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Shifting Human Resources for Health in the context of ART provision in primary care facilities: qualitative and quantitative findings from the Lablite Baseline Study

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Introduction

The Lablite project is a implementation research project following the Development of ART in Africa (DART) Trial which showed that ART can be delivered safely and successfully to adults with symptomatic HIV infection without the use of routine laboratory testing for toxicity. The aim of the Lablite project is to demonstrate that ART can be safely and cost effectively delivered in resource-limited settings to support the decentralization of ART in Africa. It is being implemented in Malawi, Uganda and Zimbabwe with the support of their Ministries of Health.

We conducted a cross-sectional baseline survey from November 2011 to July 2012 with the aim of describing and comparing national and inter-country delivery of training, clinical care and use of laboratory monitoring. Evaluating Human Resources for Health (HRH) optimization is an essential component to ensure universal delivery of ART services in the context of staff shortages.

Methods

We interviewed Health Care Workers (HCWs) involved in the provision of ART including Clinical Officers, Medical Assistants, Nurse/Midwives and Health Surveillance Assistants (HSAs) from a purposefully selected sample of 81 health facilities in Malawi (20), Uganda (39) and Zimbabwe (22).

Focus group discussions (n=33) were conducted in Malawi and Zimbabwe. We explored issues related to work conditions, training, perception of care, and overall satisfaction with current ART service provision. Using content analysis, we identified recurrent themes from the qualitative data.

Results

Table 1. Characteristics of Lablite baseline study health facilities

	Malawi			Uganda			Zimbabwe	
	Primary (n=16)	Secondary (n=3)	Tertiary (n=1)	Primary (n=21)	Secondary (n=16)	Tertiary (n=2)	Primary (n=16)	Secondary (n=6)
Location								
Urban	2 (13%)	1 (33%)	1 (100%)	3 (14%)	4 (25%)	2 (100%)	2 (13%)	1 (17%)
Peri-urban	3 (19%)	1 (33%)	0 (0%)	3 (14%)	6 (38%)	0 (0%)	1 (6%)	0 (0%)
Rural	11(69%)	1 (33%)	0 (0%)	15 (71%)	6 (38%)	0 (0%)	13 (81%)	5 (83%)
Catchment population: Median (range)	29,275 (11,074-240,000)	50,015 (29,721-1,897,168)	5,490,000	9,000 (325-210,000)	70,295 (2,400-500,000)	2,250,000 (1,500,000-3,000,000)	8,616 (3,122-113,000)	13,747 (9,184-298,495)
Adults ≥15 on ART* Median (IQR)	516 (241 - 886)	2610 (2438 - 9600)	17453	189 (56 - 604)	576 (385 - 890)	1968 (1523– 2412)	203 (97 - 359)	2800 (1976 - 3726)
Children on ART Median(IQR)				22 (9 – 51)	44 (21 – 59)	230 (223 - 237)	19 (10 - 31)	203 (165 - 318)

* For Malawi, data includes adults and children

Shortage of staff

Most health care workers feel that the introduction of ART has increased their workload (in both Malawi and Zimbabwe).

In Malawi, the introduction of new guidelines (ART for all HIV positive pregnant and breastfeeding women) in 2011 is further perceived to have increased workload as more people are now on treatment.

"…the introduction of new regimen has made more people to access ART […] and having a lot of people also means a lot of work for the providers…." Kamuzu Central Hospital

Table 2. Staffing of Lablite baseline study health facilities with professional health cadres

	Malawi			Uganda			Zimbabwe	
	Primary (n=16)	**Secondary (n=3)**	**Tertiary (n=1)***	**Primary (n=21)**	**Secondary (n=16)**	**Tertiary (n=2)**	**Primary (n=16)**	**Secondary (n=6)**
Physicians **Median (IQR)**	0 (0-0)	2.8 (1.5-4)		0 (0-0)	2 (1-4.5)	5.5 (5-6)	0 (0-0)	1 (1-1)
Clinical Officers/ Medical Assistants **Median (IQR)**	1 (1-2)	25 (11-40)		2 (1-2)	4.5 (2-8)	19 (8-29)	0 (0-0)	1 (0-1)
Midwives/ Nurses **Median (IQR)**	2.5 (1-4.5)	42 (34-49)	308.5	4 (3-6)	22 (13-68)	99 (59-138)	6 (2.5-14)	66 (46-82)
Laboratory technicians/assistants **Median (IQR)**	0 (0-0.5)	4.5 (3-6)		1 (0-1)	2 (1.8-3)	8.5 (8-9)	0 (0-0)	3 (2-4)

*Missing data for tertiary facilities in Malawi

Results

In all three countries, there were no physicians working in the primary care facilities evaluated. In Malawi and Uganda all but one had ≥1 medical assistant/clinical officer, with a median (range) of 2.5 (0-16) and 4 (1-15) nurses/midwives per facility respectively. There were no clinical officers in primary care facilities in Zimbabwe. Estimated turnover of clinical staff was higher in nurses/midwives than clinical officers in both Malawi (32% vs. 21% per year) and in Uganda (19% vs. 0% per year). Estimated annual turnover of nurses/midwives in Zimbabwe was 5%.

Table 3. Staffing of Lablite baseline study health facilities with other health cadres

	Malawi			Uganda			Zimbabwe	
	Primary (n=16)	Secondary (n = 3)	Tertiary (n=1)*	Primary (n=21)	Secondary (n=16)	Tertiary (n=2)	Primary (n=16)	Secondary (n=6)
Auxiliary staff	5 (3.5-7.5)	70 (40-101)		2 (0-3)	6 (0-8)	57(13-100)	3(3-9)	64 (52-93)
Community health workers	18 (11-22)	31 (21-40)		0 (0-0)	0 (0-3)	2 (0-4)	0 (0-0.5)	0 (0-0)
Administrative staff	0 (0-2)	7 (3-11)		0 (0-0)	1 (0.5-6)	10 (7-13)	0 (0-0)	13 (6-18)

*Missing data for tertiary facilities in Malawi

Task shifting

In Malawi primary care facilities, 57% of non-administrative staff were community health workers with a median (range) of 18 (0 - 31) per facility compared to 2% in Uganda and 12% in Zimbabwe, with most facilities in Uganda and Zimbabwe having no HCWs of this cadre. Due to lack of administrative staff, clinical staff are involved in administrative tasks.

As a way of dealing with these staff shortages, task shifting is being implemented in Malawi with Health Surveillance Assistants assuming more technical tasks (testing, counselling and dispensing drugs).

Some HCWs perceive the introduction of ART as an additional responsibility to their formal roles:

"… I am an HSA [Health Surveillance Assistant] by profession, my job as HTC counselor is just supplementary but we are not given top up incentives to feel motivated when working" HCW, Chitipa

As a result of task shifting and increased number of patients, HCWs felt that this has resulted in increased working hours. For others, it has resulted in provision of suboptimal services.

Job satisfaction and morale

With the increase in workload, HCWs felt that their monthly income ought to have increased as well:

"Any way we work just because we applied for this job, otherwise, the salary is very low, there is huge work load, no allowances, even locum is only applicable when you are off duty otherwise even if you work overtime there nothing you are given, no lunch allowances, no tea time, not even night duty you don't even get anything, if you have not brought your personal sugar there is nothing." HCW, Kawale Health Center

Most HCWs in rural facilities felt that training opportunities are monopolised by those in higher cadres and those that are in urban facilities or at district hospitals. Lack of training resulted in reduced confidence and low morale:

"Personally I don't get satisfied with the job that I do. There are two reasons; one is the issue of low salary. Secondly I feel undermined because of the fact that I don't know how to give all HIV related services while the other people doing the same work are professionals in the field. It becomes difficult for me to refer patients to other people who are working in the same department as me." HCW, Phalombe District

Conclusions

In all three countries, shortage of staff challenges the decentralization of ART in primary care facilities, especially those in rural areas. Most primary care facilities had no trained laboratory staff thus provision of laboratory services is limited.

In addition to HRH planning and forecasting, optimization of existing frontline HCWs is critical for increasing numbers of ART patients with operationalization of the 2013 WHO guidelines. Provision of equitable training may also improve decentralization of ART care. In this regard, the Lablite project has developed training videos to be used for mentoring health care workers in primary facilities.