

Training healthcare professionals in resource-limited settings on HIV care and treatment: Implementation of a blended-learning training program in Sub-Saharan Africa

de Lange-Tichelaar, T., de Raadt, J.E., Pakker, N., van der Waals, F.W.

HEALTH[e]FOUNDATION

TREAT 'N CARE[e]EDUCATION

Introduction

The field of HIV treatment is changing rapidly. It is therefore of great importance that healthcare workers update their knowledge and skills in order to provide the best care for their patients.

In Sub-Saharan Africa continuous medical education remains challenging. Due to the shortage of healthcare workers and the high workload, there is little time to attend trainings. Inadequate knowledge on part of the healthcare worker can become a barrier to initiate timely ART treatment and retain patients in care.

To overcome this problem Health[e]Foundation developed an innovative blended-learning training program.

Objective

To enhance clinical knowledge among healthcare workers in Sub-Saharan Africa via a blended-learning training program on HIV care and treatment

Methods

The Treat'n Care[e]Education course contains 16 modules and enables healthcare workers to effectively *treat and care for* patients with HIV/AIDS.

The training program consists of an onsite kick-off workshop, a 12 week distance-based self-study period, a two-day follow-up workshop and continuous medical education.



The individual knowledge gain was assessed via pre- and post-test scores per module and participants were asked to complete a clinical case study during the kick-off and follow-up workshops. Qualitative data was collected using focus group discussions.

Study population

250 healthcare workers were trained with the Treat'n Care[e]Education program in 2014 and 2015

- South Africa (n=100)
- Malawi (n=100)
- Cameroon (n=50)

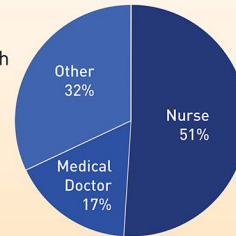


Table 1: Participant characteristics

Total		N = 250 (100%)
Sex	Male	38%
	Female	62%
Age	20-24	4%
	25-34	41%
	35-44	30%
	45 >	18%
	Unrecorded	7%
Computer usage	Daily	52%
	Often	28%
	Rarely	16%
	Never	4%

Results

Quantitative results

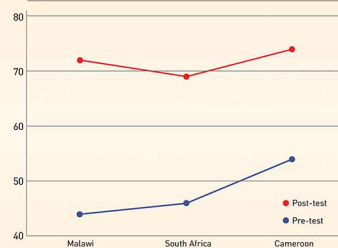
The overall knowledge increase among healthcare workers after completion of the training program was 11%. The average baseline score for the clinical case study was 9 and increased to 12 out of 20 points during the follow-up workshop.

Table 2: Five modules with the highest knowledge gain

	Average Pre-test	Average Post-test	Difference	SD	P Value
Initiation of Antiretroviral Therapy	56	72	16	19	**
Adherence, Importance, and Support	56	76	21	19	**
Antiretroviral Drug Toxicity	51	76	25	22	*
Pediatric HIV Infection	50	76	26	20	**
Palliative Care and HIV	48	70	22	17	**

** p < 0.01 * p < 0.05

Figure 1: Palliative Care and HIV test results



Qualitative results

The outcomes of the focus groups discussions confirmed that blended learning is highly valued by the healthcare workers.

"This e-learning is the best solution for learning regardless of one's situation. As a breastfeeding mother, I personally do not have time to attend workshops. But with e-learning my problems are solved. Thank you for this perfect solution" -- (Counselor, South Africa)

Although palliative care was one of the most difficult topics, the content was considered to be very useful in daily clinical practice

"We often judge or treat people in a certain way without knowing what is wrong with them. Palliative care is rare in Malawi and mainly focused on cancer. But palliative care is very important in HIV." -- (Nurse, Malawi)

Conclusion and Discussion

- Blended learning is an effective method to offer continuous medical education to healthcare workers in resource-limited settings
- Staying up-to-date with the latest development in HIV treatment is essential and can lead to a better quality of care for people living with HIV/AIDS
- More training is needed in Sub-Saharan Africa on the importance of palliative care in HIV care and treatment

How can we motivate healthcare workers in Sub-Saharan Africa to continue online learning after they completed the blended-learning training program?



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Contact Us

Health[e]Foundation
Academic Medical Center
IWO Building - Room IA3-216
Meibergdreef 39
1105AZ - Amsterdam
info@healthefoundation.eu
www.healthefoundation.eu

