

# Effectiveness of Task Shifting to Non-Doctor Anaesthesia Providers for Essential Surgery Services in Rural and Remote Hospitals of Nepal 2002-2014

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## Background & Objectives

- Mountainous terrain, poverty, and poor retention of key healthcare workers hinder the Government of Nepal (GoN) provision of continuous operative services to rural communities (83% of the population).
- As in more than half of the world<sup>[1]</sup> and endorsed by the 2015 Lancet Commission<sup>[2]</sup>, Nepal has turned to non-doctors (anaesthesia assistants, AAs) to deliver rural anesthesia services.
- We report Nepal's history of AA training and the latest survey in 2014.

## Materials and Methods

- From 2002, the GoN has conducted a formal 6-month AA training course for multiple levels of nurses and paramedicals.
- In 2011, this was upgraded to a 12-month course (AAC) with entry limited to higher-trained cadres (health assistant and staff nurse), under the authority of the National Academy of Medical Sciences (NAMS).
- The Nick Simons Institute (NSI) worked with NAMS to create the 12 month course and continues to support its 7 training sites.
- In August 2014, NSI conducted its annual telephone survey of all AA graduates since 2002.

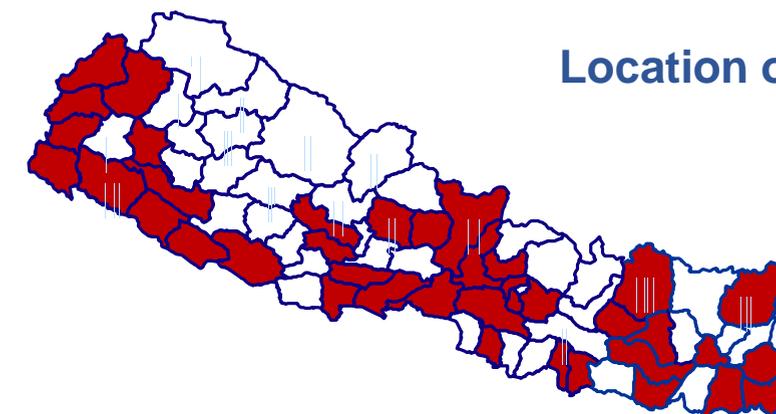


## Results

- By 2014, a total of 124 AAs have been trained -94 in the 6-month program and 30 in the current 12-month program; 100 AAs were contactable
- 81% were still working in hospitals capable of providing surgical services**
- 66% were actively providing anesthesia.**
- 82 % of actively working AAs are working outside kathmandu valley.**
- The reported reasons why 34% of trained AAs were not able to utilize their training included:
  - no operating doctor in the AA's hospital
  - inappropriate posting of the AA to non-hospital facility,
  - management issues
  - personal health
  - old age.
- Only 48 of 100 GoN hospitals designated as providing operative services were doing so in the 2014 survey; two thirds of these (**62%**) had AAs as their main anesthesia provider.

Working area	Total AAs	Working status	
		YES	NO
Central Hospital	5	2	3
Regional /Sub Regional Hospital	8	7	1
Zonal Hospitals	24	20	4
District Hospital	27	20	7
Private / Mission Hospital	17	17	0
Other*	13	0	13
Not working	2	0	2
Study Leave	4	0	4
	100	<b>66</b>	34

Note: \* it includes non operating health facilities like PHC/ HP/ DPHO etc



## Location of AAs

Existing GON Hospitals for operation (total number)	Hospitals "able to provide" surgery	AA+ doctor anaesthetist (MD/MO)	AA + anesthesiologist (specialist)	Anesthesia Assistant the only anaesthesia provider
Central (3)	3	2 (MD)	1 (MD)	0
Regional (5)	5	1 (MD)	2 (MD)	2
Zonal (12)	12	0	6 (MD)	6
District Level (80)	28	6 (MO)	0	22
Total (100)	48 (48%)	9 (19%)	9 (19%)	<b>30 (62%)</b>

## Conclusions

- Twelve years after Nepal government Anesthesia Assistant training courses began, two thirds of graduates were still actively providing anesthesia.
- Nepal's anesthesia assistants work as the sole anesthesia provider in rural, district-level hospitals and as a main provider at all levels of the national system.
- To assure that this essential training does not go wasted, Anesthesia Assistants must be posted to facilities that have a complete surgical team.
- Task shifting to non-doctor providers can meet essential provision at rural district hospitals.

## References:

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