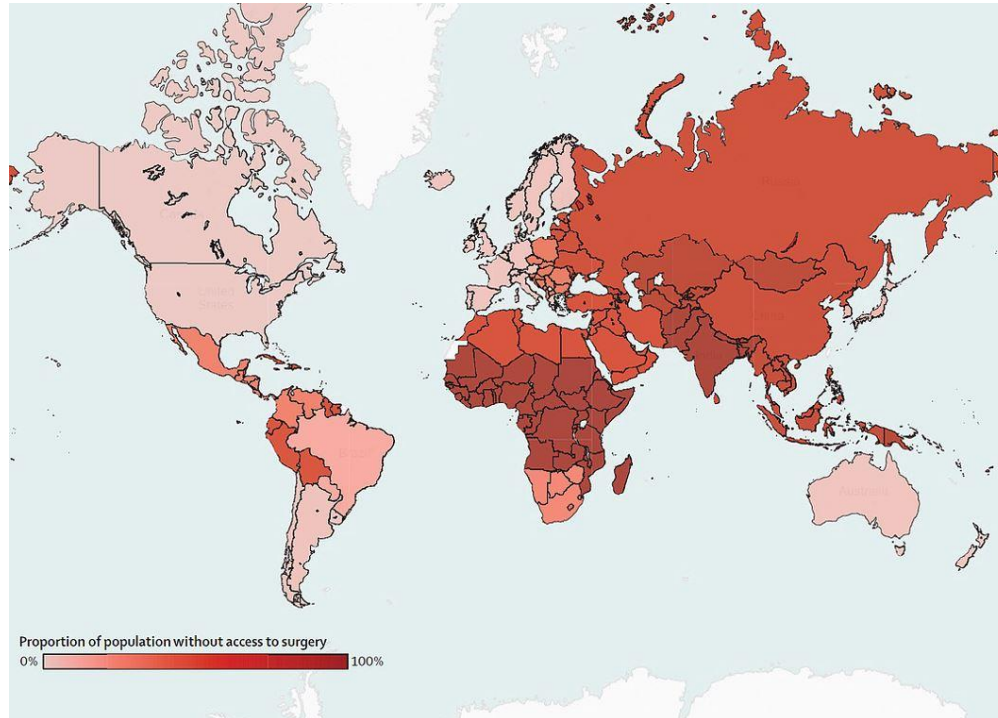
Burden of Surgical Disease

Figure 2.3 Burden Associated with a Group of Conditions That Can Be Treated with Basic Surgical Care in Low- and Middle-Income Countries



Source: Data from tables 2.3 and 2.4.

Note: GBD = global burden of disease. The group includes four gastrointestinal diseases, four maternal-neonatal conditions, and injuries that can be managed with simple interventions. Results are expressed as the percentage of the total superregion global burden of disease.



4.8 billion people or 67% world's population lack access to safe, affordable or timely surgical care

Historical Perspective

- Great momentum towards improving surgical care worldwide
- Need cannot solely be met through provision of direct surgical care during short-term volunteer humanitarian efforts

**YOU CAN'T
IMPROVE
WHAT YOU
DON'T
MEASURE.**

Research Justifies Our Efforts!

- Academic Global Surgery is an emerging area of expertise
- Global Surgical Efforts are scaling up
- Commitment from high-level organizations

DCP³

Disease
Control
Priorities

economic evaluation for health



World Health
Organization

THE LANCET Commission on Global Surgery



Types of AGS Research

- Health services and clinical outcomes
- Surgical education
- Surgical innovation
- Policy and advocacy
- Basic and translational research

Global surgery research

- Measures disease burden
- Evaluates effective resource allocation
- Ensures contextual relevance
- Identifies new approaches to improve surgical care

Can Surgery be a Public Health Initiative?

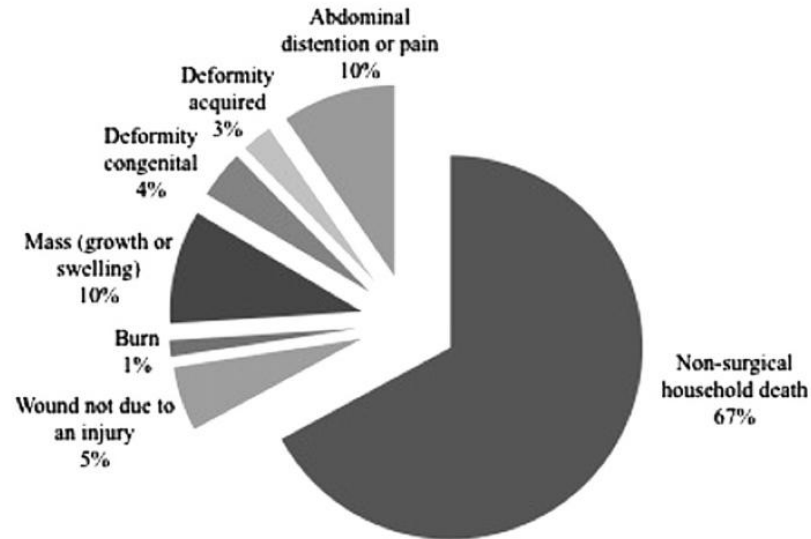



Fig 4. Potentially operatively treatable household deaths.



Surgical conditions	Preventable deaths (millions)	Burden			
		Avertable		Non-avertable	
		DALYs per year (millions)	Fraction of LMIC total GBD	DALYs per year (millions)	Fraction of LMIC total GBD
Treatable by basic surgical care delivered at first-level hospitals	1.4	77.2	3.5%	238.5	10.7%
Treatable by advanced surgical care delivered in specialized clinics	0.4	38.9	1.7%	46.5	2.1
TOTALS	1.8	116.1	5.2%	285.0	12.8%

1.8 MILLION DEATHS/YEAR = 1 DEATH EVERY 18 SECONDS!

Table 1. Estimated Cost-Effectiveness of Health Interventions

Intervention	Cost-Effectiveness
Rapid-impact package for NTDs	US\$2–US\$9/DALY averted [1]
Measles vaccination	US\$5/DALY averted [6]
Basic surgical services	US\$11–US\$33/DALY averted [5,7]
Antiretroviral therapy for HIV	US\$300–US\$500/DALY averted [6]

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The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

A Randomized Trial of Low-Cost Mesh in Groin Hernia Repair

Jenny Löfgren, M.D., Ph.D., Pär Nordin, M.D., Ph.D., Charles Ibingira, M.D.,
Alphonsus Matovu, M.D., Edward Galiwango, M.A.,
and Andreas Wladis, M.D., Ph.D.

Research Has Rules....

- Academically rigorous
- Partnered with LMIC colleagues

Guide to research in academic global surgery: A statement of the Society of University Surgeons Global Academic Surgery Committee

Saurabh Saluja ^{a,b,*}, Benedict Nwomeh ^c, Samuel R. G. Finlayson ^d, AiXuan L. Holterman ^e, Randeep S. Jawa ^f, Sudha Jayaraman ^g, Catherine Juillard ^h, Sanjay Krishnaswami ⁱ, Swagoto Mukhopadhyay ^{b,j}, Jennifer Rickard ^k, Thomas G. Weiser ^l, George P. Yang ^l, and Mark G. Shrime ^b on behalf of the Society of University Surgeons Global Academic Surgery Committee

Research Improves Quality



What does Quality mean?



**“Doing the right thing for the patient,
at the right time,
in the right way (appropriateness),
to achieve the best possible results
(safety and outcomes).”**

SUCCESS



**WHAT PEOPLE THINK
IT LOOKS LIKE**

SUCCESS



**WHAT IT REALLY
LOOKS LIKE**

Thank you



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