



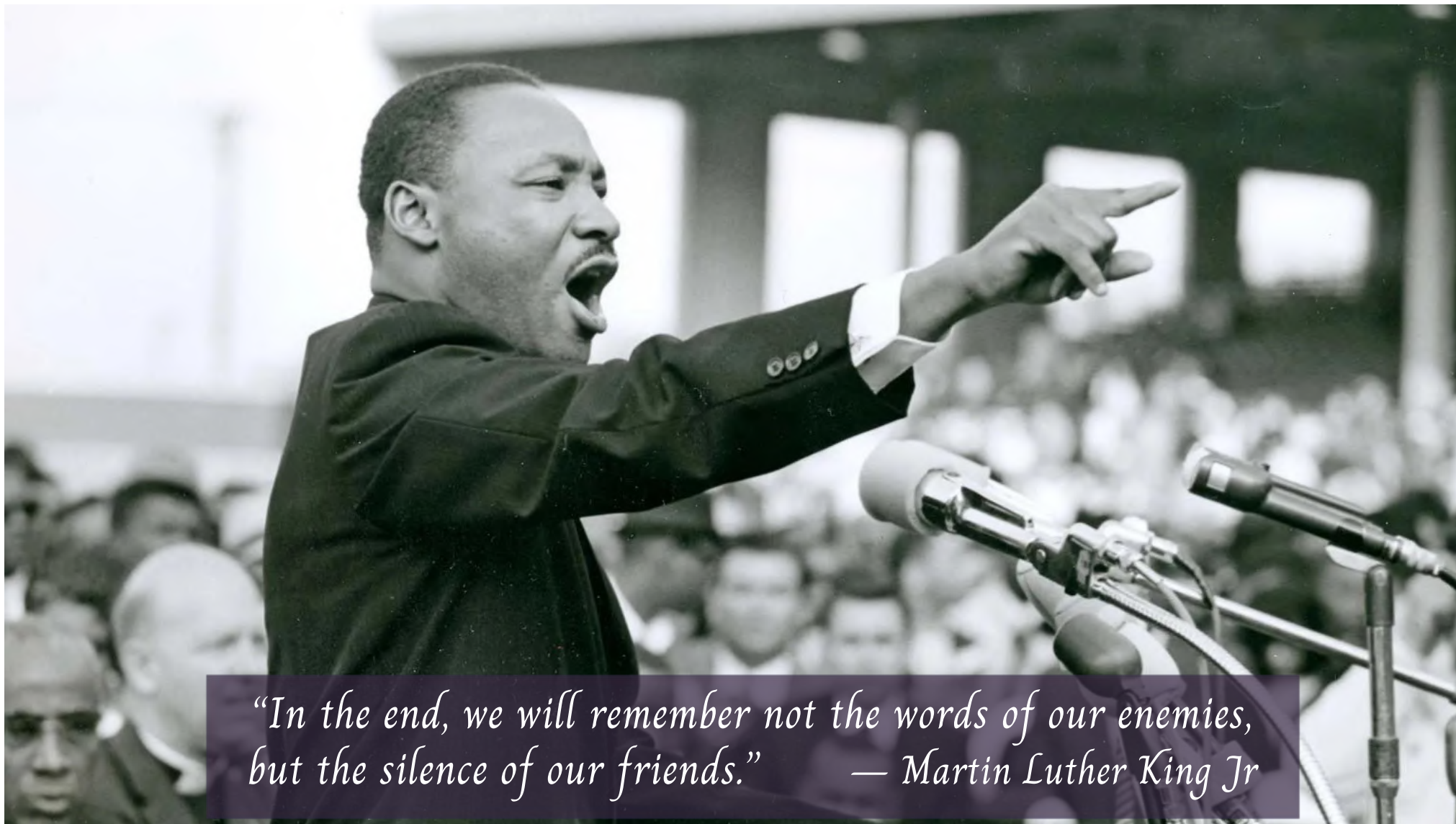
Safe Hands, Bright Futures

**Prioritizing Pediatric Anesthesia Safety
on a Global Scale**

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Saitama Children's Medical Center
Japan**



No COI, powered by ChatGPT4



*“In the end, we will remember not the words of our enemies,
but the silence of our friends.” — Martin Luther King Jr*

Agenda

01

Introduction

02

Inequities

03

Strategies

04

Success

05

Action

01

Introduction



5 billions, No access

- Critical needs to be changed...
- Leads to unnecessary deaths and disabilities...

The Lancet Commission on Global Surgery

Provincial hospital, Cambodia, 2010



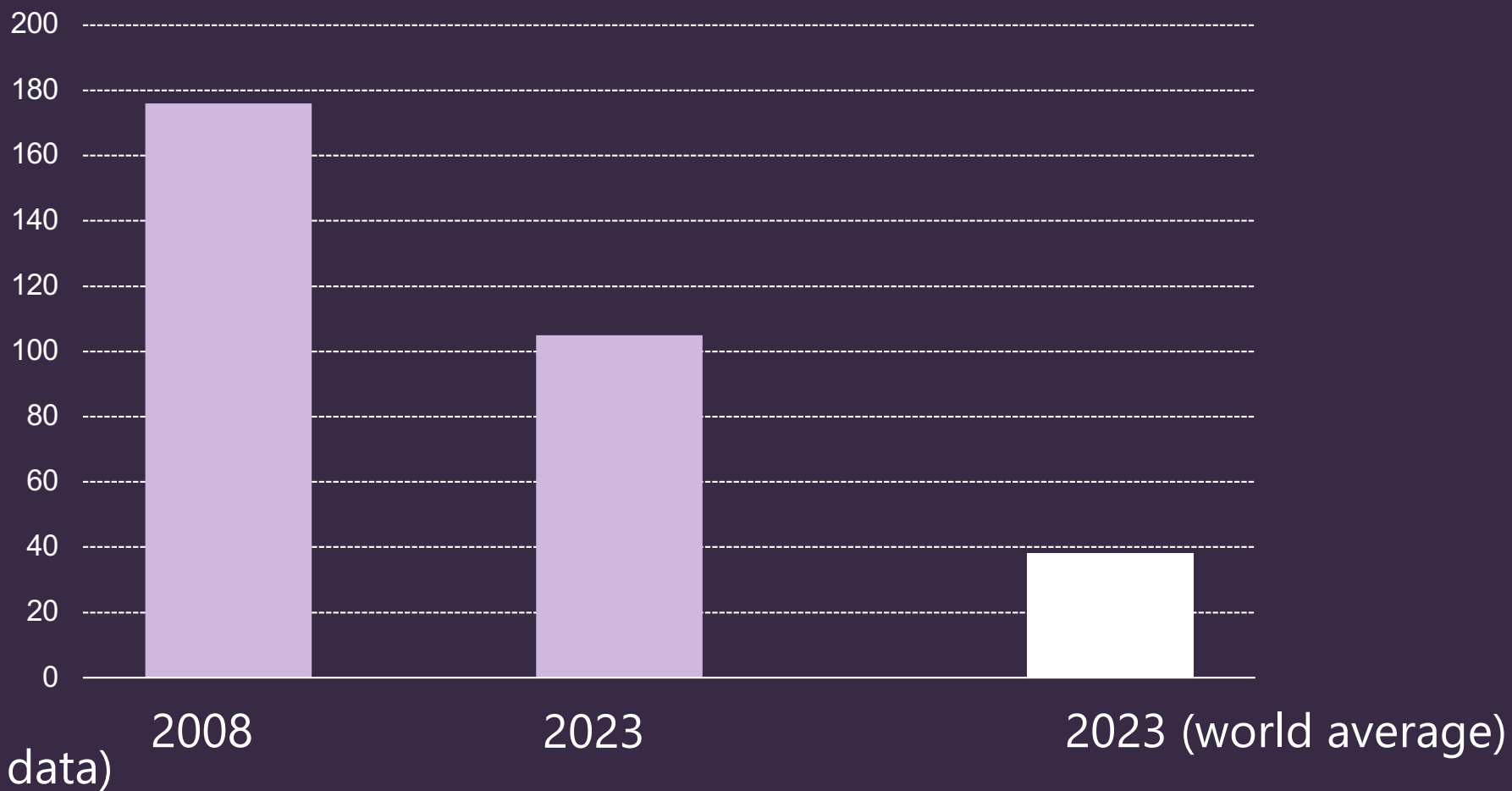
GA for inguinal hernia repair



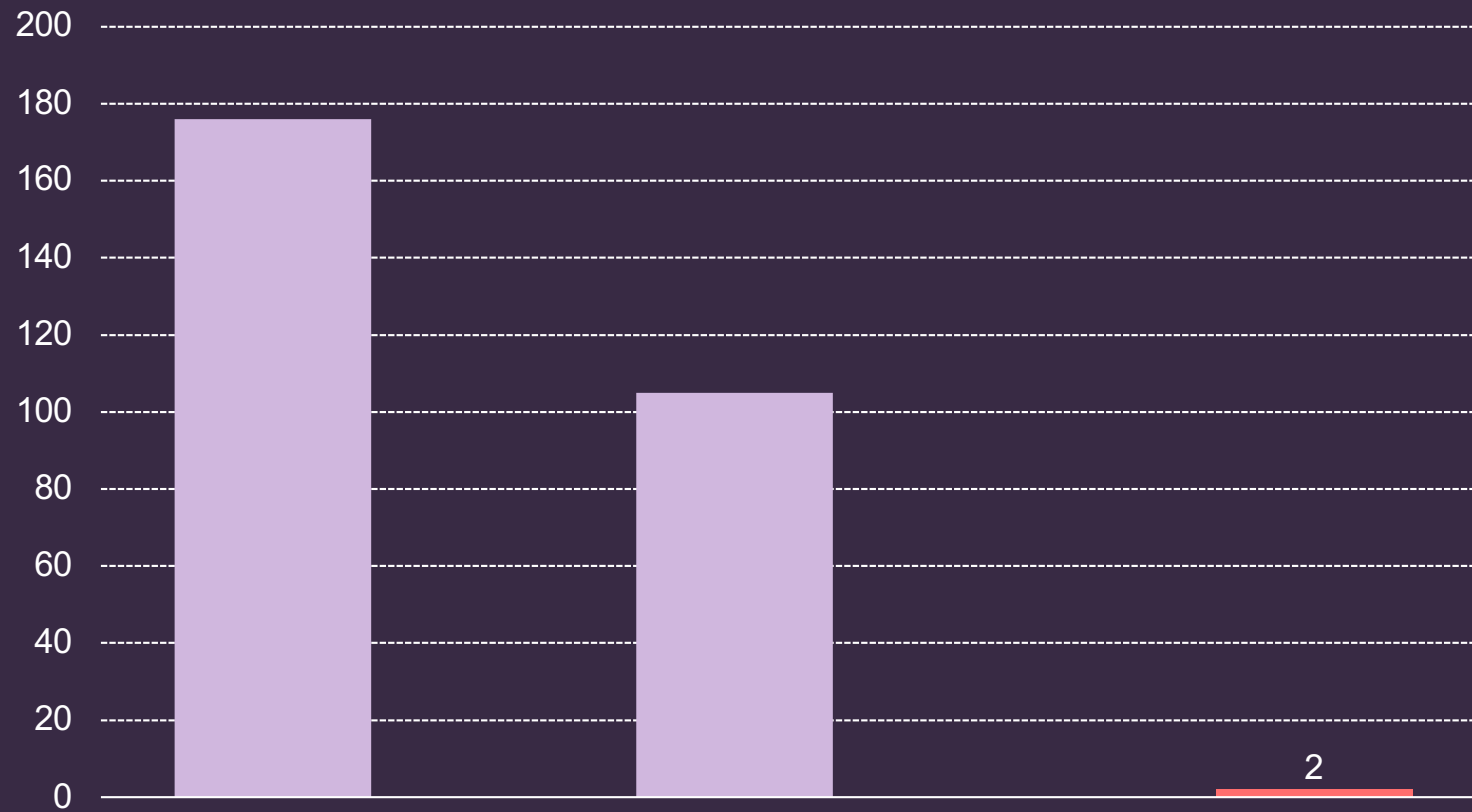
district hospital at Kampong Cham, Cambodia, 2010



Under 5 years mortality rate (per 1000 live birth) in Sierra Leone



Under 5 years mortality rate (per 1000 live birth) in Sierra Leone



(UNICEF data)

2008

2023

2023 (Japan)









Safe Anesthesia is a Key...

- Improve patient outcome and health care quality...
- Essential lifeline to be prioritized...

02

Inequities

- to take steps to equitable future...



Siddhartha Children Hospital, Butwal, Nepal, 2003

Inequities

Access

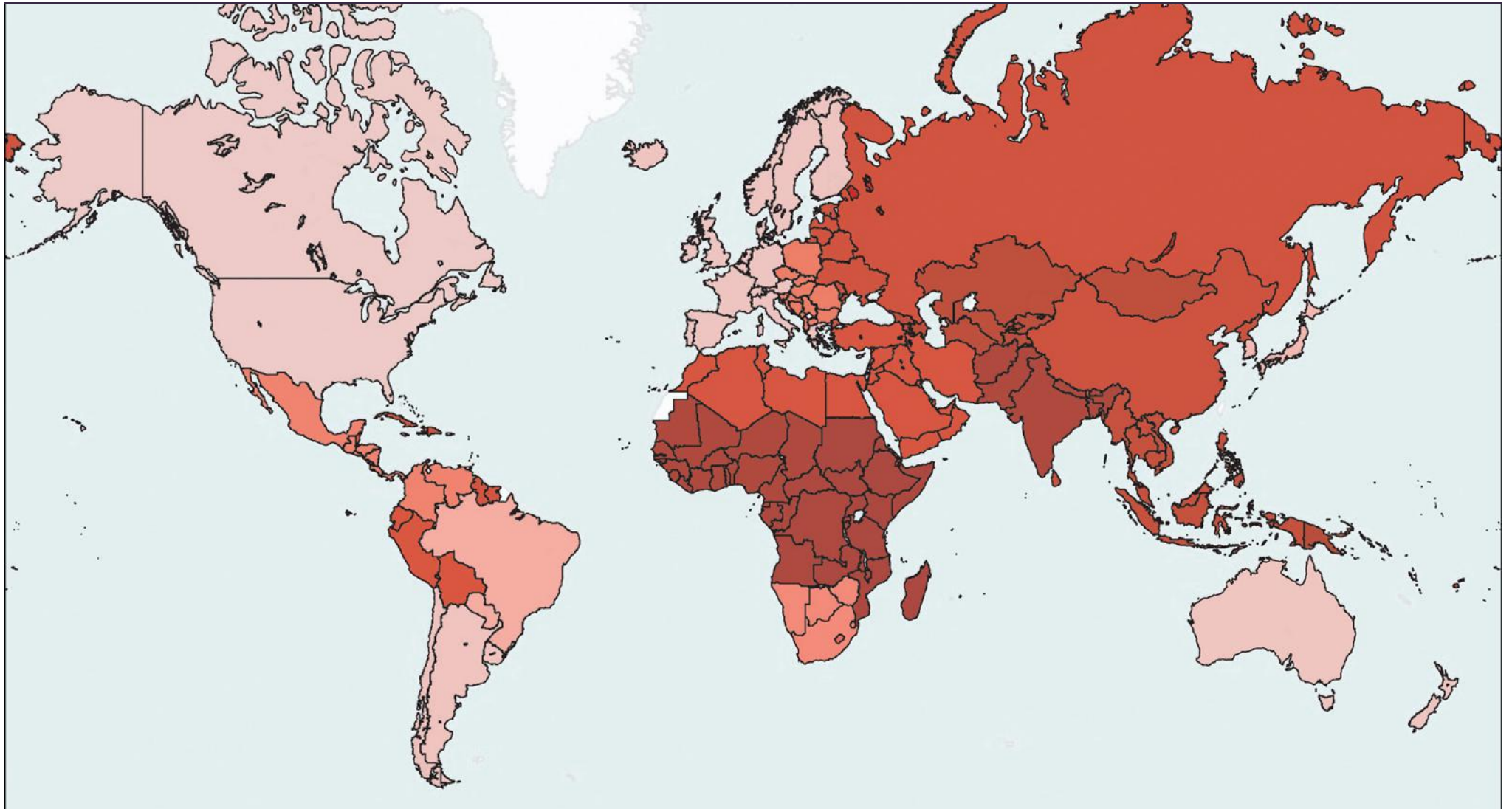


Safety



Workforce

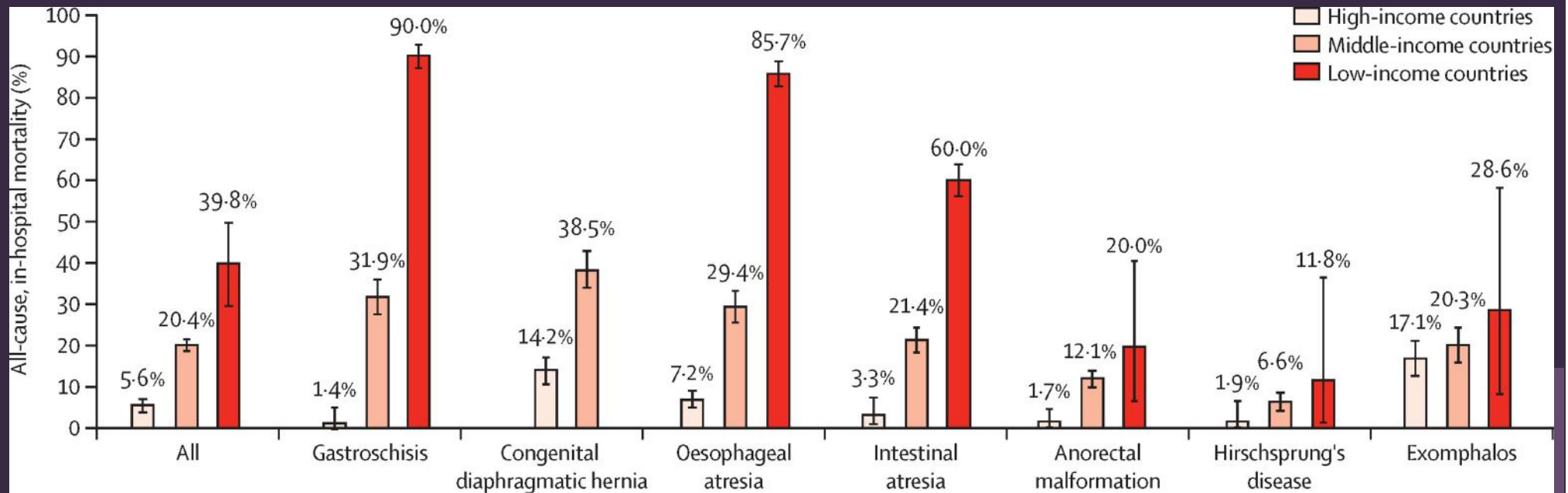




Proportion of the population without access to safe, affordable surgery and anaesthesia (The Lancet Commission on Global Surgery)

Disparities in outcome of common pediatric surgical diseases

- die from diseases that would not be fatal...
- Urgent need for improving access...



Inequities

Access



Safety

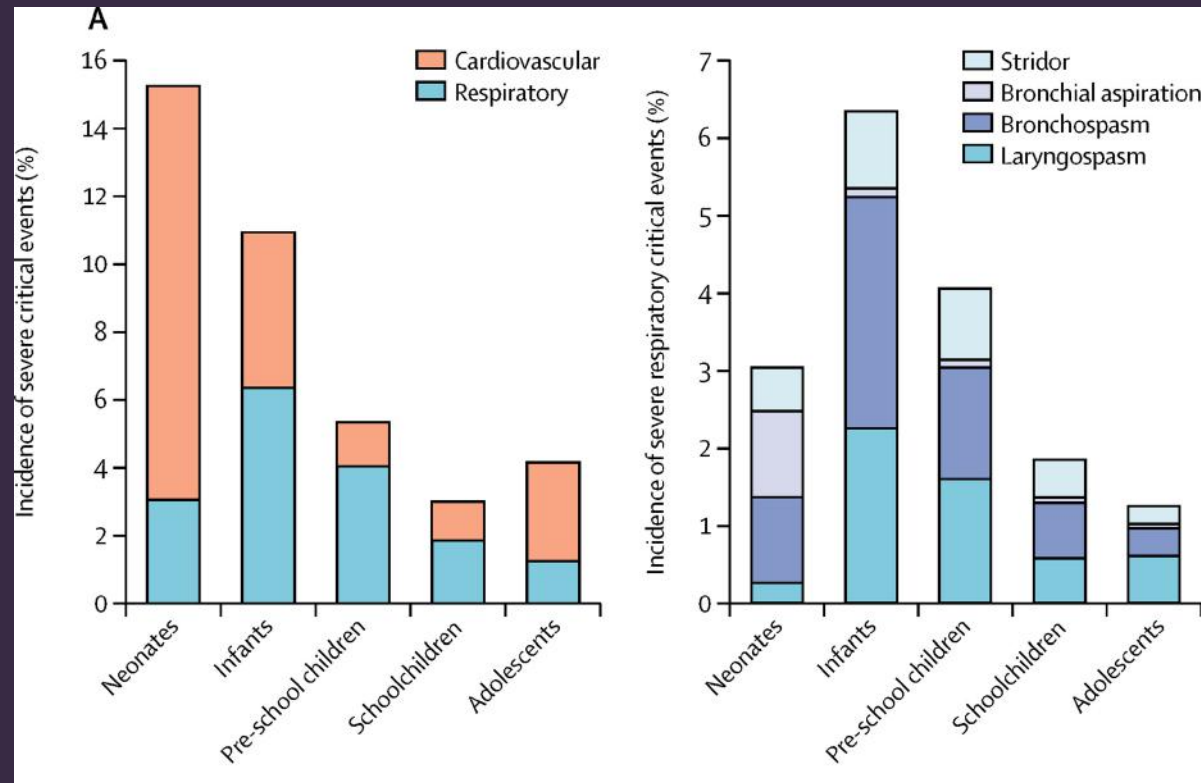


Workforce



Higher Anesthesia Risks for Younger Children

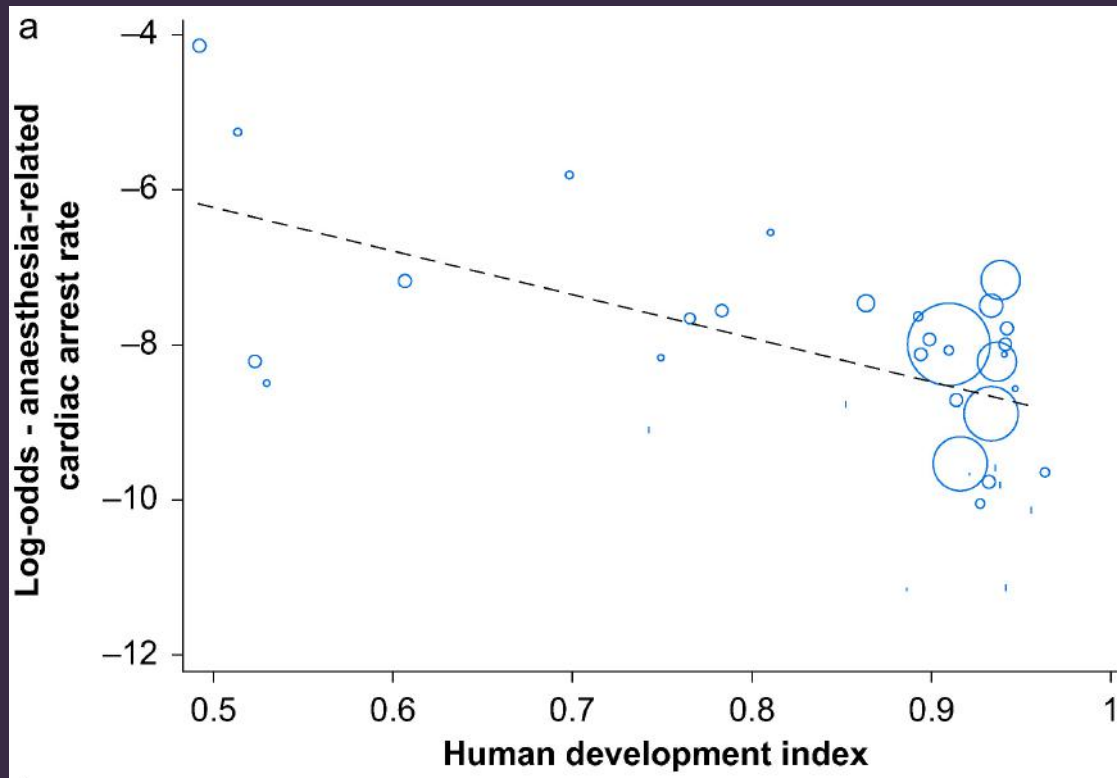
- Need of well-trained anesthetists for younger patients...



Incidence of severe critical events in paediatric anaesthesia (APRICOT): a prospective multicentre observational study in 261 hospitals in Europe. *Lancet Respir Med.* 2017 May;5(5):412-425.

Higher Pediatric anesthesia risk in LMICs

- disparities in safety between HIC and LMICs



BJA, 131:901-3, 2023

Inequities

Access



Safety

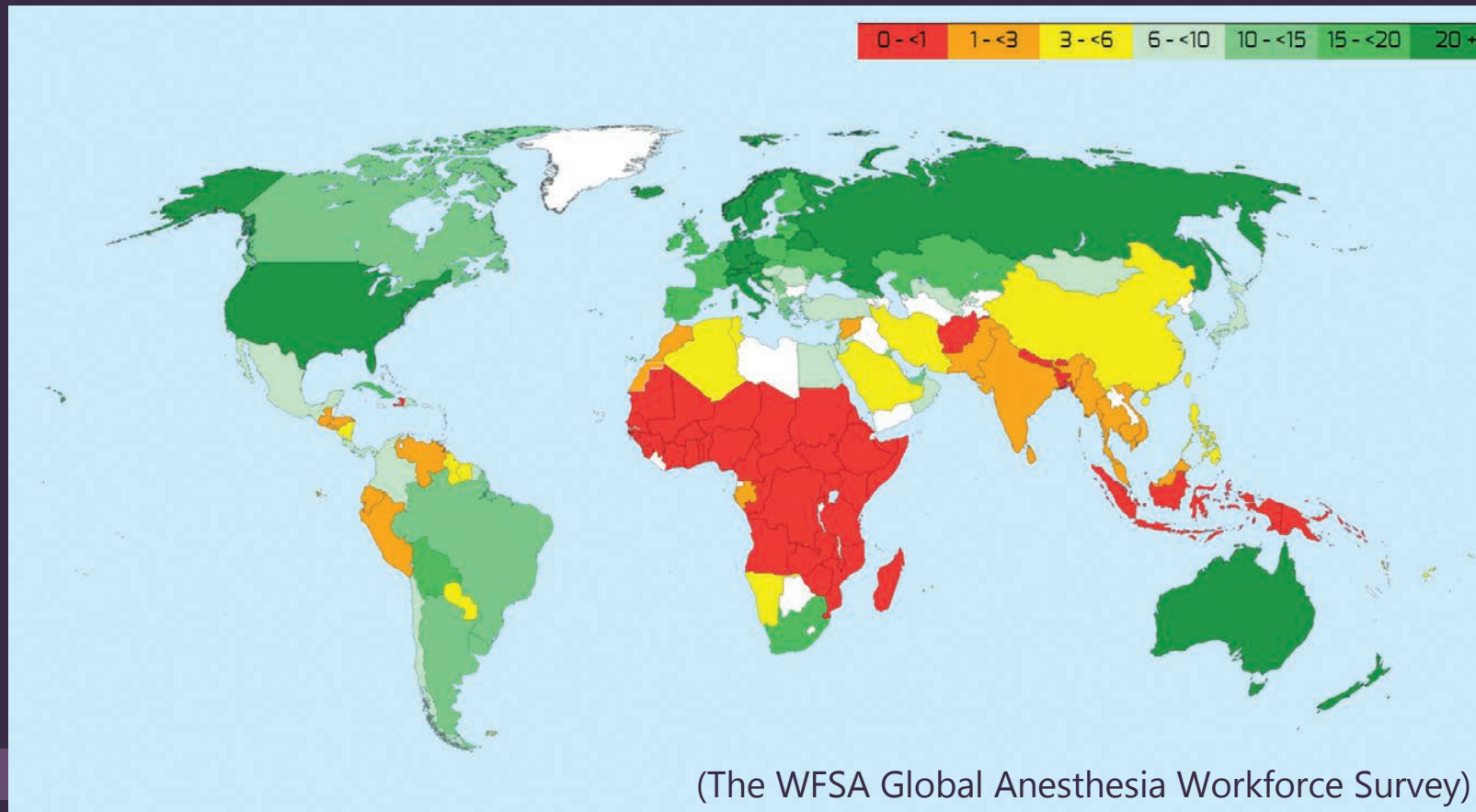


Workforce



Global distribution of physician anesthesia providers

- disparities in densities between HIC and LMICs



Inequities

Access



Safety



Workforce



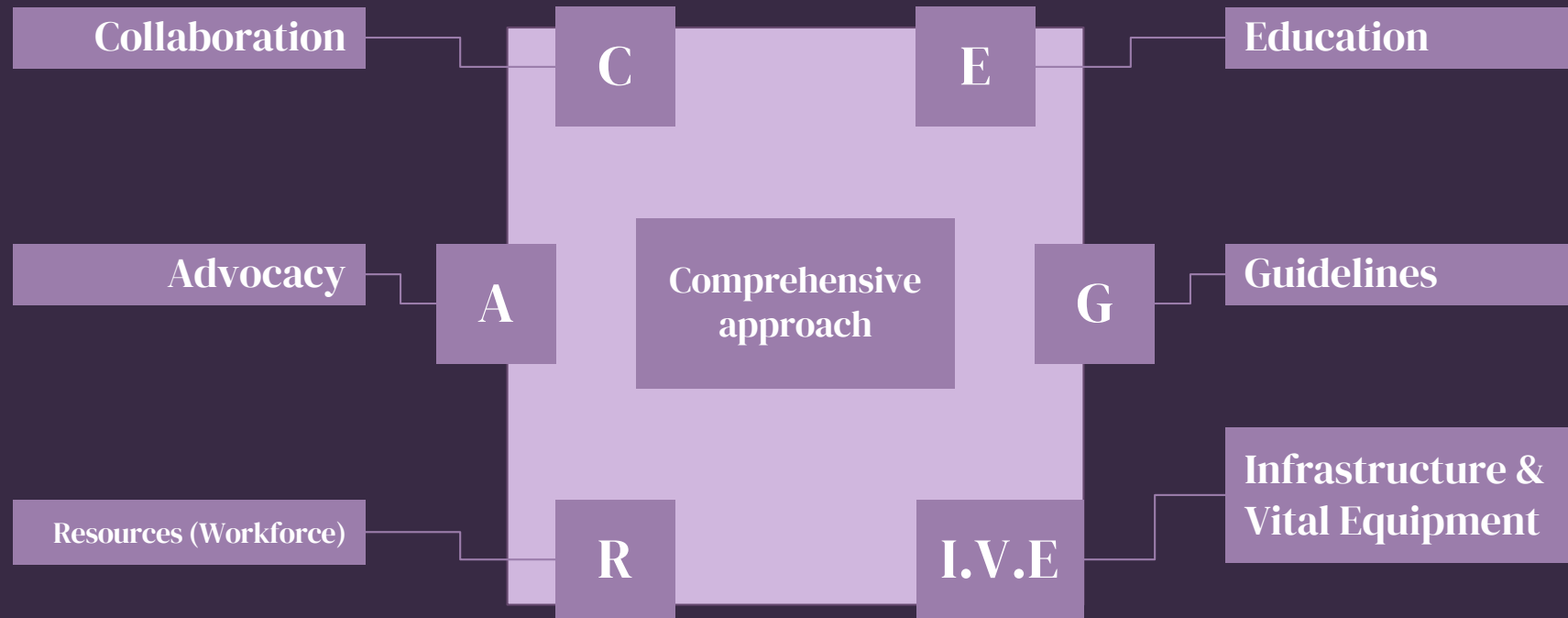
03

Strategies

- to address inequities...
- to change the world...

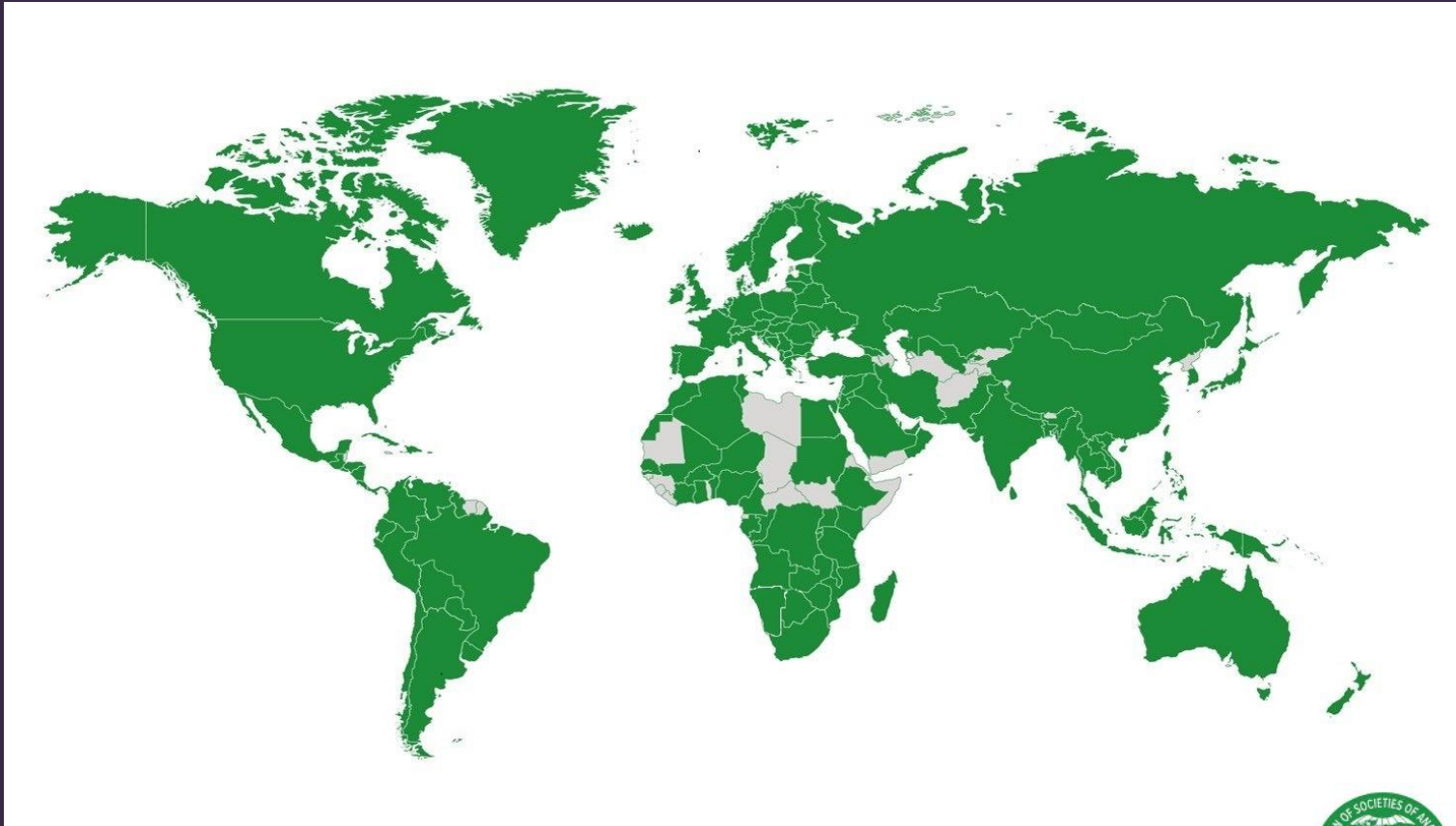


Strategies | C.A.R.E.G.I.V.E.



WFSA
WORLD FEDERATION OF SOCIETIES OF
ANAESTHESIOLOGISTS

The World Federation of Societies of Anaesthesiologists



Global WFSA for Africa, Americas, Asia, Europe, Middle East



WFSA
WORLD FEDERATION OF SOCIETIES OF
ANAESTHESIOLOGISTS

Education and Training

- Training Boosts Pediatric Anesthesia Safety in LMICs

- Short-subspecialty courses: SAFE, VAST, EPM..
- Fellowship and scholars
- Education materials: UIA, ATOW, videos..



WFSA fellowship program



WFSA
WORLD FEDERATION OF SOCIETIES OF
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Education and Training

- Short-subspecialty courses: SAFE, VAST, EPM..
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Available at: <https://resources.wfsahq.org/update-in-anaesthesia>

SPECIAL EDITION PAEDIATRICS

Update in Anaesthesia

Education for anaesthesia providers worldwide

Volume 37 **October 2023**

Editors: Christina Lundgren and Victoria Howell *ISSN 1353-4882*

PAEDIATRICS

CLINICAL REVIEW

- Paediatric critical care in resource-limited settings: An overview
- Paediatric burn injury: Key points for the anaesthesiologist
- Paediatric cardiogenic shock
- The child with severe tetanus
- Children with sickle cell disease: acute complications, acute pain and perioperative management
- Anaesthesia for neonatal and infant male circumcision
- Anaesthesia for omphalocele and gastroschisis repair
- Hypertrophic pyloric stenosis in infants
- Anaesthesia for neurosurgical procedures - Ventriculo-Peritoneal (VP) shunt and meningomyelocele repair
- Anaesthesia in children with congenital heart disease for non-cardiac surgery
- Anaesthesia for large Wilms' tumour (Nephroblastoma)
- Anaesthesia for cerebral palsy
- Paediatric neuraxial anaesthesia and analgesia
- Paediatric anaesthesia outside the operating room in children

CASE REPORT

- Barium bronchogram following hydrostatic reduction of intussusception: presentation of a rare complication and brief review of literature

The Journal of the World Federation of Societies of Anaesthesiologists



WFSA
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ANAESTHESIOLOGISTS

Special edition on Pediatrics, 2023

Workforce

2,200,000

Additional surgeons, anesthesiologists for UC

- Recruitment and retention
- Workforce survey
- Non-physician providers



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The Lancet Commission on Global Surgery

Advocacy

- raise awareness and get more resources



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Former WFSA President Dr Jannicke Mellin-Olsen presenting a statement at the 71st World Health Assembly.



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Fostering Collaboration

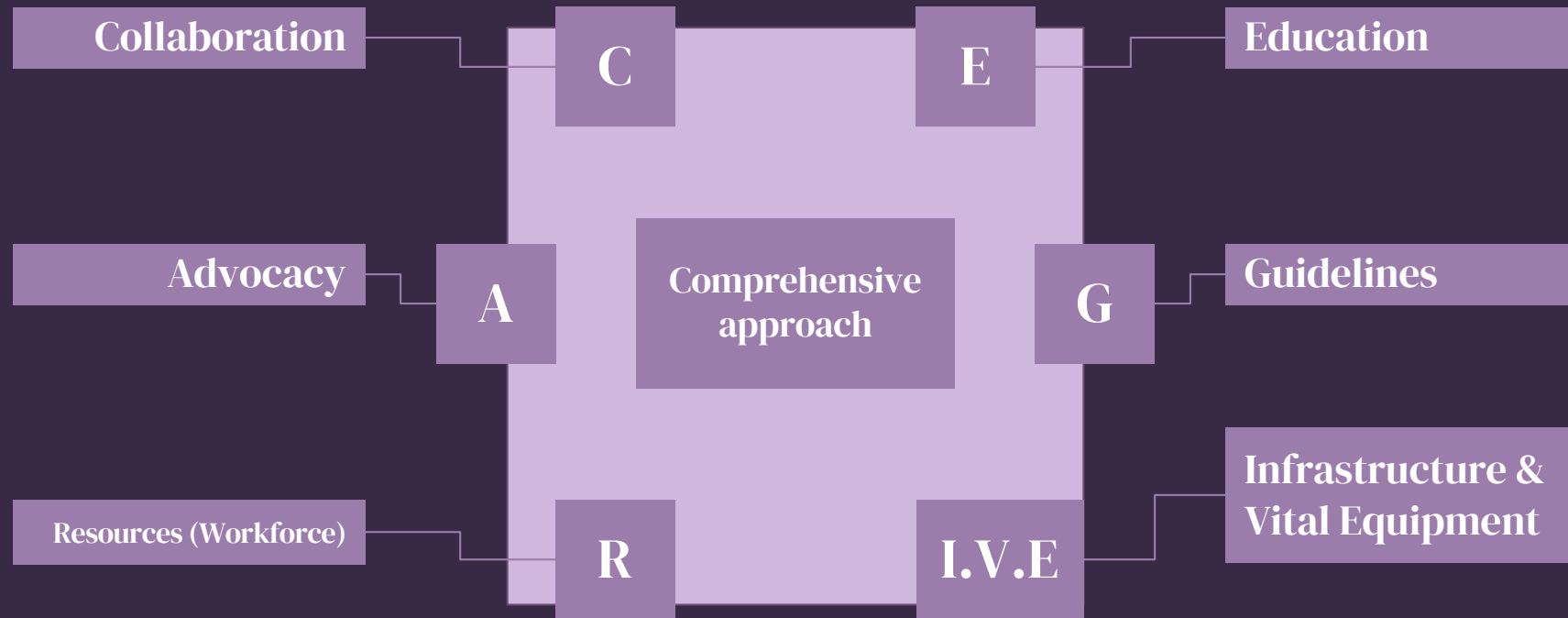
- share knowledge and best practices beyond border...



Global Anaesthesia Mentoring Programme

- Help to develop careers
- Share professional knowledge
- Build supportive networks

Strategies | C.A.R.E.G.I.V.E.



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Russian Ventilator, Kharkiv Ukraine, 2012

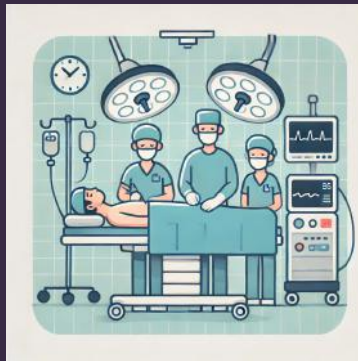
04

Success

- My personal small stories...

Toward SAFE pediatric anesthesia elsewhere

Training



Teaching



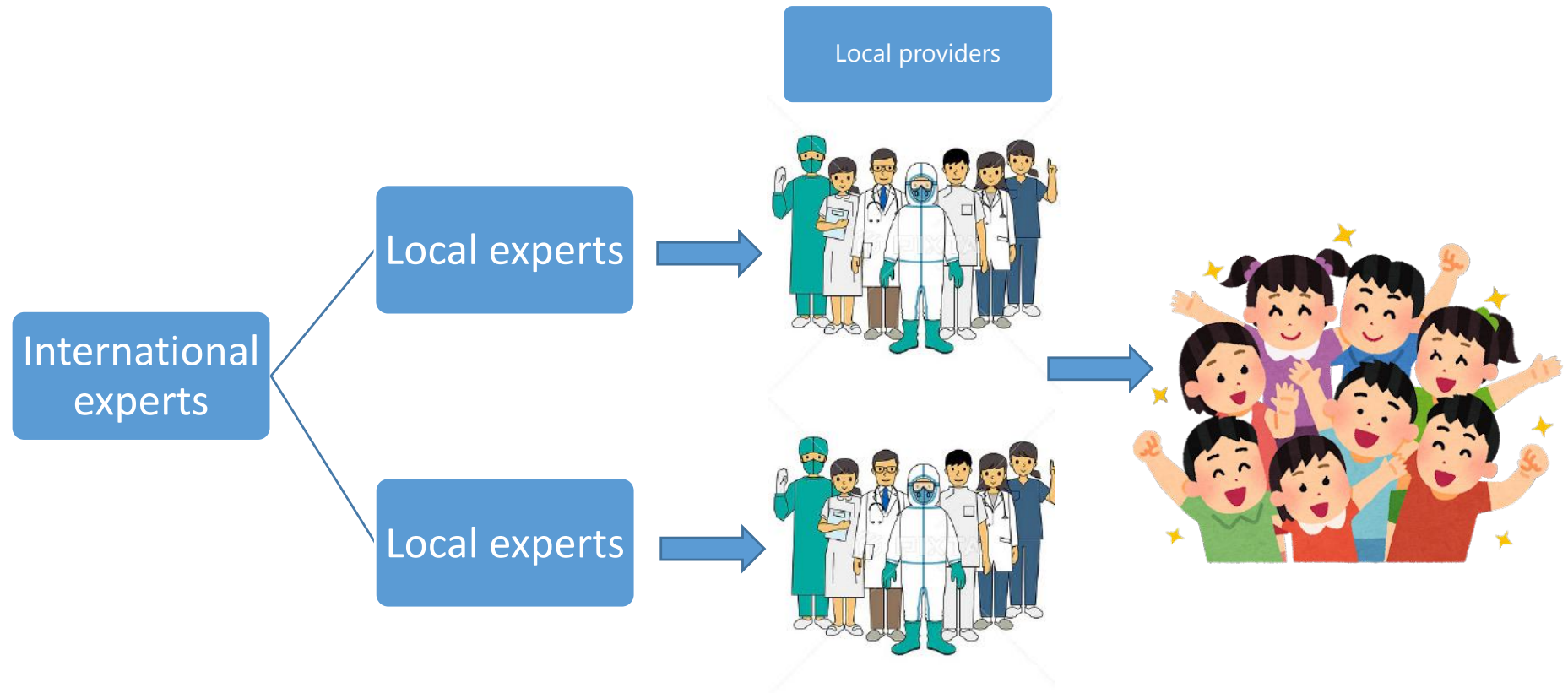
Collaboration



On-site vs scholarship training

	Pros	Cons
On-site	<ul style="list-style-type: none">✓ Tailored to local needs✓ Lower cost✓ Reach more providers	<ul style="list-style-type: none">✓ Tutors?✓ Sustainable?✓ Educational resources?
Scholarship	<ul style="list-style-type: none">✓ Educational resources✓ Cutting-edge education	<ul style="list-style-type: none">✓ Licensure?✓ Different practice pattern✓ Costly, limited trainees✓ Locum ?✓ May not return to original place

“Teach one, Reach many”

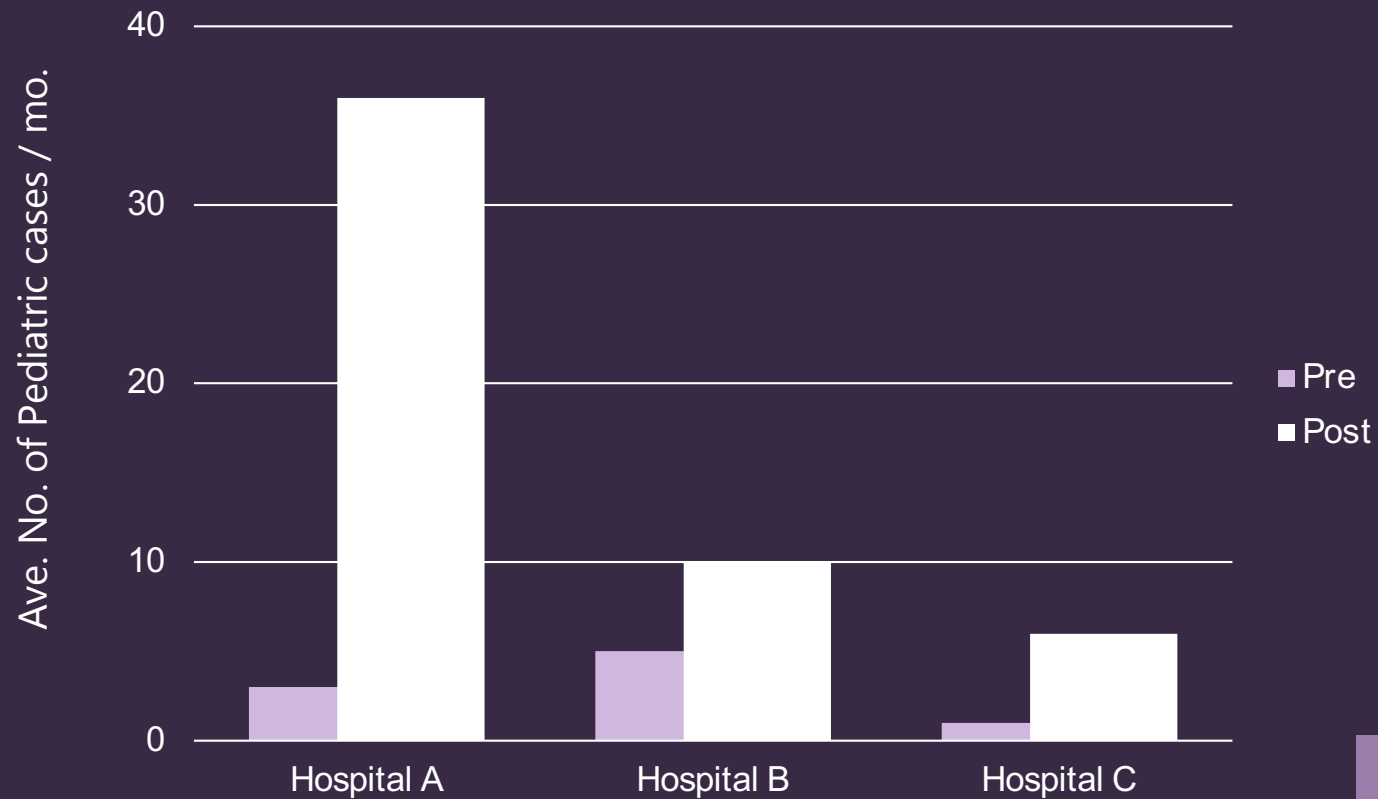


Local pediatric experts as a leadership role



Pediatric anesthesia training for anesthesia nurses from province hospitals
National Pediatric Hospital, Phnom Penh, Cambodia, 2011

“Teach one, Reach many” model in Cambodia



Fellowship at Saitama Children's

- Learning Cutting-Edge Pediatric Anesthesia



Vietnam



South Sudan



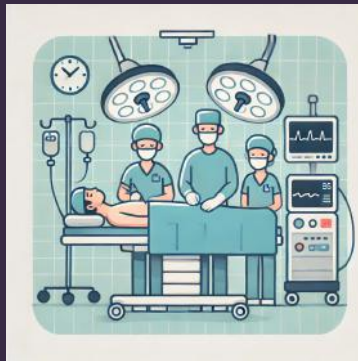
Thai



Malaysia

Toward SAFE pediatric anesthesia elsewhere

Training



Teaching



Collaboration



SAFE paediatric anaesthesia course

SAFE Paediatric Course: 3-day programme overview

Each module = 4 breakout sessions (4 x 25 minutes)
Each lecture = 15–20 minutes

Module	Breakout sessions			
	A	b	c	d
DAY 1				
Pre-course testing				
LECTURE: Introduction to the SAFE Paediatric Course				
LECTURE: Overview: The child is not a small adult				
1. Basic principles (Part 1)	Pre-operative assessment	Basic calculations and normal ranges	Pre-operative fasting	Maintenance fluids
2. Basic principles (Part 2)	The paediatric airway – basic principles	The paediatric airway – advanced	Anaesthetic plan: induction and maintenance	Extubation
3. Basic principles (Part 3)	Pain assessment and management in children		Local anaesthetic blocks	Handover and recovery
DAY 2				
LECTURE: Safety in paediatric anaesthesia				
4. Special conditions (Part 1)	ENT surgery	Cleft lip and palate surgery	Eye surgery	Inhaled foreign body
5. Special conditions (Part 2)	Sickle cell disease or the malnourished child	Airway emergencies	Seizures	Congenital cardiac disease
LECTURE: Recognition and assessment of the sick child				
6. Resuscitation	Resuscitation		Intraosseous access	Recognition of the sick child
7. The sick laparotomy	Sick laparotomy: typhoid perforation Pre-operative planning / induction / intra-operative / postoperative care			
DAY 3				
LECTURE: Trauma in children + demonstration scenario				
8. Trauma	Trauma assessment	Assessment of blood loss	Head injury in children	Transfer
9. Burns	Burns assessment	Burns size estimation and fluid resuscitation	Dressing changes/sedation	Difficult airway
LECTURE: Neonates				
10. Neonates	Newborn resuscitation and care		Imperforate anus	Pyloric stenosis
Post-course testing				
CLOSE				

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SAFE Paediatric Anaesthesia Course Facilitator Manual
Date of last review: September 2017
Date of publication: September 2017

Interactive, practical

> 8000 providers, >50 countries

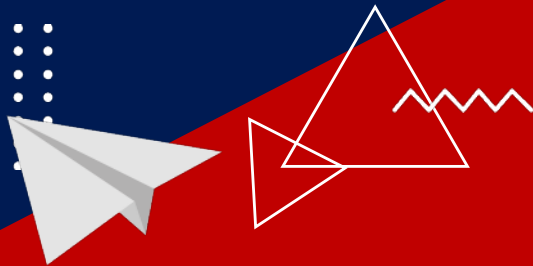
Train the Trainers

11

SAFE Paediatric Anaesthesia Course Facilitator Manual
Date of last review: September 2017
Date of publication: September 2017



SAFE Peads Course@JSPA 2023



SAFE pediatric anesthesia & ToT course in Cambodia



Nov. 18-20, 2022

Nori Kuratani, MD, PhD, MPH
WFSA pediatric anesthesia committee chair





Faculties

- Faculty leaders
 - Lowri Bowen (UK, SAFE steering committee)
 - Nori Kuratani (Japan, WFSA pediatric chair)
 - Tep Sokha (Cambodia, SCARMU)
- UK:4, Japan:4, Cambodia:5



SAFE pediatric course

- 2 days course
- 5 lectures, 19 modules
- 26 local providers trained



Train the Trainer

- 1 day course
- 10 new trainers



Nov. 12-17, 2023

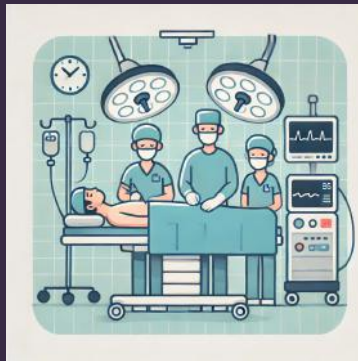
SAFE Pediatric Anesthesia in Chuuk, Micronesia

Micronesia Anesthesia Refresher Course



Toward SAFE pediatric anesthesia elsewhere

Training



Teaching



Collaboration



Collaboration with international communities

ASPA



SmileAsia



IVUmed



FIDR





05

Action

- You can contribute to change...

How You Can Improve Global Pediatric Anesthesia Safety?





“In the end, we will remember not the words of our enemies, but the silence of our friends.”

— Martin Luther King Jr.”

Acknowledgements



Work Together!





Safe Hands, Bright Futures

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