X BOMB: PHILIPPINE HIV

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FEBRUARY 21, 2019

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OBJECTIVE

- To present the current status of pediatric HIV infection in the Philippines

OUTLINE

- Epidemiology
- Is there an HIV epidemic in the Philippines?
- What is contributing to the increase in HIV cases?
- Prevention of Maternal to Child Transmission of HIV
- How can we control the epidemic?

EPIDEMIOLOGY

WHAT IS THE CURRENT SITUATION OF HIV EPIDEMIC IN THE PHILIPPINES?

- Globally, the number of new infections is declining every year.
- Philippines is among the few countries where the number of new infections is increasing at a high pace
- Between 2010-2017, the number of new infections has increased by 174% - representing the highest increase of any country this period

WHAT IS CONTRIBUTING TO THE INCREASE IN CASES OF HIV?

- With technology so readily available, finding sexual partners is as easy as a swipe to the right, clicking a follow button, or sending suggestive pictures and messages to strangers
  - Group activities or orgies
- Open relationships
  - Lines are blurred when it comes to sexuality

MALES/TRANSGENDERS WHO HAVE SEX WITH MALES (M/TSM)

- *Inclusion Criteria: Born male, 15 years or older, who reported oral or anal sex with a male in the past 12 months*

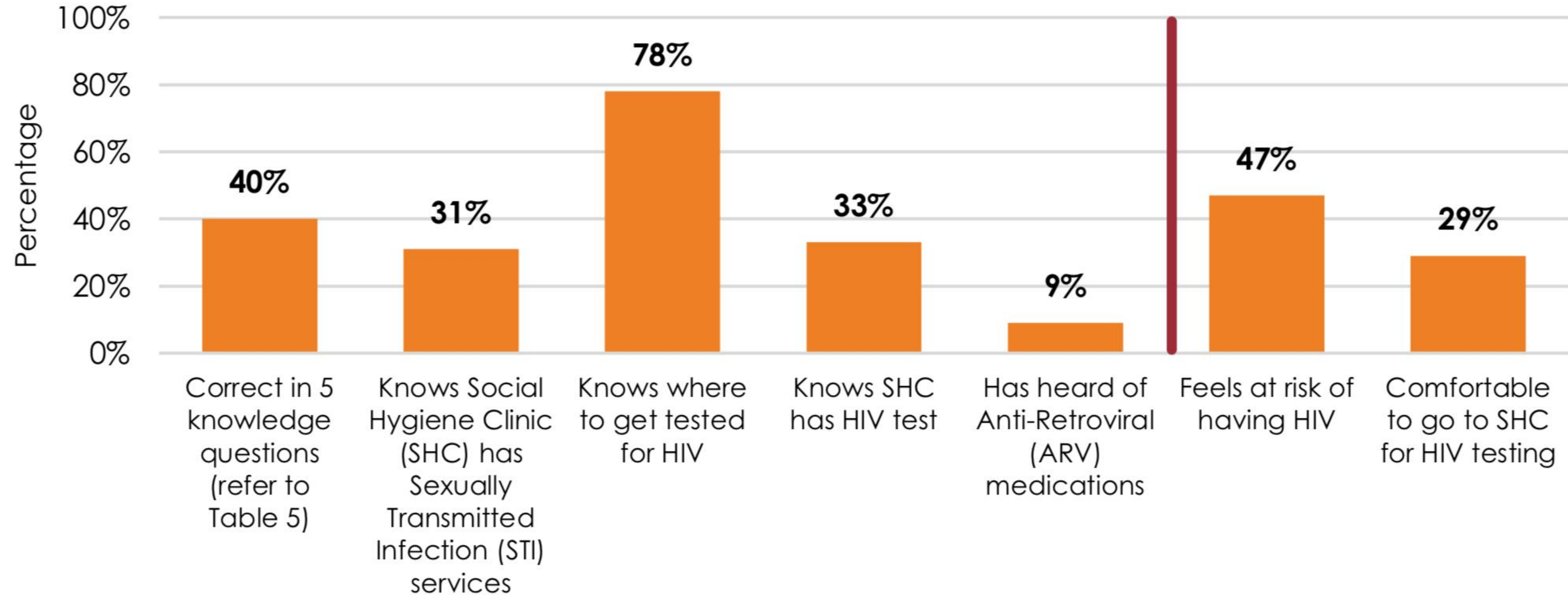
Figure 4. HIV Knowledge & Attitude, 2015 IHBSS
Percentage
100%
80%
60%
40%
20%
0%
40%
31%
78%
33%
9%
47%
29%
Correct in 5 knowledge questions (refer to Table 5)
Knows Social Hygiene Clinic (SHC) has Sexually Transmitted Infection (STI) services
Knows where to get tested for HIV
Knows SHC has HIV test
Has heard of Anti-Retroviral (ARV) medications
Feels at risk of having HIV
Comfortable to go to SHC for HIV testing

2015 INTEGRATED HIV BEHAVIORAL AND SEROLOGICAL SURVEILLANCE (IHBSS) IN THE PHILIPPINES:

10% MSM age of 1st sex	12y/o
Median age of 1st sex:	16 y/o
Age at 1st anal sex:	17y/o
Age at 1st condom use:	18y/o
Age at 1st HIV test:	22 y/o
Median age start of treatment:	28y/o

Source: UNICEF Philippines World AIDS day 2018

- Many young people are not aware of HIV, they don’t get tested regularly.
- Many are unaware that they are living with the virus, because in most people, there are no symptoms - until it is far too late

IS HIV DRUG RESISTANCE A PROBLEM IN THE PHILIPPINES?

- Drug resistance develops when people are unable to take drugs regularly
- Drug resistant strain can be transmitted to others
- Periodic surveys are required to obtain nationally representative HIV drug estimates
- The country needs to expand the coverage and quality of routine viral load and drug resistance testing and monitor the quality of service delivery

Source: WPRO 2018 Joint WHO and UNAIDS Questions and answers to HIV and drug resistance in the Philippines

HIV Treatment Failure and Acquired Drug Resistance after One Year on Antiretrovirals in the Philippines

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Background

The Philippines has one of the fastest growing HIV epidemics globally. As antiretroviral (ARV) use increases, the risk of acquired drug resistance (ADR) grows. Only 7 ARV agents are widely available locally (Table 1). The objectives of this study are to look at the rate of viral suppression after one year on ARVs, and to determine rates of resistance to specific ARVs.

Table 1. Locally available ARVs and resistance rates after one year of treatment.

Locally available ARVs	Resistance in Unsuppressed (%) N=45	Overall % Resistance N=458
AZT	10 (22)	2.2
3TC	34 (76)	7.4
TDF	23 (51)	5.0
D4T	27 (60)	5.9
NVP	39 (87)	8.5
EFV	39 (87)	8.5
LPV/r	0 (0)	0

Methods

Following institutional board review, patients on ARVs for one year from 3 of the largest HIV treatment hubs (San Lazaro Hospital, the Philippine General Hospital and Vicente Sotto Hospital) were recruited. Blood samples underwent HIV viral load testing at a national reference laboratory (SACCL-NRL). Samples with >1000 copies/mL were sent to UP-NIH for genotyping and drug resistance testing.

Results

458 patients (13 female, 445 male) with a median age of 30 years (range 1-72) were recruited. Median CD4 count was 298 cells/μL (range 3-1608). The most common regimens were TDF+3TC+EFV (236), AZT+3TC+EFV (135), and AZT+3TC+NVP (52). 45 (9.8%) patients were not virally suppressed [median viral load 130,000 copies/mL (range 1,150 to 3,410,000)]. 14 of the 45 unsuppressed subjects admitted missing pills in the past year. Failure rates for NVP-based regimens (15.9%) were significantly higher than for EFV-based regimens (8.6%)(p= 0.048).

Genotypes in unsuppressed subjects were CRF01_AE (84%), B (13%) and G (2%). No baseline genotype was available. 39 patients had clinically significant resistance mutations. The most common resistance mutations were M184V (22), K65R (18), Y181C (13), K101E (10), and K103N (9). 3 patients had a single PI mutation each (G48R, L33F, M46I). Resistance rates are shown on Table 1. 26/45 (58%) patients did not have an appropriate local second line regimen of three active drugs.

Conclusion

Conclusion: HIV viral suppression on ARVs is 90.2% at 1 year in the Philippines. NNRTIs are the least durable, and more agents are needed for second-line treatment. Treatment failure cannot be explained by compliance alone, and may be from transmitted drug resistance, which needs investigation.

Acknowledgments: Supported with funding from the Department of Health and the Department of Science and Technology – Philippine Council for Health Research and Development

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ARE THERE ANY LINKS BETWEEN HIV EPIDEMIC IN PHILIPPINES AND CIRCULATING HIV STRAINS?

- HIV subtype circulating has changed from predominantly B to the circulating recombinant form DRF01_AE - predominant in Southeast Asia.
- This may be due to changes in population risk behaviours and other host and human genetic factors. **All HIV-1 subtypes can be expected to respond to currently recommended ART regimens**

Source: WPRO 2018 Joint WHO and UNAIDS Questions and answers to HIV and drug resistance in the Philippines

- Disease progression depends on age, genes, and presence of other infections. **The CRF01_AE has not been documented to be more infectious than other subtypes** or circulating recombinant forms.
- **Insufficient access to prevention and treatment are the main drivers of the HIV epidemic in the Philippines**

Source: WPRO 2018 Joint WHO and UNAIDS Questions and answers to HIV and drug resistance in the Philippines

STIGMA

- remains an obstacle in getting tested and getting treated
- There's still a lot of fear, denial among certain population groups that they will not get infected

PREVENTING MATERNAL TO CHILD TRANSMISSION OF HIV

eMTCT (2017)

<500
(<500 - 560)

pregnant women living with HIV

11%
(10% - 14%)

of HIV-positive pregnant women received WHO-recommended regimen for prevention of parent-to-child transmission

HIV AND AIDS DATA HUB FOR ASIA-PACIFIC
EVIDENCE
TO ACTION

REVISED GUIDELINES ON THE INTEGRATED PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) ON HUMAN IMMUNEDEFICIENCY VIRUS (HIV)

PREGNANT WOMAN

- All pregnant women shall be offered HIV testing and counselling in every pregnancy
- The pregnant WLHIV shall be initiated on and fully adherent to ART as early as possible in pregnancy or at least 4 weeks before delivery to reduce the risk of mother to child transmission of HIV

HIV-EXPOSED INFANT

- ARV prophylaxis - 6 weeks of ARV prophylaxis shall be given to infants born to mothers fully adherent to ART in early pregnancy or at least 4 weeks before delivery
  - Extended for 12 weeks to those born to mothers who had ART less than 4 weeks or those who had none
- Cotrimoxazole prophylaxis from 4-6 weeks of age until HIV negative status has been confirmed

INFANT FEEDING

- Mothers living with HIV are strongly recommended exclusively breastfeed their infants in the first 6 months of life
- Breastfeeding continues for up to 24 months
- Breastfeeding shall only stop once a nutritionally adequate and safe diet without breastmilk can be provided

ANTIRETROVIRAL TREATMENT (ART) OF PREGNANT AND BREASTFEEDING WOMEN

- ART shall be initiated to ALL pregnant and breastfeeding women living with HIV, as soon as diagnosis is established, regardless of CD4 count or clinical status and shall be continued lifelong
- ART remarkably reduces the risk of transmission of HIV to the infant from pregnancy to breastfeeding

ART…

- Pregnant and breastfeeding women living with HIV and HIV exposed infants shall be referred to HIV treatment hubs and HIV satellite treatment hubs for clinical management

HOW CAN WE CONTROL THE EPIDEMIC?

- Prevention
- Early testing
- High treatment coverage

Source: WPRO 2018 Joint WHO and UNAIDS Questions and answers to HIV and drug resistance in the Philippines

PREVENTION

CONTROLLING THE EPIDEMIC

Reasons for not using a condom, freq (%)	
Condom not available	1931 (53%)
Does not like condom	787 (21%)
Not necessary	333 (10%)
Partner objected	311 (9%)
Forgot to use a condom	115 (3%)
Other reasons	61 (2%)
Condoms are expensive	46 (1%)
Does not know how to use condom	45 (1%)

EARLY TESTING

CONTROLLING THE EPIDEMIC

Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

SEP 15 2017

ADMINISTRATIVE ORDER
No. 2017-0019

SUBJECT: **Policies and Guidelines in the Conduct of Human Immunodeficiency Virus (HIV) Testing Services (HTS) in Health Facilities.**

ADMINISTRATIVE ORDER 2017-0019…

- HIV screening using DOH FDA registered HIV test kits performed through finger pricking by trained and supervised HCW and lay person
- rHIVda (rapid HIV diagnostic algorithm) - combination of 2 or 3 rapid test formats done in parallel or sequence on a sample that had reactive result in the initial test; confirmatory

HIV TESTING SHALL BE OFFERED, PRIORITIZED FOR AND PROMOTED TO THE FOLLOWING POPULATION

- Key populations (MSM, FSW, PWID, transgender) including adolescents
- High risk individuals who have not been tested recently
- Partners, infants and children of PLHIV
- Patients showing signs and symptoms consistent with AIDS defining illness

HIV TESTING….

- Patients with sexually transmitted infections (STI)
- Patients with Hepatitis B and C
- Patients with under nutrition not responsive to interventions
- **All confirmed tuberculosis patients**
- All pregnant women regardless of risk

- HIV testing shall be provided to any client who go to HIV Testing Services (HTS) facility with expressed intention or need to undergo the test
- All clients diagnosed with HIV shall be linked to prevention, treatment and care services

Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

OCT 24 2018

ADMINISTRATIVE ORDER
No: 2018-0024

SUBJECT: **Revised Policies and Guidelines on the Use of Antiretroviral Therapy (ART) among People living with Human immunodeficiency virus (HIV) and HIV-exposed infants**

"*TEST EARLY*," "*TREAT EARLY*," AND "*TREAT ALL*" STRATEGIC APPROACHES

The WHO **Consolidated Guidelines on the Use of Antiretroviral Drugs for Treating and Preventing HIV Infection** released in June 2016 recommended that all PLHIV be provided with ART regardless of immunologic or clinical condition. Early use of ART keeps PLHIV alive and healthier. Likewise, ART helps reduce the risk of transmitting the virus to their sexual and drug-sharing partners. Strategic approaches such as "test early", "treat early", and "treat all" remove limitations on eligibility for ART among Filipinos living with HIV. As such, all populations and age groups are now eligible for treatment, including pregnant women and children. Understandably, this will bring us one step closer to achieving universal access to HIV treatment and care, and ending AIDS as a public health threat.

DOH Administrative Order 2018-0024

HIV TESTING

- VOLUNTARY HIV testing
- Written Consent

PHILIPPINE HIV AND AIDS POLICY ACT 2018

- If the person is **15y/o and <18 y/o,** consent to voluntary HIV testing shall be obtained from the CHILD WITHOUT THE NEED OF CONSENT FROM PARENT/GUARDIAN

PHILIPPINE HIV AND AIDS POLICY ACT 2018…

- A person aged <15y/o who is pregnant or engaged in high risk behavior shall be eligible for HIV testing and counselling with the assistance of a licensed social worker or health worker. Consent to voluntary HIV testing shall be obtained from the child without the need of consent from parent/guardian

HIGH TREATMENT COVERAGE

CONTROLLING THE EPIDEMIC

ADMINISTRATIVE ORDER NO. 2018-0024

- ART shall be initiated in all persons with confirmed HIV test regardless of clinical and immunologic status
- ART is a lifelong therapy and requires continuous monitoring

THANK YOU.