# PAEDIATRIC SURGERY OUTREACH PROGRAM IN PAHANG: OUR EXPERIENCE IN GLÖBAL SURGERY

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## Pekan

We would like to report and share our efforts in tandem with Global Surgery here in Pahang. A self-audit was performed to highlight our difficulties, challenges faced, and remedial steps taken so far to improve quality surgical healthcare to the paediatric population here in Pahang.

## Method

Study type: Retrospective

Duration: 1st January 2017 – December 31st 2022. Population: All paediatric patients who underwent surgery in the following 4 specialist hospitals in Pahang (HTAA / HOSHAS / Pekan / Kuala Lipis)

#### Introduction

With regard to the paediatric population, Paediatric Surgery services is no stranger in the effort to promote Global Surgery in Malaysia. Outreach effort has long been established by our predecessors. At present time, Paediatric Surgical services in Pahang have expanded over the years to improve coverage mainly northern, central and western front.

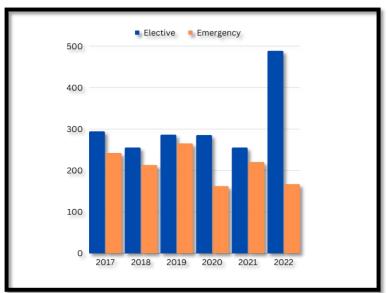
- Largest state in Peninsula Malaysia. (3rd largest state overall)
- Enclosed by main Titiwangsa range and 2/3rd primary rainforest.
  - Numerous rivers intersect and form the main Pahang river.

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  - This leads to wide challenging geographic area with limited access and infrastructure to rural areas.

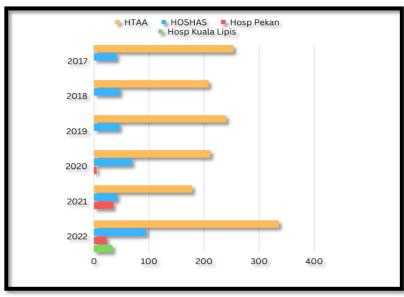
    PAHANG
    DARUL MAKMUR

#### Result

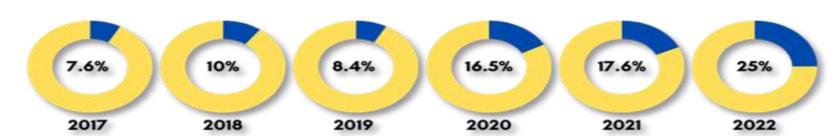
- Total of 3128 surgeries were performed within the study period.
- 59% of the total surgeries done were elective. Surge in elective cases in 2022 mainly due to additional OT time provided to reduce backlogged cases during the pandemic.
- In 2017, our outreach consisted only 7.6% of all surgeries done.
- In 2022, our outreach effort achieved 25% of all surgeries done.



Number of elective & emergency cases



Number of operations in each hospital



Percentage of cases operated each year

## Discussion

#### Benefits

- Reduce workload and healthcare burden in HTAA
- Reduce overall waiting time for elective surgery
- Reduce cost of travel for patients
- Increase awareness of our services.
   Able to reach patients with difficult access
- Reduce the need for healthcare facilitated transport for patients to Kuantan

#### Challenges faced

- Only able to perform minor elective surgeries so far. Major electives are required to be done in HTAA
- Lacking manpower. Only 2 Surgeons at present time
- Lack of Paediatric Anesthetists.
- Socio-cultural barrier which still remains due to aboriginal origins

## Improvements

- Further training of surgeons to improve expertise
- Establishing trained Medical Officers in regional hospitals. Short attachment to HTAA for training into Paediatric Surgery
- Conducting Paediatric Surgical Awareness Campaigns at various cluster regions in Pahang This allows us to bridge the gaps to Medical Officers and healthcare personnel in regional centres with difficult access
- Soon to expand services to Cameron Highlands and Rompin to achieve complete coverage of Pahang in the next 2 years

#### Conclusion

Paediatric Surgical services in Pahang has long established an effort in Global Surgery framework. The need for improved outreach program has shown to be more beneficial to the patients and also to the state health department. Although faced with various challenges, small and timely improvements can be made in a resource limited setting to overcome the difficulties and provide quality surgical care to our paediatric population.

We will continue to audit our efforts as we progress. Further research into platforms of care provision, cost effective improvement and review of complications is required to set a standard of high quality of care. Hopefully, we are able to publish a bigger study and involving other surgical disciplines involved in Paediatric surgical healthcare ie Orthopaedics, ENT, Neurosurgery, Plastics and Dental surgery.

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