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Task Analysis: Adaptation and Application in Africa, Asia and the Caribbean for Health Workforce Strengthening

Global Maternal Newborn Health Conference
Mexico City
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Presenters and Country/Region of Focus

- Leah Hart Lesotho
- Tegbar Yigzaw Ethiopia
- Thida Moe Myanmar
- Lastina Lwatula Zambia
- Judith Fullerton Caribbean

Catherine Carr Moderator

Definition

- A descriptive research methodology
- Wide application in the health professions
- Particularly useful in assessment and definition of the knowledge, skills and behaviors that define the scope of practice of a health profession or occupation.

The Task Analysis Process

- Feedback is solicited from a cohort of interest, e.g.
    - recent graduates
    - health care staff members
- A task list is developed from
    - relevant and available national/international documents—
        - national treatment guidelines
        - curricula
        - job descriptions
        - scope of practice statements
        - regional and international clinical practice guidelines.

Response Variables

- **Frequency** [how often the task is performed]
- **Criticality/impact** [what effect there would be on patient or community health if the practitioner was not able to perform the task]
- **Ability to perform** [self-rated competency]
- **Where educated/trained** to perform the skill

Approaches to Data Analysis

- A combination of frequencies and cross-tabulations are applied to the data
- Results can be aggregated by groups of interest, for example,
  - by health center
  - educational institution
  - geographic region
  - educational level of health care providers

Approaches to Data Analysis

- The nature of the quantitative data lends itself to higher analytical approaches, as relevant to the study interest.

- A qualitative inquiry can be used to obtain additional task information, e.g., *Is there any task that you are required to perform for which you feel you have not been adequately prepared?*

Exploring the Data

- The most informative results of the task analysis study came from analyzing combinations of variables
  - frequency and criticality
  - criticality and performance.

Use of Task Analysis to Transform Education of Medical Licentiates in Zambia

Presented by Lastina Lwatula

Zambia

Presentation outline

Introduction
- Background
- Country profile
- Human resource for health (HRH) situation

Who are the Medical Licentiates

Task Analysis
- Objectives of task analysis
- Results

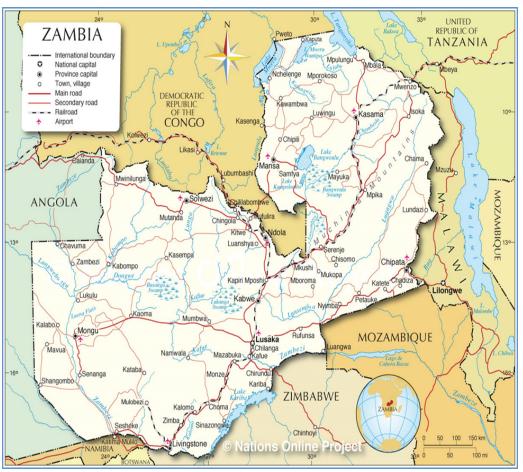Government response to task analysis results
- Immediate
- Long term

Background and country profile

Population – 14.638,505

Maternal Mortality   398/100,000

IMR – 45/1,000

HRH – 47% (53% deficit in 2010)

Doctors – 911

Nurses – 7,669

Midwives – 2,671

Clinical Officers – 1,535

Medical Licentiates – 116

Who are the Medical Licentiates (ML)

- Critical HRH shortage

    - especially doctors,

    - prompted the government to formulate potential solutions

    - especially peri-urban and rural areas

- Introduced training of Medical Licentiates in 2002

    - globally known as Associate Clinicians

    - intended as a stop gap measure

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Medical Licentiates Scope of Practice

- Primarily clinical officers educated at diploma level

  - Additional training in surgical skills and internal medicine

  - Provide primary to critical surgical health services at district level facilities where there are no doctors

  - Positioned to serve in low-resourced settings via task sharing and task shifting

- Regulated by the Health Professions Council of Zambia

Rationale for Task Analysis

- National Training Guidelines (NTG) stipulated curriculum revision every 5 years
- ML curriculum had not been revised since 2002
- Trends in disease and treatment were not covered
- Many tasks had been shifted to ML without due training to prepare them for changed roles
- Task Analysis enabled review of
  - gaps in pre-service curriculum
  - opportunities for role expansion
  - need for upgrade of qualification

Results – Educated but not Practiced

- Midwifery specific tasks – maternal and child health services

- Patient nutrition

- Care of equipment

- Data entry

Results - Practiced but not Educated

- Administration and management –

    - ML assigned to some district hospitals were managing the facilities in addition to other duties

- Basic sciences –

    - Depth of content did not adequately prepare ML to take on some of the tasks they were undertaking especially surgical procedures

Results - Practiced but not Educated

- Surgery –
  - hysterectomy, repair of fistula, rectocele, other surgical emergencies

- Emergency medicine –
  - tracheostomy, intubation

- Anaesthesia –
  - local, spinal and (rarely) general anaesthesia

Government response

- Government and stakeholders incentivized to make decisions towards closing the identified gaps:
- Immediate revision of ML curriculum:
  - 2-year bridge course to upgrade practicing ML
  - New 5-year direct entry curriculum
  - Strengthening basic sciences and surgery courses
  - Elective courses in radiology & ultrasonography, mental health, ophthalmology, otorhinolaryngology, community health, urology, dental hygiene
  - Mandatory anaesthesia course within the ML training
  - ML qualification upgraded to Bachelors degree

Lessons and Conclusions

- College was given tool for advocacy use with stakeholders and policy makers

- ML services ranged from primary to advanced for rural population

- ML identified as appropriate cadre for task shifting for advanced care

- ML committed to serving their patients despite not being fully prepared for the roles they undertook

- Led to upgrade of qualification in recognition of level of practice