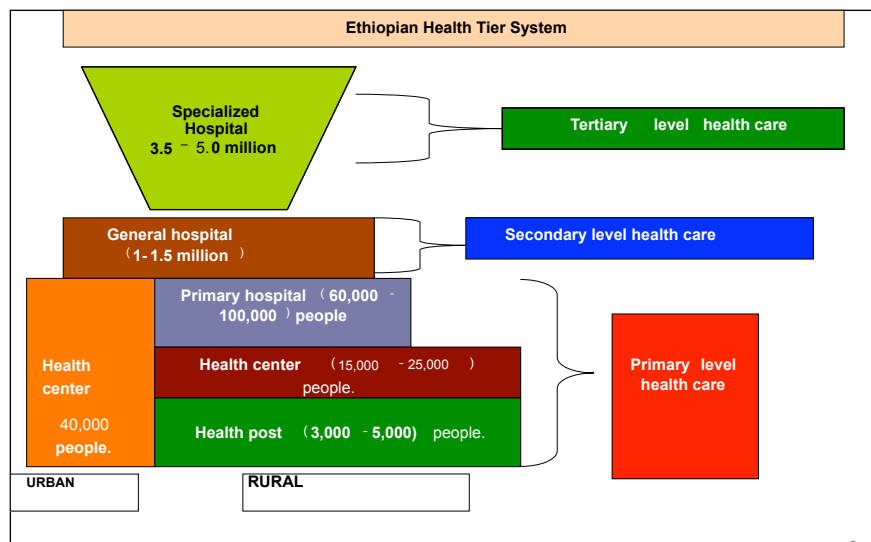# Determining the Staffing Level of Nurse Professionals

The Case of a Specialized Referral Hospital in Ethiopia

Serkalem Girma

HRH TA MOH

Addis Ababa, Ethiopia

1

Background

Ethiopian Health Tier System		

Specialized Hospital
3.5 – 5.0 million → Tertiary level health care

General hospital
（1-1.5 million） → Secondary level health care

Primary hospital （60,000 – 100,000） people

Health center

Health center （15,000 – 25,000） people.

40,000 people.

Health post （3,000 – 5,000) people. → Primary level health care

URBAN   RURAL

2

Background

Indicators	2015/2016	International Bench Mark
Doctors, Nurses and midwives	0.8 per 1000	2.3 per 1000 (WHO)
A physician to population ratio	1 per 17,720	1 per 10, 000
A Nurse to population ratio	1 per 2,132	1 per 5,000

3

… Study setting -TASH

- Tikur- Anbesa Specialized Hospital (TASH)

- Tertiary care Hospital

- Located in Addis Ababa, Capital of Ethiopia

4

... Study setting -TASH

Tikur- Anbesa Specialized
Hospital (TASH) Services:

- ❑ Out patient
- ❑ **Inpatient**
- ❑ **Emergency**
- ❑ Elective surgery
- ❑ Urology surgery
- ❑ Gyn/obs surgery
- ❑ Orthopedic Surgery

5

Study setting -TASH

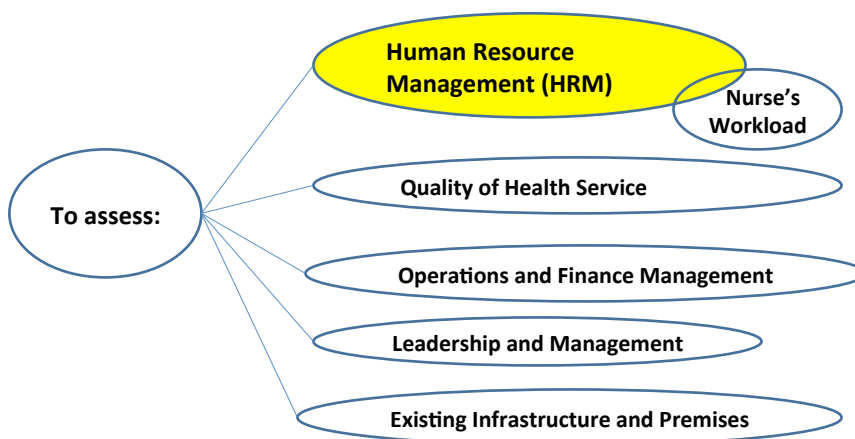| Professionals Required	Minimum Required
Nurses (BSc) **[ER (8)** OPD (15) **IPD (32)** OR (20) ICU (6)	81
Nurse (Diploma) **[ER (6)** OPD (27) **IPD (30)** OR (20) ICU (6)	89

6

Purpose of the Rapid Assessment

- High-and-system level problem-solving recommendations to inform
  - o Health Sector Executive Committee
  - o Board of Directors of the Hospital and College of Health Sciences;
- Upgrade quality of service rendered by this institution and ensure responsiveness to changing health care environment including needs of the public.

7

Purpose of the Study

Rapid Assessment Study focus areas:

To assess:

- Human Resource Management (HRM)
  - Nurse's Workload
- Quality of Health Service
- Operations and Finance Management
- Leadership and Management
- Existing Infrastructure and Premises

8

Data Collection Methods

Rapid Assessment data collection includes:
- ❑ Desk (document) reviews
- ❑ Mail/email/drop box Questionnaire
- ❑ In-Depth Interviews:
  - ✓ Patient
  - ✓ Head nurse
- ❑ Focus Group Discussion:
  - ✓ patient's relatives
  - ✓ Nurses

9

Major Gaps Identified

- HRM structures
- HR planning and Staffing
- Training and Development
- Motivation and Productivity
- HRIS
- Workplace Safety
- Work load

10

Rapid Assessment Results

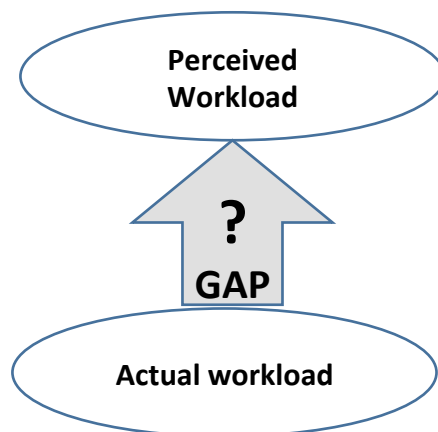Patient interview on nursing care practices:

- ❑ Poor nursing care
- ❑ Care given by patient's relatives

FGD with Nurse staffs:

- ❑ So frustrated Complain about high workload (high perceived workload)
- ❑ Nurses leave the Hospital frequently

11

Perceived Workload Vs Actual Workload

12

Work Load Measurement of Nurses

- o **Inpatient wards**
- o **Emergency department**

13

**Annual Hospital output
for Selected Service areas**

Service Category	Annual Service Output
Out patient Services	270,318
Inpatient service	18,178
Emergency service	24,363
Elective surgery	454
Urology surgery	394
Gyn/obs surgery	142
Orthopedic Surgery	622

14

Annual Working Days and Hours Estimation

Category	Description	Annual Working	
		Days	Hours
Leave	Annual	25	200
	Sick	15	120
	Maternity	10	80
Holidays	Government, Religious …	12	96
Weekends	None working weeks (67÷7)	67	536
Annual working	**days and Hours**	**193**	**1544**

15

Workload of
Inpatient Nurse Professionals

16

Workload: Inpatient Nurse Professionals

Total Number of Patients Served / year =	18,178
Average Length of Hospitals Stay =	4.8 Days
Total Number of Nurses, three shift =	110
Actual Nurse Workload	
❑ Annual work load/ Nurse =	793 patients/ year
❑ Daily work load/ Nurse =	4 Patients/ day
Facility Standard:	
❑ Daily workload/Nurse =	4 Patients /day

17

Workload of
Emergency Nurse Professionals

18

Workload: Emergency Nurses professionals

Total Number of Patients Served per Year =	**24,363**
Total Number of Nurses, three shift =	**119**
Average Workload :	
❑ **Patients per Year** =	**615 Patients/year**
❑ **Patients per Day** =	**3 Patients/ day**
Standard Workload:	
❑ **Patients per Day =**	**1-2 Patients /day**

19

Turn Over Rate: Emergency Department Nurse

Total number of staffs at the beginning of the year =	119
Transferred to other departments based on individual request =	15
Resigned staffs =	20
Total Number of staffs at the end of the year =	84
Nurse staff turn over rate =	**29%**

20

Recommendations

- **Inpatients Nurse**
  - The gap between Actual Workload and Perceived Workload is not significant.
  - Further investigation is required to decide the Staffing level of inpatients unit.
- **Emergency Nurse:**
  - The gap between Actual Workload and Perceived Workload is real.
  - Staffing levels at emergency unit shall be improved.
- This Rapid Assessment study **lead** the Hospital to conduct further study to determine the activity standards using **Time Motion Study**.

21

Merci
Thank you
Amesegnalehu

22

Workload indicators for staffing Needs (WISN)

How can WISN help you?
- Determine how best to improve your current
  staffing situation. You can set better priorities for
  allocating new staff or transferring existing staff
- Plan future staffing of health facilities
- Measure the daily workload pressure on the
  staff

23

WISN Steps

- Determining the priority cadre(s) and work unit/ service area(s) for applying the WISN method

- Estimating available working time1544 hrs/year

- Defining workload components (health service activities and those supporting these activities)

- Setting activity standards, the local circumstances

24

WISN Steps

- Establishing standard workloads -the amount of work within a health service component that one health worker can do in a year

- Calculating allowance factors in order to take account of the staff requirement of support activities
- Determining staff requirements by calculating the total staff required to cover both health service activities and support services

25