

# Preparation, experience, confidence and performance of Botswana nurses and midwives in HIV care

Presented by:

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# BOTSWANA



# Introduction

- 35 million people living with HIV
- 16 million (15.2 million–16.9 million) women aged 15 years and older
- 3.2 million (2.9 million–3.5 million) children younger than 15 years
- 4 million (3.6 million–4.6 million) young people 15–24 years old
- 29% of whom are adolescents aged 15–19 years.
- in 2013, 240 000 (210 000–280 000) children were newly infected with HIV
- Most likely by MTCT
- Concern about untreated non-progressors and positive children who will become mothers

• Statistics Botswana 2013

# Introduction

- HIV prevalence is 18.5% for the general population (aged 18 weeks and over)
  - Females at 19.2%
  - Males 14.1%
  - 30.4% among women ages 15- 49
  - 87.26% or 223,974 individuals receiving ART
  - Covering just 67% of the total HIV positive population at the end of 2013.
  - MTCT estimated at 2.2% in 2013, down from 3.9 in 2008
  - PMTCT has been robust and presumably matured
  - Hence the need for this evaluation
- National AIDS Coordinating Unit

# Purpose of the presentation

- To share some results of the Facility assessment of the PMTCT, infant and pediatric and adolescent HIV care in 2 health facilities in Botswana
- The assessment focused on the care provided by nurses and midwives in these facilities
- The results presented pertain to their preparation/training, experience and self reported confidence in providing PMTCT, B+, pediatric and adolescent HIV care

# Methods

- Design: cross sectional descriptive study
- Quantitative questionnaire with qualitative questions
- Setting: Nyangagwe Referral Hospital in the North and Gabane Clinic in the North
- Selected through purposive sampling
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- Based on their provision of PMTCT and pediatric HIV services, previously reported poor performance from CDC reports
- Population: Nurses and Midwives at the PMTCT sites
- Permission from MoHW, facility management, informed participant consent

# Results: Professional Qualifications

	Frequency	Percentage
Nurse	9	31
Midwife	1	3.4
Nurse-midwife	19	65.5
Total	29	100

# Types of pre-service education provided (n=29)

	frequency	Percentage	
<b>Bachelors</b>	<b>1</b>	<b>3.4</b>	
Post basic certificate	3	10.3	
Diploma	24	82.8	
Certificate	1	3.4	
<b>Total</b>	<b>29</b>	<b>100</b>	

# Currently providing PMTCT, HIV care to exposed infants care, pediatric and adolescent HIV care

- All (100%) said they were providing different HIV services

# Pre-service Education in HIV care (n=20)

HIV Care	PMTCT Services	Exposed Infant Care	Pediatric HIV care	HIV positive Adolescent Care
Yes	28 (96.6%)	24 (82.8%)	17 (58.6%)	13 (44.8%)
NO	1 (3.4%)	5 (17.8%)	12 (41.4%)	<b>16 (55.2%)</b>
Total	29 (100%)	29 (100%)	29 (100%)	29 (100%)

## Experience in HIV care (n=29)

	0-4 years	5-9 years	10 to 15 years	15 and above	None
PMTCT	6 (20.7%)	9 (31%)	8 (27.6%)	4 (13.8%)	2(6.9%)
Exposed infants	8 (27.7%)	9 (31%)	5 (17.2%)	0	7 (24.1%)
Pediatric HIV Care	4 (13.6%)	5 (17.15)	2 (6.8%)	1 (3.4%)	<b>17 (38.6%)</b>

# Confidence in providing HIV services

- Nurses and midwives felt confident about performing most of the HIV care activities except the following: **PMTCT services for pregnant and breastfeeding women**

HIV Care	Frequency	Percentage
ART Prescription for pregnant and breastfeeding women	25	86
ART Management for pregnant and breastfeeding women	23	79.3
Interpreting viral load lab results	15	65.5
Recognition of treatment failure	19	65.5
Counselling of discordant couples	15	51.7

# HIV care for exposed infants

	Frequency	Percentage
Determine when to start for infants	24	82.8
ART management for infants	21	72.4
When to conduct viral load testing for infants	18	62.1
Interpreting viral labs	24	82.8

# Care for children and adolescents living with HIV

	Frequency	Percentage
Determining when to start ART	17	58.6
ART prescription	27	93.1
When to start ART for children with HIV and TB co-infection	26	89.7
Side effects recognition and management	22	75.9
Recognition of treatment failure	21	72.4
When to conduct viral load testing	17	58.6
Interpreting viral load test results	19	65.5

# Adolescents specific care

	Frequency	Percentage
Understanding testing consent and disclosure policies for adolescents	18	62.1
Counselling for transition to adult care	18	62.1
Post exposure prophylaxis for adolescents who have experienced sexual and gender-based violence	17	58.6

# Performance in Knowledge assessment

- Performance was quite good in the knowledge assessment (Mean=76.7%)
- Performance was weak in the following areas: the number represents those who got the wrong answers

	Frequency	Percentage
What ARV regimen does WHO currently recommend for pregnant and breastfeeding women who are newly diagnosed with HIV?	17	58.6
You are prescribing ARVs for a newborn after birth. The newborn' mother started ART in early pregnancy and is now breastfeeding. What medication and dosage would you give to this newborn?	26	89.7
What HIV test should be given to an 18-month old child who has not breastfed since 12 months ago?	11	37.9
What technique is correct for dried blood spot (DBS) specimen collection in an infant?	17	58.6
When is the appropriate time to conduct a viral load test for an HIV+ child who will be starting on ART?	22	75.9
In cases of children who have experienced sexual violence, when should post-exposure prophylaxis (PEP) be administered to be most effective	19	65.5

# Discussion and conclusion

- Nurses and midwives in the selected facilities do have some level of preparation to provide HIV services for pregnant and breastfeeding women, exposed infants, children and adolescents.
- This is provided for in their pre-service and in-service education
- They have a good level of confidence in providing these services
- The weakest area is in prescription and management of ART, viral load testing and interpreting results of viral load tests, especially for infants, children and adolescents
- Although there is ongoing training, it does not seem to have reached all nurses and midwives.
- This evidence of training needs in these areas.
- There is need to evaluate the prescriber training that is currently in place

# Other Continuing Nursing and Midwifery Development Projects

- Jill Iliffe continues to assist us with completion of the scopes of practice for nursing and midwifery
- Development of the Nursing and Midwifery Strategy.
- Completion of the standards of practice that are now aligned with the scopes of practice
- Initial draft of a Fitness to Practice Policy
- We continue to implement the CPD program
- Our Permanent Secretary for Health has just endorsed a formal QUAD and is looking at the Task Sharing Policy for endorsement.