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GICS

Global Initiative for Children's Surgery

GICS III ATTENDANCE REPORT

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VENUE FOR GICS III MEETING

Date: 12th to 13th January 2018.

Location: Stem Cell Research Centre, Christian Medical College, Vellore, India



Figure 1. The location where meeting was held.

TRANSPORT AND ACCOMMODATION

Sponsored by the GICS III organising committee, the Papua New Guinea team (Dr. Ben Yapo and Dr. Jack Mulu) departed through Singapore at 3pm on Thursday 11th January 2018 and returned through the same route. Arrived at Jacksons Airport at 5am on Wednesday 17th January 2018. There was a delay at Changai Airport but through appropriate communication, the destiny was reached accordingly. The two shared a common room at Banzz Park Hotel in Vellore.



Figure 2. Banzz Park hotel where most of the delegates were accommodated. This hotel was recently being opened.



Figure 3.0; Wellcome reception at the Hotel.

THE EXECUTIVE MEMBERS

The organising committee is composed of some of the most prominent people in the Paediatric Surgery. They are coming from the seven continents of the globe including the watch over from the WHO and UNICEF.

The first meeting was held in 26 – 27th May 2016 in London, GICS II was incorporated in July 12th 2017 in California, USA; This is the third GICS meeting in Vellore, India.

This corporation shall have no voting members, but the Board of Directors may, by resolution, establish one or more classes of nonvoting members and provide for eligibility requirements for membership and rights and duties of members, including the obligation to pay dues.

The Board of Directors of GICS shall have no less than three (3) nor more than twenty (20), shall aspire that at least half of the directors live or practice medicine primarily in low and middle income countries and should converse in written and spoken English. One third of directors are elected each year which shall cover a term of three years. The meeting of the Board of Directors at least once per year without being compensated and may use any means of communication that is available, especially the modern technology.

The Chairman to the Advisory Committee to the Board shall serve for a term of up to three years. Each such chair may appoint a vice chair. Other than the initial chair appointed by the Board, the members of each Board Committee shall nominate a member of the Board Committee to serve as the Chair; such nominations shall be approved by the Board.

The current GICS Board is made of the following colleagues.

Executive Committee members

- ▶ Chair – Diana Farmer
- ▶ Immediate Past Chair - NA
- ▶ Vice Chair/Chair Elect – Kokila Lakhoo
- ▶ Treasurer –Doruk Ozgediz
- ▶ Secretary –Emmanuel Ameh

Publications Committee members

- ▶ Keith Oldham (Chair)
- ▶ Diana Farmer
- ▶ Don Poenaru
- ▶ Emmanuel Ameh
- ▶ Kokila Lakhoo
- ▶ Tahmina Banu

Marilyn Butler (Chair); Website, Networking, and Communications Committee

The Board of Directors of GICS is the following.

Table 1. The Officers of GICS:

Diana Farmer	Chair	2017-2018	USA	No	Pediatric and fetal surgery
Kokila Lakhoo	Chair-Elect	2017-2018	England	No	Pediatric surgery
Emmanuel Ameh	Secretary	2017-2020	Nigeria	Yes	Pediatric surgery
Doruk Ozgediz	Treasurer	2017-2021	USA	No	Pediatric surgery

Table 2. The Board of Director Members

Tahmina Banu	Governor	2017-2019	Bangladesh	Yes	Pediatric surgery
Keith Oldham	Governor	2017-2018	USA	No	Pediatric surgery
Dan Poenaru	Governor	2017-2019	Canada	No	Pediatric surgery
Stephen Bickler	Governor	2017-2019	USA	No	Pediatric surgery
Marilyn Butler	Governor	2017-2019	USA	No	Pediatric surgery
Sabina Siddiqui	Governor	2017-2019	USA	No	Pediatric surgery
Vrisha Madhuri	Governor	2017-2020	India	Yes	Pediatric orthopedic surgery
John Sekabira	Governor	2017-2020	Uganda	Yes	Pediatric surgery
Neema Kaseje	Governor	2017-2020	USA	No	Pediatric surgery
Benjamin Yapo	Governor	2017-2020	Papua New Guinea	Yes	Pediatric surgery
Rashmi Kumar	Governor	2017-2020	Kenya	Yes	Pediatric intensive medicine and critical care
Patrick Kamalo	Governor	2017-2020	Malawi	Yes	Neurosurgery
Lily Saldaña	Governor	2017-2020	Peru	Yes	Pediatric surgery
Zipporah Gathuya	Governor	2017-2020	Kenya	Yes	Pediatric anesthesiology
Bertille Ki	Governor	2017-2020	Burkina Faso	Yes	Pediatric anesthesiology
Michael Cooper	Governor	2017-2019	Australia	No	Pediatric anesthesiology

Table 3. THE WORKING GROUPS

Working Group	Facilitator	Facilitator email
Anesthesia	Zipporah Gathuya	
Cardiac surgery	Eltayeb Ahmed	
Critical Care	Rashmi Kumar	
Dental/Oral Surgery	Sunday Ajike	
ENT	Shazia Peer	
General surgery	Basil Leodoro	
Neurosurgery	Anthony Figaji & William Harkness	
Ophthalmology	Open	
Orthopedic Surgery	Vrisha Madhuri	
Pediatric General Surgery	Soji Ademuyiwa	
Plastic surgery	Peter Nthumba	
Trauma	Open	
Urology	Bankole Rouma	
Financing/Advocacy/Policy	Lubna Samad	
Infrastructure/Standards/Verification (including OReCS)	Emmanuel Ameh	
Research/Data/Quality Improvement	Tahmina Banu	
Training/Human Resources/Workforce	Neema Kaseje	
Research Webinar	Dan Poenaru & Emily Smith	

Attendees,



Figure 4.0; Group photo of the attendance. The Writer is not in the photo because he was late for the meeting.

Table 4. The following table contains the very people who were sponsored to attend this meeting.

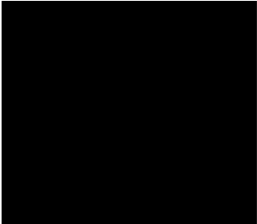
First Name:	Last Name:	Degrees/Profession:	E-mail address:	Primary country of residence?
Nurudeen Toyin	Abdulraheem	MBBS		Nigeria
Lukman	Abdur-Rahman	MBBS, MPH, FWACS, FMCS, FACS		NIGERIA
Edna	Adan Ismail	- Diploma in Nursing - Diploma in Midwifery - Bachelor of Science Nursing Administration - Honorary Doctoral degrees from Clark and Ahfad Universities as well as University of Pennsylvania		Somaliland
Niyi	Ade-Ajayi			UK
Ahmad	Tariq	Azizi		India (Delhi)
Olugbemi Benedict	Akintububo	BDS, FDSRCS, FWACS		NIGERIA
Vanda	Amado	PEDIATRIC SURGERY		mozambique

Emmanuel	Ameh	MBBS, FWACS, FACS		Nigeria
Jamie	Anderson	MD MPH		US
Theophilus Teddy Kojo	Anyomih	MBChB, BSc Human Biology		Ghana
Gudeta	Assegie	Medical doctorate		Ethiopia
Jacques	Bake	Medical doctor (Surgical resident)		Democratic Republic of Congo
Harshjeet Singh	Bal	MS (General Surgery), M.Ch. (Paediatric Surgery)		India
Roumanatu u	Bankole			Côte d'Ivoire
Tahmina	Banu			Bangladesh
Tim	Beacon			UK
Stephen	Bickler	MD		USA
Hiranya Kumar	Borah	MBBS,MS(Gen Surg),MCh(Ped Surg).		India
Eric	Borgstein	MD FRCS FCS		Malawi
Nick	Boyd	MBChB, FRCA (UK)		UK
Britta	Budde- Schwartzm an	Md		ghana
Marilyn	Butler	MD MPH		US
Sarah	Cairo	MD MPH		USA
Clara	Chong			UK
Tessa	Concepcion	BS		USA
David	Cunningha m	LLD BSc(Hons)		UK
Shugri	Dahir			
Miliard	Derbew	felowship in Pediatrics surgery		Ethiopia
Sushil	Dhungel	MD		Nepal
Bassey	Edem	MBBS, FWACS		Nigeria
Faye	Evans	MD		United States
Diana	Famer	MD, FACS, FRCS		United States
Mohammad Rafi	Fazli	MD		Afghanistan
Gacelle	Fossi			Cameroon
Krishna Kumar	G			India

George William Muwambi	Galiwango	FCS Plastic Surgery-ECSA		Uganda
Zipporah	Gathuya	MbChB, MMed (Anaesthesia) Fellowship in Paediatric Anaesthesia		Kenya
Maryam	Ghavami Adel	Pediatric surgeon. Associate professor		Iran
Vafa	GhorbanSa bagh	Neonatologist		Iran
Sridhar	Gibikote	MBBS, DMRD, DNB		India
Hetal	Gohil	MBChB		Kenya
David	Grabski	MD		USA
Rahimullah	Hamid	MS orthopedics		Afghanistan
William	Harkness	MB ChB FRCS		United Kingdom
Intisar	Hisham	MBChB		Kenya
Sarah	Hodges	MB ChB FRCA		Uganda
Andrew	Howard	MD, MSc, FRCSC		Canada
Enas	Ismail	Registrar(trainee)		Sudan
Rebecca	Jacob			India
Deeptiman	James	MS Orthopedics		India
Ebor Jacob	James	DCH DNB		India
Kathy	Jenkins	MD, MPH		USA
Tarun	John K Jacob	MBBS, MS, MCh		India
Walter	Johnson	MD, MBA, MPH		Switzerland
Anita	Joselyn	MD Anaesthesia		India
Shanthi	k	Bsc in Nsg		India
Neema	Kaseje	MD/MPH		Switzerland
Kélan Bertille	Ki	Médecin		Burkina Faso
Rashmi	Kumar	MBBS, MMed, Fellowship Paeds critical care		Kenya
Kokila	Lakhoo	PhD,FRCS(ENG+ED IN),FCS(SA),FCS-PAED, MRCPCH(UK),MBC HB		UK

Monica	Langer	MPH, MD		United States
Andrew	Leather	FRCS		UK
Basil	Leodoro	Masters of Medicine in Surgery		Vanuatu
Kennedy	Lishimpi	BSc MB ChB MMed F2F Rad Onc (SA)		Zambia
Katrine	Lofberg	MD		USA
Dawn	M. Torrence Ireland			UK
Vrisha	Madhuri	MS MCh		India
Luc Kalisya	Malemo	MD, MMed Surgery		Democratic Republic of the Congo
John	Mathai	M.B.B.S, M,S (gen Surg), DipNBE , M.Ch (Paed surg)		India
Marcia	Matias	Medical Doctor - Paediatric surgeon (and general surgeon)		Brazil
Bryson	Mcharo	MD,MMED,Fellowship cand.paed ortho		Tanzania
Liz	McLeod	MD FRACS		Australia
Leecarlo	Millano	Pediatric Surgeon		Indonesia
Ashish	Minocha	MS, M.Ch, DNB, MNAMS, FICS, FRCS,		United Kingdom
Mubarak	Mohamed			
Faustin Felicien	Mouafo Tambo	Associate professor of pediatric surgery		Cameroon
Mulewa	Mulenga	Bachelor of Science in Human Biology, Bachelor of Medicine and Bachelor of Surgery		Zambia
Bhargava	Mullapudi	MD HIGHER POSTGRADUATE DIPLOMA IN GENERAL PAEDIATRIC SURGERY		USA
Jack	Mulu			PAPUA NEW GUINEA
Mary	Nabukenya	MBChB, MMED Bachelor's Degree in Medicine and Surgery		Uganda
Laurence Isaaya	Ntawunga			RWANDA
Keith	Oldham	MD		USA
Rae	Oranmore-Brown			Zambia

Maryrose	Osazuwa	MBBS (Bachelor of Medicine, Bachelor of Surgery); Fellow, West African College of Surgeons (Faculty of Anaesthesia)		Nigeria
Emmanuel Abem	Owusu	Bsc, MBChB		Ghana
Doruk	Ozgediz Paul	MD		USA
Vinitha	Ravindran	Msc (N) PhD		India
Norgrove	Penny	MD, FRCS(C)		Canada
Dan	Poenaru	MD, PhD		Canada
Ekta	Rai	MRCA, MD		India
Henry	Rice	MD		USA
Amezene	Robelie	MD		Ethiopia
David	Rothstein	MD MS		USA
Coleen	Sabatini	MD, MPH		United States of America
Soumitra	Saha	MBBS, MS, MCh, DNB		India
John	Sekabira	MBChB, MMed(gen surg), MMed(paed. surg)		Uganda
Vinayak	Shukla	MCh (Cardio-Thoracic Surgery)		India
Sabina	Siddiqui	MD		US
Thomas	Sims	MD		United States of America
Emily	Smith	PhD		USA
Etienne	St-Louis	MD MB MCh BAO MD FRCSEd FRCSEng FRCS(Paed)		Canada
Richard Mansi	Stewart Tara	BDS, MPH MBBS, MS, FRCS, DNB, MCh (PdSg), DNB, MMAS, MBA		UK UK
Reju	Thomas	MBchB, mmed gen surgery		India Uganda
Anne Paul Mwindekuma	Wesonga Wondoh	MBChB; BSc Human Biology		Ghana
Garreth	Wood	MBChB (Hons) BSc (Hons) MRCS DCH MSc		US, East Africa
Naomi	Wright			UK

Benjamin Denléwend é Sylvain	Yapo Zabsonre	MBBS, HDipPedsurg		Papua New Guinea
				Burkina Faso
Bistra	Zheleva	MBA		USA

The abbreviations are not being demonstrated here but the reader should know the common abbreviations for the Professional achievement and the initials of the country of origin. This table speaks for itself: Paediatrics surgeons, anaesthetists, general surgeons, radiologist and nursing officers who deals with children's surgery. Professional colleagues came all the way from the seven continents as the table demonstrates.

It is notable here in this very table that not only paediatric surgeons attended the meeting and also not only from one particular region, race or culture. The surgical delivery to the children at the most was demonstrated in which all the team involved in children's surgery presented themselves.

GICS III Meeting Programme

Day 1 – Friday, 12 January, 2018

06:30 – 07:00 am: Breakfast (at the hotel)

07:30 – 08:00 am: Registration (at the meeting venue)

8:00 – 9:30 am: GENERAL SESSION 1: Opening and Welcome Remarks

(Chairs: Kokila Lakhoo & Vrisha Madhuri)

- Welcome from host and prayer
- Meeting objectives (Diana Farmer video)
- Updates since GICS II: Bylaws (Keith Oldham), Optimal Resources for Children's Surgery document (Doruk Ozgediz, Emmanuel Ameh, Stephen Bickler)

9:30 – 10:45 am: Major Project Presentations (Chairs: Bertille Ki & Dan Poenaru)

- Vellore-RCS Children's Surgical Training Partnership (Vrisha Madhuri, Richard Stewart)
- Nicaragua Project (Neema Kaseje, Operation Smile Team)
- Kids Operating Rooms (David Cunningham & Garreth Wood)
- Children's Surgery in Rural Ghana Project (Britta Budde-Schwartzman)
- Gastroschisis Project & The Global PaedSurg Research Collaboration (Naomi Wright)

10:45 – 11:00 am: Tea Break

11:00 – 12:00 pm: Project Presentations from GICS members (Chair: Neema Kaseje)

12:00 – 1:00 pm: Buffet lunch & poster session on lawn (Chairs: Etienne St-Louis & Hetal Gohil)

1:00 – 2:00 pm: Workshops (breakout into two groups) (Chair: Luc Malemo)

- Proposal writing and manuscript publication (Neema Kasaje)
- Project design and online data collection using REDCap (Naomi Wright)

2:00 – 3:30 pm: GENERAL SESSION 2: Road Map for Implementation

(Chairs: John Sekabira & Doruk Ozgediz)

- Bellwether procedures for children (1 hour) – Create consensus document (Dan Poenaru)
- Optimal Resources for Children's Surgery (OReCS) implementation (30 min) (Emmanuel Ameh, Stephen Bickler)

3:30 – 4:30 pm: Implementation Breakout Groups: (Chairs: Emmanuel Ameh & Rashmi Kumar)

- Infrastructure/ Service Delivery (Emmanuel Ameh & Basil Leodoro)
- Human Resources and Training (Neema Kaseje)
- Research (Tahmina Banu)
- Policymaking and Advocacy (Rashmi Kumar, Lubna Samad)

4:30 – 4:45 pm: Break

4:45 – 5:30 pm: GENERAL SESSION 3 (Chairs: Benjamin Yapo & Marilyn Butler)

- Report from Breakout Groups
- Wrap-up of the day

5:30 pm: Walk from meeting to reception

6:00 – 9:00 pm: Reception and Dinner (go straight from meeting to restaurant)

9:00 pm: Transport back to hotel

Day 2: Saturday, January 13, 2018

06:30 - 07:30 am: Breakfast (at the hotel)

8:00 – 8:30 am: GENERAL SESSION 4 (Chairs: Kokila Lakhoo & Vrisha Madhuri)

- Summary of Day 1 and Objectives for Day 2 (Naomi Wright, Jamie Anderson)

8:30 – 10:00 am: Presentations from Organisations: Incorporating GICS into their vision (Chair: Keith Oldham)

- UNICEF (Indian Branch Representative)
- WHO (Walt Johnson)
- MSF (David Rothstein)
- SIOP (Eric Borgstein)
- WFSA (Faye Evans & Zipporah Gathuya)
- COSECSA (Miliard Derbew)

10:00 – 11:00 am: Organisation Presentations (Chair: Vrisha Madhuri & Coleen Sabatini)

Organizations to give talks on what they are doing & potential collaborations

11:00 – 11:15 am: Break

11:15 – 12:15 am: Workshop 2: (Chairs: Tahmina Banu & Penny Norgrove)

- Practical skills for children's neurosurgery (William Harkness)
- Paediatric anaesthesia in low-resource settings: panel discussion on current & future initiatives (Faye Evans) – Main hall
- *Networking session or tour of the hospital for those not at a workshop*

12:15 – 1:00 pm: Lunch & poster walk-around (Chairs: Naomi Wright & Sarah Cairo)

1:00 – 1:45 pm: GENERAL SESSION 4: National Children's Surgical Plan (Chairs: Stephen Bickler & Leecarlo Milano)

- Kennedy Lishimpi (Zambia)
- Emmanuel Ameh (Nigeria/ WACS)

1:45 – 3:15 pm: Working Group Breakouts by Specialties (Chairs: Zipporah Gathuya & Marcia Matias)

- *2 groups in each of the 4 rooms and other groups on the lawn*

3:15 – 3:30 pm: Break

3:30 – 4:30: Report from Breakout Groups (Chairs: Zipporah Gathuya & Marcia Matias)

4:30 - 6:00 pm: GENERAL SESSION 5: Conclusions (Chairs: Kokila Lakhoo and Vrisha Madhuri)

- Finalize next steps: outline & discuss possible directions for GICS
- Implementation of the Optimal Resources for Children's Surgery Document: Future Direction (Jamie Anderson)
- Meeting evaluation

6:00 pm: Adjournment

6:00 pm – 8:00 pm:

Delegates - optional temple visit (self-funding for transport)

Steering committee debrief – Seminar Room

Day 1: GICS Member Presentations: (Chair: Neema Kaseje)

1) Met and unmet need for children's surgery in Somaliland (Tessa Concepcion, Emily Smith)

- 2) Global Survey of Paediatric Neurosurgery - Surgical Workforce and Bellwether Procedures (William Harkness)
- 3) Campaign for free hernia surgery in Cote d'Ivoire (Rouma Bankole)
- 4) Paediatric surgery service provision, Goma, DRC (Jacques Fadhili-Bake)
- 5) Clinical Profile and Outcome Analysis of Surgical Patients in PICU (Rashmi Kumar)
- 6) Starting from Nothing - Pediatric Surgery in North-East India (Prof Borah)
- 7) Children's Surgical Care Provision in Afghanistan (Rahimullah Hamid)
- 8) Spina bifida and hydrocephalus project, Rwanda (Laurence Ntawunga)

Day 2: Organisation Presentations: (Chairs: Vrisha Madhuri & Coleen Sabatini)

- 1) Sick Kids International (Andrew Howard)
- 2) World Federation of Pediatric Imaging (WFPI) (Sridhar Gibikote)
- 3) Medical Aid International: providing sustainable paediatric surgical facilities in low resource environments (Tim Beacon)
- 4) GICS Website and Networking Committee: Update on collaboration mapping platform (Marilyn Butler)
- 5) InterSurgeon - A website to develop Global Surgical Partnerships; First steps (William Harkness)
- 6) Smile Train (Rebecca Jacob)
- 7) Lifebox (Mansi Tara)
- 8) International Quality Improvement Collaborative for Congenital Heart Disease (Kathy Jenkins)
- 9) Children's Heartlink (Bistra Zheleva)
- 10) CDH International (Dawn M. Torrence Ireland)

Day 2: Specialty Breakout Groups

- 1) General Paediatric Surgery
- 2) Neurosurgery
- 3) Orthopaedic Surgery
- 4) Plastic Surgery
- 5) Cardiac Surgery
- 6) Anaesthesiology
- 7) Critical Care

AIMS AND OBJECTIVES

Principle:

Every child must have access to safe surgical care.

AIM:

The first world countries (the Northern globe) trying to improve children's surgery in the third world countries (the southern globe).

Objectives

Define and promote optimal resources for children's surgery in resource poor regions.

Try and help the low and middle income countries who requires children's surgery.

Provide an affordable and conducive environment where children's surgery is delivered safely.

Delivery of children's surgery is not only by trained paediatric surgeon but other general surgeon who are exposed to childrens surgery where there is no trained paediatric surgeon and no trained anaesthetist.

Effectively train anaesthetist, radiologist and other service providers for children's surgery in LMICs.

All children managed should be recorded, audited and a mapping should be made to asses the distribution and case loads where a particular pathology is seen.

This is achieved through engaging with providers of all desciplines of children's care around the world.

GLOBAL SURGICAL CARE FOR CHILDREN COMMITMENTS

1. To advocate for the recognition that childhood surgical disease, whether of congenital, acquired or traumatic aetiology, is an important global health issue.
2. To support efforts to improve the availability of and access to safe, competent surgical and anaesthetic care for all children of the world and that no child be denied of necessary surgical care because of prejudice or for want of payment.
3. To promote global standards for the performance of safe paediatric surgical and anaesthetic practice.
4. To encourage the development of surgical pateint records and registries in all health care jurisdictions in order tha treatment and ourcomes may be carefully monitored and result in importanc care.
5. To focus on relevant research carried out in resource-constrained settings and primarily led by individuals who work in those settings, to determine the unique needs and potential context-specific innovations that can improve the care of children with surgical problems.
6. To commit to the formation and suport of international collaboration which can help define problems and develop solutions to local paediatric surgical needs.
7. To enhance communication and collaboration amongst all those in the world who are devoted to the surgical care of children, irrespective of antional or potilical borders, in effort to imporve the health of all children though shared research, shared training and shared support.
8. To ecnourage educaitalonal initiatives athat can improtve the quality of surgical and anaesthetic care of all children.
9. To facilitate the provision od quality surgical and anaesthetic care as close to where the child and family reside as possible, and thsu assist in the necessary surgical and anaesthetic education and trainin of local and regional health care workers to provide such care.
10. To foster efforts to increase and reatin the paediatric surgical, anaesthetic, nursing, and health care providers workdforce in naitons where such a workforce is defident.

Summary of what was discussed

The writer was late for the first morning sessions until 2pm. However from the presentations being forwarded to the attendance, the following things were obtained

Keith T. Oldham, MD

Professor of Surgery, Medical College of Wisconsin

Marie Z. Uihlein Chair and Surgeon in Chief, Children's Hospital of Wisconsin

Chairman of the GICS publication presented the update review from the previous meeting (GICS-II).

The GICS envision a future where every child will have access to surgical care. The mission is to define and promote optimal resources for children's surgery in resource-poor regions of the world. This shall be done by engaging leading providers of children's surgical care globally, inclusive of the many disciplines of care, as well as organizations whose missions affect children's surgical care.

Major Project Presentations.

Vellore-RCS Children's Surgical Training Partnership (Vrisha Madhuri, Richard Stewart)

- Nicaragua Project (Neema Kaseje, Operation Smile Team). Demonstrated the importance of partnerships with stake holders and important recognised foundations. It also highlight the fact of the importance of the levels of phases that need to be done to achieve a given task: Phase I being the Planning and baseline assessment, Phase II being the implementation part of it, Phase III being the reviewing of the impact and phase IV is where you scale up to reach the higher level of implementation.
- Kids Operating Rooms (David Cunningham & Garreth Wood)
- Children's Surgery in Rural Ghana Project (Britta Budde-Schwartzman)
- Gastroschisis Project & The Global PaedSurg Research Collaboration (Naomi Wright)

Proposal writing and manuscript publication (Neema Kasaje) Presented a paper on how to write up a proposal for manuscript. The purpose of the proposal, the expected outcome of the study proposal, the study population and the readers's view of the write. The manuscripts need to read by many authors and edition must be done several times to reach the reader's mind so that what ever that is written is not wasted. At the end of the manuscript, the source of fund for the manuscript to be effectively distributed to a wide range of community in the medical fraternity.

The following documents were noted when I met with them. The earlier presentation were not being attended.

- Pediatric Bellwether procedures by Dan Poenaru. Bellwether procedures for children (1 hour) – Create consensus document (Dan Poenaru)

Bellwether procedures for children's surgery.

Bellwether procedure by definition *is an essential operation that reliably indicates that most other essential surgical procedures are also feasible at that institution.*

Essential Surgery is defined *when a primary pathology can be treated by surgery, which has a large burden on the health status of that nation, and the treatment of such a pathology is cost effective and feasible using the available resources which can then be promoted globally.*

The bellwether definition can further be expanded when there is an inability to predict the capacity for a given specialty at a given facility level.

The three bellwether procedure for safe and affordable surgery in adult is a cesarean section, laparotomy and management of compound fractures. In children, these bellwether procedure are defined so that every surgeon who is dealing with children who require surgery is able to perform in a low resource setting whereby the child is able to receive his/her surgical service which is feasible and cost effective.

The potential bellwether procedures for children's surgical specialties was identified using the e-Delphi method from those GICS members who are experience in LMICs. Specialty involved are the general children's surgery, neurosurgery, anesthesia, urology, plastic surgery and orthopedic surgery. The respective time interval to assess service at the first level, second level and third level care of service was also assessed.

Table 5. Bellwether procedures for children

Specialty	Level 1	Level 2	Level 3
General Surgery	Laceration repair	Intussusception management	Intestinal atresia repair
Neurosurgery	Trans fontanelle CSF shunt tap	Skull fracture management	Myelomeningocele closure
Anesthesia	Neonatal resuscitation	Endotracheal anesthesia (<1 yo)	Spinal anesthesia (>6 mo. but <6 yo)
Urology	Catheterization for urinary obstruction	Cystostomy	Nephrectomy
Plastic Surgery	Basic laceration wound care	Cleft lip repair	Cleft palate repair
Orthopedic Surgery	<i>TBD (tiebreak)</i>	Surgical fracture reduction	<i>TBD (tiebreak)</i>

The bellwether procedure for orthopedic at level 1 and level 3 were not well demonstrated. However in other specialized children's surgery, the bellwether procedures has been demonstrated. Level 1, level 2 and level 3 represents those in District hospital, provincial hospital and a tertiary hospital for that matter. The hour to reach in each level is less than 2 hours, less than 4 hours and less than 12 hours respectively. In the near future these essential surgical procedures in children can be further defined by validating the pediatric bellwether procedures in the field through on-site data collection at first, second and third level hospitals in LMICs. After looking at this The Port Moresby General Hospital in Papua New Guinea where the writer is employed, the procedures done so far correlates to a level 2 hospital because we do not do spinal anaesthesia. However other procedures such as intestinal atresia repair, nephrectomy, cleft palate repair and myelomeningocele has been done in this hospital. Lack of level three anaesthesia demonstrates the fact that the hospital does not have a trained pediatric anaesthetist, which is the reality. This need to be addressed in the long run to deliver quality service to the paediatric and the children who require surgery.

LIMITATIONS AND IRREGULAR PARTICIPATIONS

There was limited input from ophthalmology, ENT and OMF. There is no bronchoscopy, endoscopy procedures considered. There was uninterpretable results from OMF, ENT and cardiac surgery. The procedures based on Specific subspecialties in paediatric surgery. There is also lack of definition of what constitutes essential pediatric surgery. Some procedures given by hospitals were not eligible to be bellwethers at higher or lower hospital levels. Countries and specific regions have different procedures and they have their own differences.

Optimal Resources for Children's Surgery (OReCS) implementation (30 min) (Emmanuel Ameh, Stephen Bickler)

He presented on the minimal and optimal resources required for basic, intermediate and complex surgical care for children. Also added on was the procedures done by the subspecialty for different facility level such as in health centre, first level hospital, second level hospital, third level hospital and the national children's hospital. Subspecialty mentioned includes anaesthesia, cardiac surgery, critical care, general surgery, neurosurgery and ophthalmology, oral maxillofacial surgery, orthopedic surgery, otolaryngology, plastic surgery and urology. In each of these subspecialty facilities, surgical conditions such as trauma/injuries and congenital anomalies are being mentioned as well and what can be done within their specialty level.

In the same token, there were discussions on the various equipments required in the respective level and types of surgical procedures that are expected to be done in those health care levels.

Research should be part and puzzle of the case management and respective data is expected by the GICS committee to deliver quality care.

This plans and objectives needs to be integrated into the health budget

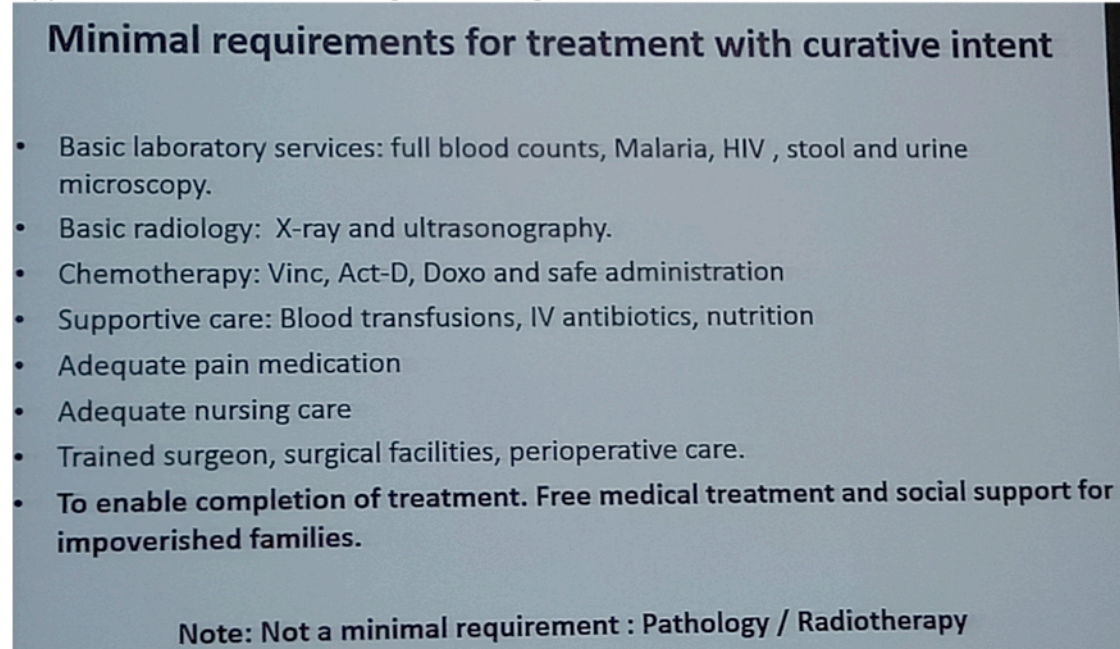
Essential surgery in a child is defined when it is substantially needed, cost effective and feasibly implementable. Out of the 44 procedures identified, 28 procedures were essential and thus will require OreCS.

To bring this to verification there was a presentation regarding management of cancer in South African comparing with those managed in high income countries. In the last decade, survival in the cancer patients have been overwhelming due to collaborative group management in the high income countries. There was a decrease in the relapse and progression of disease patterns, deaths related to toxic effect have been reduced, there was complete treatment protocol application and an increase in priority to reduce the long term side effect. However such values and management approaches has been inadequate in the Sub-saharan countries.

Common curable cancers such as Burkitt's lymphoma, Wilms tumor, Acute lymphoblastic leukemia and kaposi sarcoma are having their deep root in these children. If minimal requirement of treating such cancer is available then there should be a relief of such pathologies in the LMICs where malignancies are prevalent. Papua New Guinea is not exempted from this.

If minimal level of care is provided in the LMICs then there shall be an optimum level of care being achieved in those countries. The following slide reveals the protocol to be obtained in order to reach these minimum standards.

Application of minimal settings to manage cancer.



Minimal requirements for treatment with curative intent

- Basic laboratory services: full blood counts, Malaria, HIV , stool and urine microscopy.
- Basic radiology: X-ray and ultrasonography.
- Chemotherapy: Vinc, Act-D, Doxo and safe administration
- Supportive care: Blood transfusions, IV antibiotics, nutrition
- Adequate pain medication
- Adequate nursing care
- Trained surgeon, surgical facilities, perioperative care.
- **To enable completion of treatment. Free medical treatment and social support for impoverished families.**

Note: Not a minimal requirement : Pathology / Radiotherapy

Most childhood cancers are curable. If specific local challenges are met, adapting the treatment protocol with collaborative network with a uniform treatment guidelines and capacity building then we should be able to deliver such services to the patients.

Implementation Breakout Groups:

(Chairs: Emmanuel Ameh & Rashmi Kumar)

The team was then distributed to various groups to discuss the essential requirements needed to deliver children's surgery. The four main things that were discussed in detail to bring about in this setting are: 1) Training, 2) Resources, 3) Infrastructure and 4) policy making and source of money.

1. Infrastructure/ Service Delivery (Emmanuel Ameh & Basil Leodoro): The use of technology and innovation is advocated. GICS should follow the WHO guidelines in order to deliver children's surgery with OreCS. There must be flexibility of standards of infrastructure and the surgical support services such as biomedical engineers, radiological equipment and paramedics,
2. Human Resources and Training (Neema Kaseje): In order to build up the human resource there need to be a partnerships, the support should be all throughout the year in a cycle so that progressive training of staffs. General surgeons should be trained for children's surgery and at the same time anaesthetist should also be trained. This does not exclude the nurses who does the volumes of work. GICS has now created the platform where training is role.
3. Research (Tahmina Banu): Researches should be done to validate and assess the impact of OreCS. Data should be collected from level 1 care givers. Each research metrics is defined and presented to the government for sustainability.
4. Policymaking and Advocacy (Rashmi Kumar, Lubna Samad): Empowering mother and women, parents as advocates. Media should support this, data is required for advocacy, audit standards of care against OreCS. Write a lay-persons' summary of OreCS. Involve influential ministers, stakeholders, NGOs, public-private partnerships. Morbidity and mortality advocacy should also be involve.

PRESENTATIONS FROM ORGANISATIONS

Various international organisations who are part of this global initiative of children's surgery presented their component and involvement in this organisation. They want GICS to be incorporated into their vision. This was chaired by Keith Oldham.

- UNICEF (Indian Branch Representative)
- WHO (Walt Johnson) presented the WHO aspect of Surgery.
- MSF (David Rothstein)
- SIOP (Eric Borgstein)
- WFSA (Faye Evans & Zipporah Gathuya)
- COSECSA (Miliard Derbew)

WHO

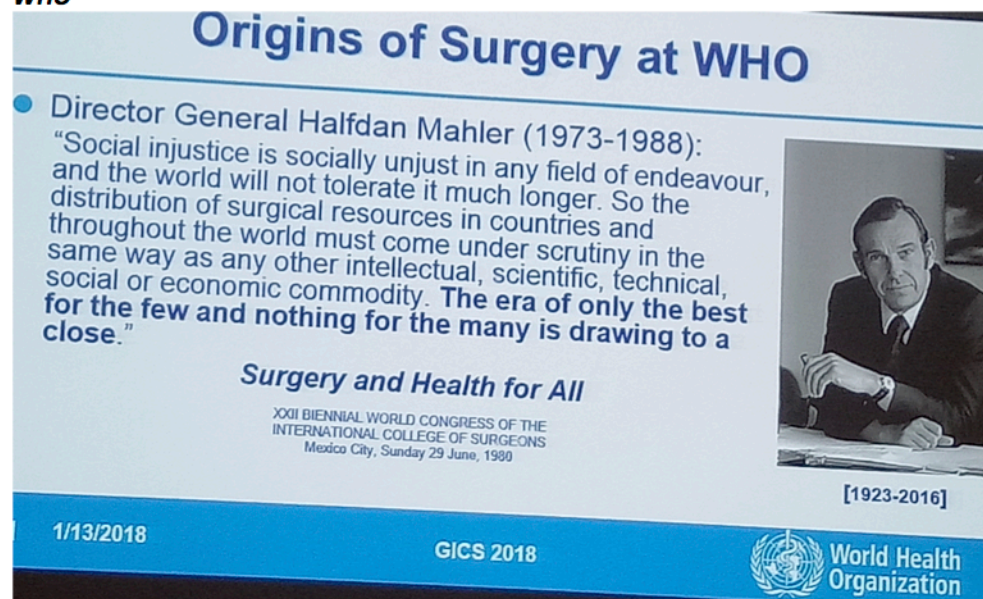


Figure 5. Surgery for all by the WHO.

In 2015, the Lancet Commission was introduced to establish a bellwether procedure for general surgeons. And that for reason, the bell whether procedure for any surgeon is cesarean section, laparotomy and management of compound fractures. This has been captured by Papua New Guinea in which the symposium was held in the first week of September 2017. The theme being "Safe Surgery and Safe Anaesthesia". A sustainable development is needed to and advocated. Globally from the 7-8 billion people, 5 billion need essential surgery and most of them are in the LMICs as shown in the slide short diagram below.



Figure 6. Map showing the regions where surgery is needed.

Currently there are active priority projects going on. In the conclusion part of the WHO presentation, there is a great deal of work to be done at all levels which will then create an impact. There needs to be active partnerships and twinning partnerships. Innovation and volunteerism is the way to go to bring social justice. Health and even surgery as a vehicle for establishing peace.

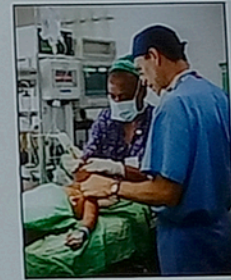
Paediatric anaesthesia in low-resource settings: panel discussion on current & future initiatives (Faye Evans) – Main hall. They also shared the same sentiments in which there is complete lack of manpower in the anaesthetic department. Their motor and the pillar of safe anaesthesia are: Advocacy, Education & Training, Innovation & Research plus Safety & Quality. With these pillars, safe anaesthesia can be delivered at various levels of health care.

The topic of this slide demonstrates well the huge shortage of trained staff around the globe. Papua New Guinea is not excluded from this. There are four paediatric surgeons so far and one is under training but still we don't have any paediatric anaesthetist so far.

Anaesthesiologists Worldwide

There is a huge shortage of trained staff in hospitals around the world and the disparity between high, middle and low income countries is shocking:

USA > 15 anaesthesiologists / 100,000 people
 UK > 10 anaesthesiologists / 100,000 people
 Mexico > 4.4 anaesthesiologists / 100,000 people
 Venezuela > 2.2 anaesthesiologists / 100,000 people
 Zimbabwe < 1 anaesthesiologist / 100,000 people
 Tanzania = 0.1 anaesthesiologists / 100,000 people
 Sierra Leone = 0.02 anaesthesiologists / 100,000 people



We need around 500,000 additional anaesthesiologists by 2030, primarily (but not only) in LMICs. There are disparities between the capital and the rest of the country, even in HIC.



Figure 7. Huge shortage of anaesthetist man power in Paediatric Surgery.

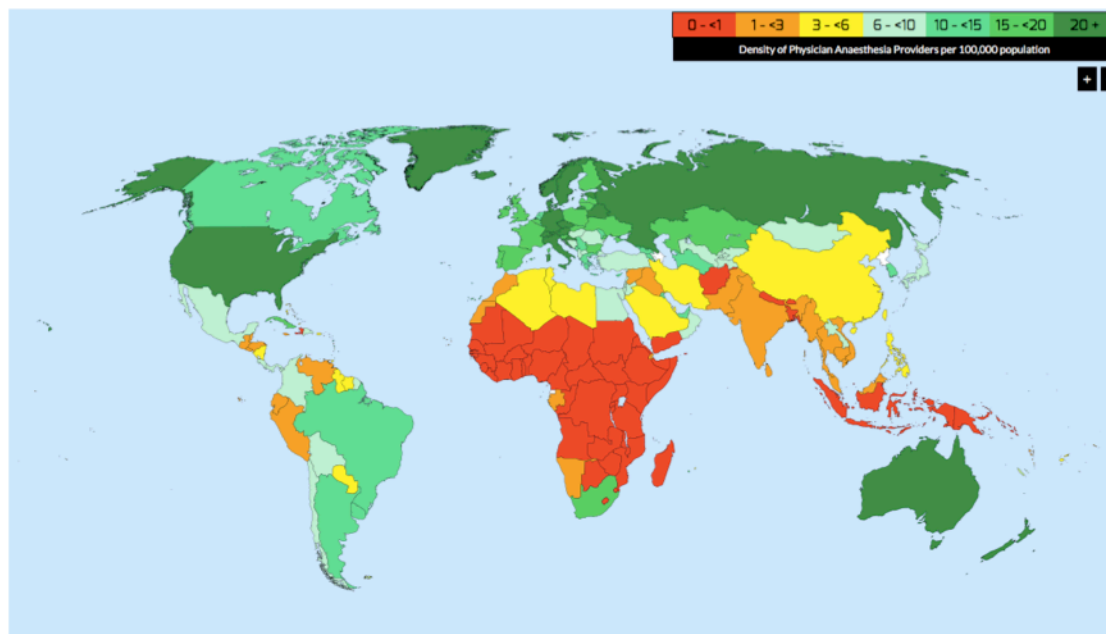


Figure 8. Density of Physician Anaesthesia Providers in 191 countries / 99.3 % world's population

When safe network is provided by individual anaesthetists safe consortium by respective industry and patient focused organisations, overall objectives can be achieved. These objectives include;

1. Bringing together individuals, industry and patient focused organisations working in the field of anaesthesiology and global health with the WASA's global network of anaesthesia professionals.
2. Demonstrates a joint commitment to advancing patient safety and the international standards for a safe practice of anaesthesia.
3. Raise awareness of the need for safe anaesthesia as an essential element of safe surgery.
4. Gather data to map the gap in the access to safe anaesthesia
5. Raise awareness of the lack of provision and the need to take action.

6. Identify opportunities for collaboration between the WFSA, the safest network and the safest consortium members to improve the practice of and access to safe anaesthesia.

AFSA first produced the International Standards for a safe Practice of Anaesthesia in June 1992. In 2017, it was the latest update of this document which was endorsed by WHO. It is now more important to promote these standards particularly in the areas around the world where they are most challenging due to shortage of workforce, infrastructure, medicines and the equipment.

Currently WFSA has established training programmes. It has with 13 countries, 21 hospitals, 43 fellowships and 8 specialties.

ASAP (The Alliance for Surgery Anesthesia Presence) advocates safe surgery and anesthesia worldwide. This correlates with the 2017 Medical Symposium in Papua New Guinea.

PAEDIATRIC RADIOLOGY

Bolt on pediatric radiological expertise and even teaching/training for the new ones coming up who are interested in pediatric radiology. World Federation of Pediatric Imaging (WFPI) was established in London in 2011. The purpose was to provide a united platform for pediatric radiology organizations to address global challenges in pediatric imaging. *It has involved various stake holders and organisers.*

Essential, affordable and safe Intelligent Operating room

Presented by Dr. Russel Gruen from Singapore.

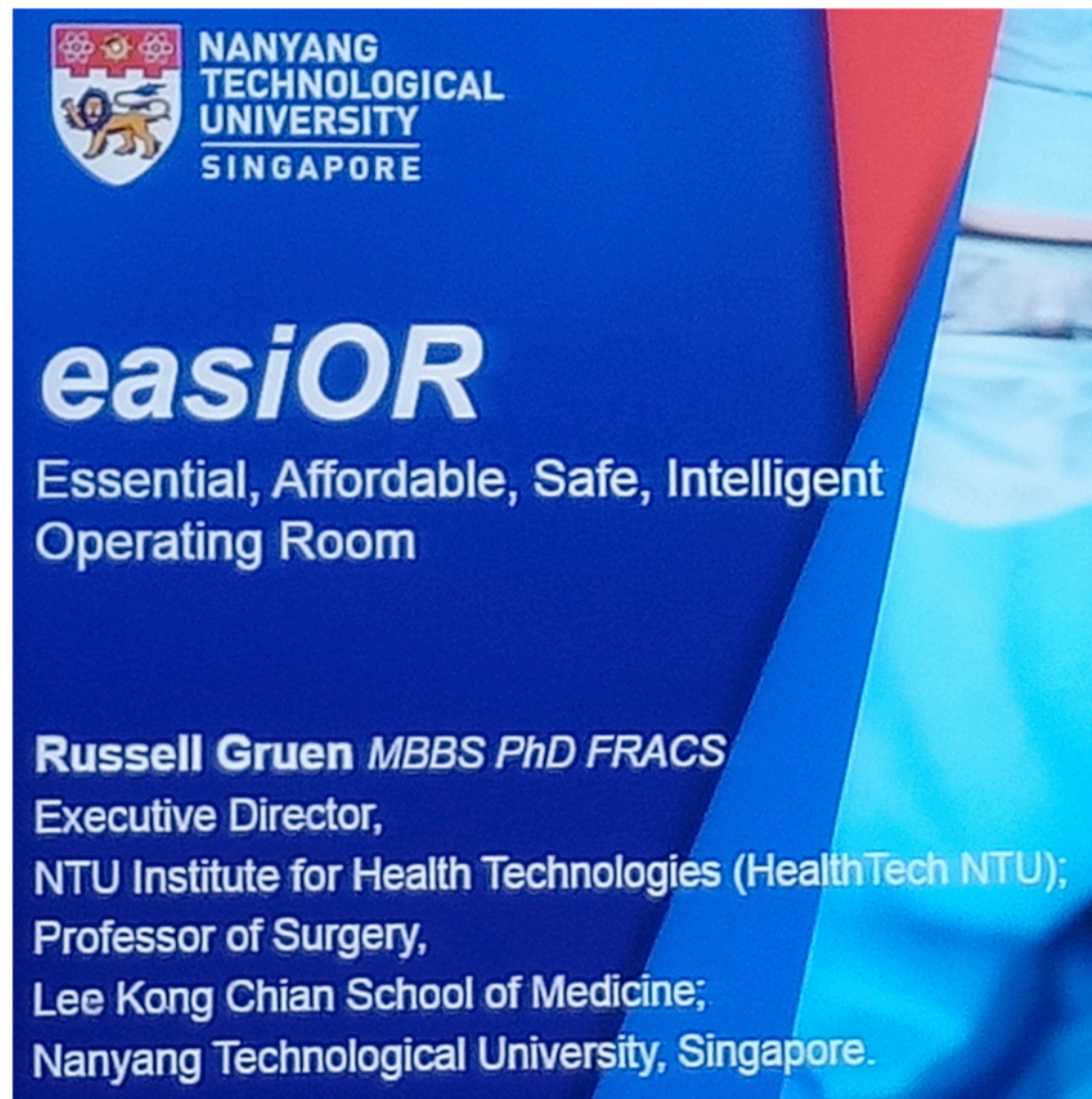


Figure 9. *The initial slide of Russel Gruen*

Presented on the easily available complete short-medium term facility-based solution for first-level hospitals in low-resource settings. Prefabricated, transportable and easily-developed facility complete with equipment and eventually supply chains can be contacted. There is a 24/7 provisions of emergency and essential surgery in w facility designed for 5-plus years. It is highly cost effective, at under \$100 per DALY averted which puts it on par with many global health programmes, including some vaccine programs. It enables trianing support and consulting to develop long-term plan for sustainable local surgical services.

The Initial Project Governance include Prof David Watter, who is the chairman as depicted in the slide show bellog.



Figure 10. The governance of global lancet commission, chaired by Professor David Watters.

GENERAL SESSION 4: National Children's Surgical Plan chaired by Stephen Bickler & Leecarlo Milano.

He presented the the global child surgery programs. This includes fellowship in every paediatric surgical sub-specialty, former trainees in each continent is involved, and a fully funded one year clinical fellowships for trainees from low income countries are given. There need to be a collaborative effort on capacity buidling for new and existing paediatric specialty hopsitals. Physical, human resource, training planning and support for specialty for children's hospital in required.

MEETING EVALUATION



Figure 11. Dr. Marilyn Butler presenting on the next move GICS would take after all the discussion.

There need to be a communication network be established immediately by a communication committee chaired by Dr. Marilyn Butler.

Newtworking need to be involved with a mapping platfrom in which Global Paediatric Surgery Network is inplaced. It may not meet the requirement of all the subspecialties but atleast a platform is created. Those who are in this forum should bid for this network and funds should be sought to deliver this. They will then roll out in phase from time to time. Once the mapping is inplaced, then this can be shared with others who are organisation involved in children's childrenUltimately it will link the GICS website.

NIGERIA'S PLAN

This was televised through telenet communication. The following messages were released. The children's surgery need to be inco-operated into the National Surgical, Obstetrics and Anaesthesia plans but not excluding nursing issues as well.

In a 193 million population with 43% less then 15 years old, birth rate of 37.3%, the health expenditure in 2017 was 4.2% and that has reduced to 3.9% in the year 2018 budget. Neonatal mortality rate is 34/1000, infant mortality rate of 69/1000 and less then 5 mortality reate of 109/1000, this nation has plans to bring children's surgery to the next level.

The process can be achieved through on ongoing process and need to be an active proces involving not only the medical professionals and caliber but a lot of none health workers and even stake holders have actively participated in this. These professional stake holders have a regular meeting with the health work force: Surgical and surgical specialties, obstetrics and gynaecologist, anaesthetistss, paediatrics nursing, societies and associations, surgical training colleges. The baseline then visits the hospital where the recipients are and they are the children who require surgery.

It was also higlighted that there need to be a densitiy mapping of the paediatric surgical anaesthesia provider.

The same caliber can then be reached towards the nursing, the surgeons and those who provides children's surgery.

If we ever want to achieve things for the children's surgery then the above logistics has got to be readily and easily available. Then the question is how we can establish each one of these things.

RECOMMENDATIONS

Overseas or at an international arena.

This meeting has been taken to the highest level of the globe and the WHO and UNICEF are involved in this. The vision has been well taken care off and with high level of intelligent in this forum from various sectors in delivering children's surgery, the vision shall be accomplished.

My only recommendation is that those people or partners who has some how been selected should hold fast on this vision and there should be a continuous dialogue through the communication network.

On the other side of the coin, the respective people on the ground in the LMICs should do their work and establish a dynamic pathway to delivery quality children's surgery using the available resources.

Regular communication network should be established which has already been done.

This should not be exposed until we see the fruit of this recent global dynamic move.

This is just a tip of an iceberg whereby children's surgery has a lot to delivery. In a hospital where children's is delivered, that is where the heart of most families are so when GICS touches the heart of the very poor people who have nothing at all to pay for yet their appreciation shall be the cornerstone whereby this organisation need to look at. And in no doubt, that has been well captured.

The people on the ground should also be assessed so that whatever commitment that the GICS makes comes to be fulfilled.

As a nation in Papua New Guinea

Papua New Guinea being a low and middle income country, also requires the assistance of GICS to delivery children's surgery. A separate request is being made and is attached with this report so that the GICS community can look at to see whether they can be able to help.

In the Hospital where I am working.

Co-operate sponsors should be addressed so that they can see for themselves the need for the appropriate assistance at the right timing. Give them the visions to accomplish so that they can see for themselves.

Present these to the National Department of Health, PNG and become a part and puzzle of the policy makers so that it can be budgeted for.

Also these need to be presented to the co-operate sponsors such as the representatives of what was presented in the GICS III meeting: WHO, UNICEF, World Bank, etc. When each one of these understand from their setting and then when they communicate with the respective representatives it should not be a problem and the communication has been well established. What you require is a dynamic work force with structural developmental plans in place.

ACKNOWLEDGEMENT.

The following individuals and organising committee's need to be acknowledged for their involvement in assisting me in making this trip a success for me.

- Associate Professor Ikau Kevau for releasing me.
- Dr. Okti Poki for looking after the unit.
- Dr. Benjamin Yapo for his companion. He being a board member was a bonus.
- The Port Moresby General Hospital for releasing me in this trip.
- The GICS III organising Committee
- Dr. Marilyn Buttler for organising my ticket and accommodation.
- Dr. Naomi Wright for providing the logistic.
- Other board members and the organising committee members.

Without their support, I wouldn't have travelled, attended and even learn these things to establish in our nation.

After these trip, the writer would like to present two things, both with permission from the hospital where he is working under for:

1. An audit for the all the childrens that have been operated in The Port Moresby General Hospital in 2017 with its mortalities and recommendations.
2. A request to the GICS committee and appropriate team to re-activate children's surgery in our nation and to share the vision that we have so that we can establish a pathway for delivering children's surgery in Papua New Guinea.

Report Compiled by;

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