

REPUBLIC OF BOTSWANA

PROGRESS REPORT OF THE NATIONAL RESPONSE TO THE 2011 DECLARATION OF COMMITMENTS ON HIV AND AIDS

Reporting Period: 2014

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FOREWORD

Although HIV is preventable, it continues to adversely affect the health and well-being of Batswana. In 2013, the fourth Botswana AIDS Impact Survey estimated a national prevalence rate of 18.5 percent. HIV also has significant impact on the economy and development in general. Through the 2011 UN Political Declaration on HIV, Botswana and other countries agreed on the need to measure the success on the war against HIV through concrete time bound targets and this resulted in the need for careful monitoring of the commitments made by member states.

Therefore, on annual basis we need to provide to the General Assembly a report on progress achieved in realizing the bold targets set in June 2011. This Botswana AIDS Response Progress report highlights successes that have been achieved in 2014 and the obstacles impeding progress. This 2014 report therefore provides a solid foundation for identifying new strategies and actions that are required to be implemented with the view of achieving the High Level Meeting targets by 2015.

The Botswana AIDS Response Progress Report shows areas where progress has been made: increase in access to antiretrovirals by Batswana and growth in prevention of mother to child transmission of HIV. These achievements are a result of sustained funding by Government of Botswana and its valued development partners. The report also points out problems which continue to impede the implementation of HIV programs such as inadequate funds for comprehensive prevention interventions implementation, overall health system challenges and need for better community mobilization.

As we reflect and celebrate our achievement, let me urge us all to take personal responsibility in tackling the challenges identified in the 2014 Botswana AIDS Response Progress Report. The burden HIV imposes on our people, the health system and the national economy begs of all stakeholders led by the Government of Botswana to do more to achieve zero new HIV infections. This is a rallying call to all of us to invest more in HIV prevention efforts.

GRACE MUZILA

NATIONAL COORDINATOR

ACKNOWLEDGEMENTS

The 2014 progress report of the national response to the 2011 declaration of commitments on HIV and AIDS is a product of process of intensive consultations, detailed information gathering and validation, consensus building and team work. The development of this report would not have been possible without the assistance of numerous individuals within Ministry of Health, NACA, Development Partners and Civil Society Organizations who provided the data. The National AIDS Coordinating Agency would especially like to thank the Technical Working Group and national HIV response stakeholders for their dedication, perseverance and commitment in ensuring that the report was completed.

To every other individual, institution or stakeholders who may have contributed to this report in direct or remote ways, thank you!

ROBERT SELATO

ACTING MONITORING AND EVALUATION MANAGER

ACRONYMS

| AIDS | Acquired Immune-Deficiency Syndrome |
|--------|--|
| ANC | Antenatal Care |
| ART | Antiretroviral therapy |
| ARV | Antiretroviral |
| BAIS | Botswana AIDS Impact Survey |
| BBSS | Botswana Sentinel Surveillance Survey |
| BNTP | Botswana National Tuberculosis Program |
| CD4 | Cluster of Differentiation |
| CSO | Civil Society Organization |
| DHMT | District Health Management Team |
| DSP | Department of Social Protection |
| EID | Early Infant Diagnosis |
| GARPR | Global AIDS Response Progress Report |
| HAART | Highly Active Antiretroviral Therapy |
| HIV | Human Immune-Deficiency Virus |
| HTC | HIV Testing and Counselling |
| IDCC | Infectious Disease Care Centre |
| IDU | Injecting Drug User |
| M&E | Monitoring and Evaluation |
| МОН | Ministry of Health |
| MSM | Men Who have Sex with Men |
| MTCT | Mother-to-Child Transmission |
| NAC | National AIDS Council |
| NACA | National AIDS Coordinating Agency |
| NASA | National AIDS Spending Assessment |
| NSFII | National Strategic Framework I |
| OVC | Orphans and Vulnerable Children |
| PEPFAR | President's Emergency Plan for AIDS Relief |
| IPMS | Integrated Patient Management System |
| PIMS | Patient Information Management System |
| PMTCT | Prevention of Mother-to-Child Transmission |
| SMC | Safe Male Circumcision |
| SRH | Sexual and Reproductive Health |
| STI | Sexually Transmitted Infections |
| TB | Tuberculosis |
| TWG T | Technical working group |
| UNAIDS | Joint United Nations Program on HIV/AIDS |
| WHO | World Health Organization |

EXECUTIVE SUMMARY

The overall goal of the assignment was to produce a Global AIDS Response Progress Report (GARPR) for Botswana based on the latest available data for 2014 involving all sectors of the response to HIV and AIDS. The scope of the work for the progress report was drawn from the standardized UNAIDS Global AIDS Response reporting guidelines for 2015 available on the UNAIDS website and the national intervention documentation process. The focus of the work was on data collection and report writing on 2014 Global AIDS Response Progress Report (GARPR) and Universal Access health sector indicators. The online reporting tool was populated using data collected from programs, HIV estimates and projections before writing the narrative report. The report will assist in focusing the response on areas where action is most needed to reach priority targets and elimination commitments by the end of 2015.

Although, the HIV incidence rate has marginally decreased, Botswana needs to design and implement innovative prevention measures in order to achieve the target of an HIV incidence of less than 1%. The current HIV incidence for Botswana is 1.35%. Although the percentage of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who rejected major misconceptions about HIV transmission or prevention slightly increased from 42.1% in 2008 to 47.9% in 2013, the country has to invest more in behavioral interventions that are specifically aimed at reducing multiple concurrent partnerships, promotion of consistent use of condoms and increase in knowledge about HIV among young people at all levels the national response. For instance, the BAIS IV report indicates that condom use at last sex with non-regular partner among the youth aged 15 to 24 years declined from 78.4% in 2008 to 65.2% in 2013. The last two BAIS reports also show that HIV transmission continued to be exacerbated by declining use of condoms during the last sexual intercourse from 90.2% (BAIS III, 2008) to 81.9% (BAIS IV, 2013) by women and men aged 15-49 years who had more than one partner in the past 12 months at the time of the survey.

Although the PMTCT program has done very well in Botswana compared to other countries, it is worrisome to note that in 2014 the percentage of HIV-positive pregnant women who received antiretroviral medicine to reduce the risk of mother-to-child transmission decreased to 90.8% (11845) from 95.9% in 2013. Furthermore, due to poor turnaround times at the laboratory, only 41.6% of infants born to HIV-positive women received a virological test for HIV within two (2) months, a figure that was even lower than that for 2013 (47%). While the percentage of these babies who will ultimately receive their results improves over time, the purpose of early infant diagnosis and subsequently early treatment is lost for those who do not receive their results in time.

Although the ARV program has done well since inception, there are concerns with loss to follow-up rates which have steadily increased among adults. Among the challenges encountered with growing numbers has been less time for one on one counselling of patients and aggressive follow up through community channels for those who fail to honor clinic appointments. There are also high treatment failure rates for adults (an increase in first line adult failure rate from less than 6% recorded in 2012 to over 10% in 2013) due to the challenges of adherence to counselling and monitoring. As a mitigation measure, the Ministry of Health is strengthening the integration of HIV/TB/RMNCH/SRH-R/NCDs services at all levels in order to ensure that those who are lost to

follow up at one program can be recovered when coming to utilize a different program. The ART coverage is also compromised by the low testing rate of 63.7% (according to BAIS IV) of the population aged 15- 49 years who in the 12 months preceding the survey had an HIV test and were informed of the results.

According to the interviews with program people, it was ascertained that the national HIV response monitoring and evaluation system in the country is experience some challenges regarding data collection. A lot of the information is still collected using paper based system and completeness, timeliness and accuracy remain a challenge to be addressed. There are also challenges with Monitoring and Evaluation personnel at district and national level. Most of the positions were supported by development partners and when funding ended most of the officers sought other opportunities elsewhere. The lack of monitoring and evaluation skills throughout the country has repeatedly been acknowledged through various assessments and compromises data quality, data analysis, and data interpretation. This challenge was also experienced during the extraction of data from the national data warehouse for this report.

Another challenge currently faced by the national response is the lack of regular monitoring and evaluation audits and routine data quality assessments. This has been due to the shortage of dedicated data personnel and weak linkages between data generation points and national level system. It was also noted that data is generated by service providers whose primary duty is not data collection. This eventually compromises data completeness, quality and processing and reporting. In order to address these challenges, the country has submitted a concept note to Global Fund aimed at, inter alia, requesting for funding to strengthen the monitoring and evaluation system.

The Government of Botswana is reinforcing an aggressive national response that is focused on comprehensive service provision in a systematic and proactive manner to all Batswana. Although there are inadequate systems for identification and registration of orphans, weak linkages with government services across ministries for continuity of care and inadequate coordination of the program mainly due to lack of human resources, the main mitigation initiative is to strengthen coordination mechanisms, including a comprehensive family-centered plan of action for the protection, care, and support of OVC and their care-givers.

The national response is also being urged to prepare for the rising trend of non-communicable diseases that arise from treatment regimens and other interventions. Such conditions include oncological morbidities, heart disease, and diabetes, among others. While maintaining the priority focus on addressing HIV infection and the treatment of AIDS, concurrent programs must be put in place for capacity building to deal with the increasing disease burden over the implementation of the new strategies. This approach will fast track the HIV response and improve the efficiency and sustainability of the national response.

1. Introduction

1.1: Background

Since independence in 1966, Botswana has made remarkable progress in the areas of health, education, the rule of law, general welfare of the people, and the macro-economic situation. However, the emergence of HIV in the mid-1980s, and its spread country-wide, has undermined post-independence gains, as evidenced by declining life expectancy at birth, and increasing underfive mortality and crude death rates. Although the main mode of transmission is heterosexual, the epidemic is spreading along the fault lines of socioeconomic development such as gender inequality, poverty, food insecurity and gender-based violence among others. The problems are compounded by behavioral practices such as multiple and concurrent partnerships (MCP), inconsistent use of male and female condoms, low levels of male circumcision and the presence of sexually transmitted infections (STIs).

The Botswana HIV response is also guided by national strategic frameworks that serve as a guide to all participating partners in their programming, implementation, and service delivery. Since 1985, Botswana has responded to HIV through five successive generations of national strategic plans/frameworks (Short Term Plan I, Mid Term Plan I, Mid Term Plan II, National Strategic Framework I and National Strategic Framework II). The second strategic framework (National Strategic Framework II) was developed for the period 2010 to 2016 with the aim of preventing new infections through a focus on behavioral change; strengthening systems through which the national response could be intensified; strategically managing information for monitoring, learning and (re-) programming; and scaling up of treatment, care and support. The National Strategic Framework II (NSF II) was revised in 2014. Although NSF II has been extended to 2017 with new strategies that refocus the response towards high impact interventions, the revised framework upholds the original four thematic areas as shown below:

- Preventing New Infections
- System Strengthening
- Strategic Information Management
- Scaling Up Treatment, Care And Support

The national response's strategic planning process has, over the years, been supported by sound HIV policies. The first National Policy on HIV and AIDS was developed in 1993 and subsequently revised in 1998 and 2013. The national HIV policy emphasizes a multi-sectoral approach to HIV and AIDS response and established structures for all sectors (public, civil society and private) to participate in the National Response. An oversight body, National AIDS Council (NAC), was established to give policy direction to all participating stakeholders from Government, Civil Society to Development Partners. The implementation of HIV strategies is also based on the "Three One Principles" of One Coordinating Body, One Strategic Framework and One Monitoring and Evaluation system to avoid duplication of efforts.

Periodically, HIV interventions outlined in strategic frameworks are assessed through surveys such as sentinel surveillance and national AIDS impact surveys. These surveys provide information on the behavioral patterns of the population, HIV prevalence and incidence rates. It is critical to document progress made in responding to the HIV epidemic. The documented information is used for continuous strategic prevention and national HIV program planning and guide future HIV and AIDS research.

1.2: Justification for the Review

In 2001 the United Nations General Assembly Special Session (UNGASS) on HIV and AIDS agreed on a comprehensive framework that sought to achieve the Millennium Development Goal (MDG) 6 whose main objective is to halt the spread of HIV and to reverse its spread. This special session placed emphasis on a multi-sectoral approach to the HIV and AIDS at global, regional and country levels. This was followed by the 2006: Political Declaration on HIV/AIDS which recognized the urgent need to achieve universal access to HIV treatment, prevention, care and support. In 2011, the United Nations General Assembly High Level Meeting (HLM) endorsed the Political declaration on HIV for intensifying efforts to intensify HIV and AIDS response with 10 specific targets:

- i. Reduce sexual transmission by 50% by 2015
- ii. Reduce transmission of HIV among people who inject drugs by 50% by 2015
- iii. Eliminate new HIV infections among children by 2015 and substantially reduce AIDS-related maternal deaths
- iv. Reach 15 million people living with HIV and lifesaving antiretroviral treatment by 2015
- v. Reduce tuberculosis deaths in people living with HIV by 50% by 2015
- vi. Close the global AIDS resource gap by 2015 and reach annual global investment of US\$22-24billion in low and middle income countries
- vii. Eliminate gender inequalities and gender-based abuse and violence and increase the capacity of women to protect themselves from HIV
- viii. Eliminate stigma and discrimination against people living with and affected by HIV through the promotion of laws and policies that ensure the full realization of human rights and fundamental freedoms
- ix. Eliminate HIV-related restrictions on entry, stay and residence
- x. Eliminate parallel systems for HIV-related services to strengthen integration of the AIDS response in global health and development efforts

The 2011 UN Political Declaration on HIV agreed on the need to measure the success on the war against HIV through the above stated concrete time bound targets and this resulted in the need for careful monitoring of the commitments made by member states. In the HLM declaration (para. 105) countries agreed to

"...provide to the General Assembly an annual report on progress achieved in realizing the commitments made in the present Declaration..."

Since 2011, national targets were being assessed on an annual basis and required interventions were prioritized together with resource allocation. A midterm review of the targets was conducted in 2013. This year, countries will have a chance to assess their achievements against the targets of 2015. The reported data is utilized for national-level reviews (including the Global Fund New Funding Model and similar reprogramming efforts), regional reviews, and global analysis. The Declaration requests that the United Nations Secretary-General reports to the General Assembly on progress in implementation, in accordance with the global reporting on the Millennium Development Goals.

At the HLM, bold new targets on HIV were set to be achieved by 2015 and a framework of core indicators was also developed. The Global AIDS Response Progress Reporting (GARPR) indicators (previously known as UNGASS indicators) used to be reported at the global level every second year are now being reported annually until 2015. A 2013 midterm Review of progress towards the targets was conducted in July 2014, which showed encouraging results and paved the way to reorienting the national response. Botswana was among the 171 countries that reported and the analysis of country reports was featured in the 2013 Global Report on AIDS.

1.2: Scope of the Review

The scope of the work for the progress report was drawn from the standardized UNAIDS Global AIDS Response reporting guidelines for 2015 available on the UNAIDS website and the national intervention documentation process. The focus of the work was on data collection and report writing on 2014 Global AIDS Response Progress Report (GARPR) and Universal Access health sector indicators. In collecting data for each indicator, the following six key issues were described based on the GARPR 2015 Guidelines:

- i. Summary of what the indicators measures,
- ii. Rationale for the indicator.
- iii. Numerator, denominator and calculation,
- iv. Recommended measurement tools,
- v. Measurement frequency, and
- vi. Strengths and weaknesses of the indicator

The consultant populated the online reporting tool using data collected from programs, HIV estimates and projections before writing the narrative report. The report will assist in focusing the response on areas where action is most needed to reach priority targets and elimination commitments by the end of 2015.

1.3 Purpose of Assignment

1.1 Overall Goal

The overall goal of the consultancy is to produce a Global AIDS Response Progress Report for Botswana based on the latest available data for 2014 involving all sectors of the response to HIV and AIDS.

1.2 Specific Objectives

- Update data on core indicators for GARP reporting to measure and report on national progress.
- Conduct a desk Review and analyze all collected data and reports, including but not restricted to the draft Mid-term Review Report of High Level Meeting Target by NACA (2013).
- Facilitate a stakeholder consensus workshop (Civil Society and Government Agencies).
- Produce a narrative report, including documentation of processes, best practices, challenges and recommendations.

1.3 Specific Tasks

- Prepare and present an inception report inclusive of work plan and schedule for consultations
- Complete GARPR online reporting tool
- Produce and present a narrative draft report to NACA.
- Facilitate a national consensus workshop to validate the report.
- Incorporate comments from the validation workshop to finalize the report.

1.4 Expected Outputs

- A completed and uploaded GARPR online tool
- A first draft report submitted to NACA for comments within 27 working days after signing contract.
- A second draft with comments from NACA within three working days after receiving comments
- Final draft incorporating comments from the validation workshop within 2 working days after the workshop

2. METHODOLOGY

2.1: Introduction

The process entailed utilisation of existing data sources and was divided into two phases:

- i. Secondary data collection that comprised Data extraction from the national databases, and national SPECTRUM file of 2014.
- ii. Data analysis and report writing.

A highly consultative process which engaged stakeholders in each step of the documentation process for country ownership purposes was followed. This approach largely employed data collection and analysis techniques drawn from the social research and participatory action research tradition. The consultant worked closely with a core working group led by NACA with backstopping support from UNAIDS, MOH and WHO. The process of updating SPECTRUM was closely linked to the data abstraction for online reporting.

2.2: Desk Review

A comprehensive review of existing reports, assessments, evaluations, situational analyses, and other relevant documents related to the national HIV and AIDS response in Botswana was undertaken. The desk review provided a deeper understanding of the progress made in achieving the HLM targets in Botswana. The scope of the desk review included evaluating implementation status as well as progress in attaining HLM set targets from existing national data, and identifying barriers and constraints to implementation. Documents reviewed during the desk review included (but were not limited) to the following:

- BAIS IV report
- Investment Case
- The Global Fund 2015 Concept Note
- ANC Sentinel surveillance reports
- ART, HTC, PMTCT, STI, SMC, TB and OVC Program reports
- NSF II Mid-Term Review report
- Revised second National Strategic Framework on HIV and AIDS
- Strategic information systems
- National HIV estimates from Spectrum software to provide denominators.
- Gender Assessment
- RMNCH-PMTCT Evaluation Report
- Stigma Index Report
- Shuga Study report on stigma and discrimination

2.3: Key Informant Interviews

The consultant conducted key informant interviews with national stakeholder representatives identified under the guidance of the Technical Working Group (TWG). Informants were drawn from all sectors of the national response (civil society, development partners, private sector and government). The information was collected from key informants such as directors, program managers and other persons responsible for management and coordination of programs (ART, PMTCT, HCT, TB, STI, SMC, OVC and Gender).

The focus of the key informant interviews was on progress in improving health status and availability of, access to, coverage and quality of HIV intervention packages; the key achievements in implementation of relevant intervention package and the gap analysis; the innovations and the proposed solutions and recommendations. Through the desk review, patterns and trends on progress were identified and documented.

2.4: National Consultations

National level round-table discussions were held based on the ten HLM targets. The purpose of the round-table discussions was to reach consensus on the data retrieved from program data, desk reviews and key informants. Round-table discussions facilitated interaction and debate amongst the stakeholder representatives. The results of these sessions provided the consultant with an indepth understanding of the issues related to the national targets for the purpose of discussion in this narrative report.

2.5: Limitations of the review

The review was constrained by the unavailability of new data for targets indicated in the GARPR online tool. New data for indicators of Targets 1, 6, 7, 8 and 10 was not generated in 2014 because a national survey had been conducted in 2013 and discussed in the 2013 Global AIDS Response Progress Report. It should also be noted that data targets 2 and 9 are not applicable to Botswana, and hence data could be not be collected for the associated indicators. Target 2 focusses on reduction of transmission of HIV among people who inject drugs by 50% by 2015 and is not tracked because in Botswana because the assumption is that transmission through drug injection is minute. The target focusing on elimination of HIV-related restrictions on entry is tracked at the global level. In any case Botswana does not have any restrictions to entry related to HIV transmission.

As for Target 5 on reduction of tuberculosis deaths in people living with HIV by 50% by 2015, Botswana has never collected data for the indicators since 2011 due to the lack of such indicators at national level. However, the Ministry of Health has just finished revising data collection tools for TB/HIV integrated services. The tools are being pilot tested in a few districts before rolling them out country wide.

It should also be noted that data on syphilis and gonorrhea is not routinely collected in Botswana since the country has adopted the syndromic approach for management of STIs. However, such information is collected in national surveys every few years. For the indicator on women accessing antenatal care (ANC) services and tested for syphilis, the 2014 program data did not collect such data and hence the reliance on the ANC sentinel surveillance which was last conducted in 2011.

The review encountered challenges in extracting data from the databases due to the unavailability of some of the Data Managers and Monitoring and Evaluation officers. Most of the positions of Monitoring and Evaluation officers were supported by development partners and when funding ended most of the officers sort other opportunities elsewhere. Data is generated by service providers whose primary duty is not data collection. This eventually compromises data completeness, quality and processing and reporting.

3. Data Analysis and report writing

Through round table discussions with national program managers and data managers, consensus was reached on the type of data and data sources. The Data Managers from various HIV programs submitted electronic copies of quarterly, annual and special survey reports with quantitative and qualitative data for analysis. The data was then recorded and organized according to the indicators defined by the GRAPR toolkit. The data was collated and entered into the GARPR online tool. Some of the data was captured from the Spectrum database and 2014 progress reports. All the quantitative data were analysed using Microsoft Excel platform to generate numerators, percentages and charts. The data was then consolidated according to the HLM targets as findings of the Botswana GARPR 2014 progress report. Specifically, in collecting the data, the following aspects were observed during data collection and analysis:

- The Technical Working Group assisted in gathering information from all sources
- All recording forms were photocopied and electronics copies were saved to guard against loss, accidental erasure, or other problems
- Entering narratives, numbers, and other information into a computer program, where they can be arranged and/or worked on in various ways
- Performing any mathematical or similar operations needed to get quantitative information ready for analysis. These included entering numerical observations into a chart, table, Excel spreadsheet and figuring the measures of central tendency (mean, mode and median) of a set of numbers.
- Transcribing the proceedings of consensus building meetings with TWG members

The analysis involved examining data collected in ways that revealed the relationships, patterns and trends that can be found within the national response. The data was subjected to statistical operations and compared to other information from the previous GARPR outputs. Conclusions were then drawn from the data based on an accurate assessment that provided a better understanding of the national response in Botswana.

4. Progress Report Findings

This Chapter highlights progress on each Target, data gaps, programmatic achievements and challenges, based on the information gathered from key informant interviews with program officers.

4.1: Target 1 - Halve Sexual Transmission of HIV by 2015

a) General Population

In order to measure progress regarding this target, the 2013 BAIS survey data were used to determine the incidence and prevalence of HIV. According to the Botswana AIDS Impact Survey (BAIS IV, 2013), the country has an HIV incidence rate of 1.35% in the general population which dropped from 1.45% in 2008 (BAIS III). Botswana, characterized as a country with a generalized HIV epidemic, has an estimated HIV prevalence of 18.5% among the population aged 18 months and above. This is slightly higher than the 2008 prevalence of 17.6% (BAIS III) and 17.1% of 2003 (BAIS II). The epidemic has a gender bias with females having recorded a higher HIV prevalence of 19.2% compared to their male counterparts (14.1%) in 2013. These statistics indicate that the HIV incidence has marginally decreased, and much more prevention efforts are required if Botswana is to achieve the target of halving the sexual transmission rate by 2015.

i. Knowledge about HIV Prevention

Evidence shows that HIV epidemics are perpetuated through primarily sexual transmission of infection to successive generations of young people. Furthermore, sound knowledge about HIV is an essential pre-requisite for adoption of behaviors that reduce the risk of HIV transmission. As a strategy of progressing towards universal knowledge of the essential facts about HIV transmission, the percentage of young women and men aged 15-24 years who both correctly identify ways of preventing the sexual transmission of HIV and who rejected major misconceptions about HIV transmission was determined.

According to the last population census (Statistics Botswana, 2011), slightly over a fifth (426,400) of Botswana's population are young people aged 15-24 years and the 2013 BAIS IV indicates that this age group has a HIV prevalence of 4.74%. The same survey shows that the same age group has a low level of comprehensive knowledge of HIV (47% in 2013), although it has to some extent improved compared to 2008 (43%) and 2004 (28.1%). When broken down by gender, the 2013 survey reveals that there was no difference in the level of knowledge between males (47.1%) and females (47.4%) aged 15-24 years who gave correct answers to all five questions on ways of preventing the sexual transmission of HIV and rejected major misconceptions about HIV transmission.

ii. Sex before the Age of 15 years

HIV prevention strategies, the world over, encourage countries to delay the age at which young people first have sex and discourage premarital sexual activity. This strategy is based on the evidence that delaying sexual debut reduces susceptibility to infection per act of sex, at least for women. In light of this, this indicator measures progress in increasing the age at which young women and men aged 15–24 years first have sex. The 2013 survey (BAIS, IV) indicates that the percentage of young people aged 15-24 years who had sex before the age of 15 years was 4.4% in 2013 compared to 3.5% in 2008. There were more males (6.8%) than females (2.7%) who reported that they had sexual intercourse before the age of 15 years. Of the 4.4% reporting early sexual debut, 24.8 percent of females with early sexual debut reported not giving consent at the time of intercourse. The Median age at first sex reported in BAIS IV was 18 years with an age range of 10 to 24 years.

iii. Multiple Sexual Partners

Literature has shown that the transmission of HIV is largely influenced by unprotected sex among people with a high number of partnerships and individuals who have multiple partners have a higher risk of HIV transmission than individuals who do not link into a wider sexual network. For global reporting, this indicator measures progress in reducing the percentage of people who have higher-risk sex. Approximately sixteen percent (15.8%) of women and men aged 15-49 years reported to have had sexual intercourse with more than one partner in the last 12 months in 2013 and within the same age group, 81.9% reported having used a condom during the last sexual intercourse. The BAIS IV report indicates that condom use at last sex with non-regular partner among the youth aged 15 to 24 years declined from 78.4% in 2008 to 65.2% in 2013. The last two BAIS reports also show that HIV transmission continued to be exacerbated by declining use of condoms during the last sexual intercourse from 90.2% (BAIS III, 2008) to 81.9% (BAIS IV, 2013) by women and men aged 15-49 years who had more than one partner in the past 12 months at the time of the survey. As for young people, the percentage of people 15-24 years of age reporting the use of condoms every-time they had sex with non-regular partners in the last 12 months decreased from 78.4% in 2008 to 65.2% in 2013.

b) Size Estimations for Key Populations

i. Sex Workers

This indicator relies on data that was collected during the 2012 Mapping, Size Estimation & Behavioral and Biological Surveillance Survey of HIV/STI among Select High-Risk Sub-Populations in Botswana (BBSS) since no other survey has been conducted. Although the survey which was conducted in three major areas of Botswana (Gaborone, Francistown and Kasane), indicate that in 2012 there were 4,000 estimated sex workers in the three districts, there is uncertainty in determining the number of FSW in Botswana. This is further compounded by the fact that some of the sex workers in Botswana are foreigners as indicated by the BBSS results in which 65.5% of FSW identified themselves as Batswana. Using a proxy of 3-6% of all females 15-49 years are involved in sex work based on "Estimates of the Number of Sex Workers in Different Regions of the World Study", it can be assumed that there are 18,000 FSW in Botswana (at 3%).

According to the same survey (BBSS), the HIV prevalence among female sex workers (FSW) was 61.9%, with an estimated incidence rate of 12.5%. About half (54.8%) of FSW had been tested for HIV. With Botswana's unemployment rate of 20%, approximately 62.7% of FSW reported engaging in sex work due to unemployment with 60% reporting that they had no other occupation. Sex workers who reported, "Always using a condom" were estimated at 67%. The female sex workers who reported not using condoms indicated that they were paid specifically not to do so, and 18.6% of FSW reporting they were forced not to use condoms.

ii. Men who have Sex with Men (MSM)

The data for this indicator is based on the BBSS conducted in 2012 and is also documented in the previous GARPR reports. A total of 454 men who have sex with men were surveyed and 97.6% identified themselves as Batswana. The survey estimated 13.1% HIV prevalence of MSM and an incidence of 3.6% among MSM. The study also revealed that 46.7% MSM also reported having

female sexual partners in the past six months while 65.9% of MSM reported "always using condoms" during anal sex in the last six months.

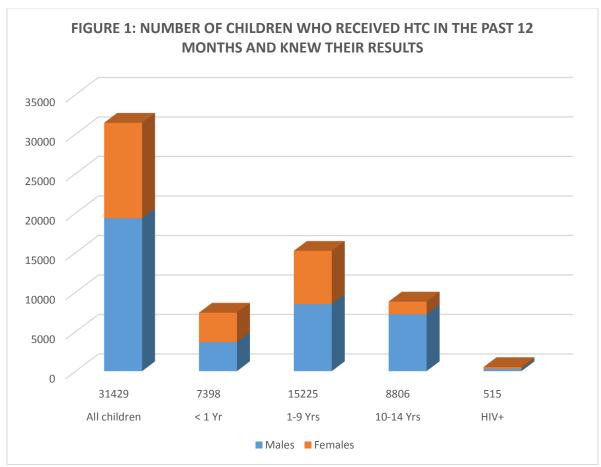
Although the BBSS shows that over sixty percent of MSM are not aware that anal sex is associated with higher risks of HIV acquisition and less than half (49.4%) of MSM surveyed reported receiving HIV related information provided in the past year. The country does not currently have a specific strategy that addresses the needs of key populations. However, specific recommendations to target those most-at-risk of HIV acquisition as well as hard-to-reach populations in Botswana have been documented in NSF-II and the intention is to be all inclusive in programming adopted. In August of 2014, the Supreme Court of Botswana ruled that all HIV positive prisoners, regardless of nationality must be provided with public access to ART. There is currently little public information in regard to the HIV status of prisoners in Botswana.

c) HIV Testing and Counselling

HIV testing is an entry point for protecting oneself, preventing infecting others and making a decision to seek treatment. It is therefore important for individuals to know their HIV status. In order to measure progress in implementing HIV testing and counselling (HTC), percentage of women and men aged 15-49 years who received an HIV test in the past 12 months and know their results was determined.

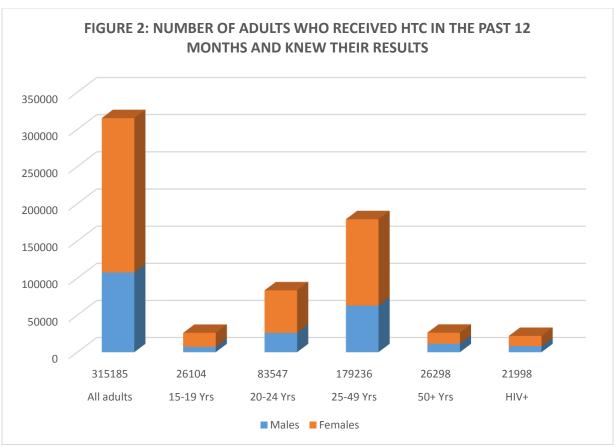
Botswana provides HIV Testing and Counselling (HTC) services through a network of public and private health facilities and non-governmental organization (NGO) sites. A total of 636 public health facilities and 32 civil society facilities were providing HTC services by end of 2014. There is no data from private sector. The provision of HTC services is guided by comprehensive national guidelines which encompass both Client-Initiated HIV Testing and Counselling mostly provided in community-based settings and Provider-Initiated Testing and Counselling (PITC) mostly practiced in health facilities. Community based testing has also proved to be a preferred model of HIV testing through initiatives such as "Tsosoloso HTC Campaign" Maun HTC campaign which seem to reach more people with HIV testing.

Data for this indicator was extracted from the 2014 program data compiled from the public health facilities and civil society organizations (CSO) providing HTC services. The data collection tools for CSO's are not the same as those of Public Health Faculties, e.g. CSO doesn't disaggregate the 0-4 age group. In 2014, a total of 31,429 children aged between 0 and 14 years received an HIV test in the past 12 months and knew their results is reflected in Figure 1 below. The HIV sero-positivity rate was 1.64% among children aged below 15 years. Although, generally, there were more male than female children who tested, the difference was substantial in the 10-14 years age group.



Source: Botswana National HTC Program data, 2014.

The 2014 national HTC program data reveals that a total of 315185 males and females aged 15 years and older received HIV testing and counselling in the past 12 months and knew their results is reflected in Figure 2 below. The HIV sero-positivity rate was 6.98 percent among adults aged 15 years and above. When the data is disaggregated by age, more females tested for HIV than male adults.



Source: Botswana National HTC Program data, 2014.

d) Sexually Transmitted Infections

Data on syphilis and gonorrhea is not routinely collected. Botswana uses the syndromic approach for management of STIs. However, such information is collected in national surveys every few years. For the indicator on women accessing antenatal care (ANC) services and tested for syphilis, the 2014 program data did not collect such data and hence the reliance on the ANC sentinel surveillance which was last conducted in 2011. The 2011 ANC sentinel surveillance showed that out of the 6745 pregnant women who participated, 6223 (92.3%) women tested for syphilis. It should be noted that at health facility level, syphilis data is reported as part of other sexually transmitted infections (STI) and hence could not be disaggregated by the GARPR indicators on syphilis.

Regarding urethral discharge, in 2014, there were 26,481 men reported with urethral discharge in the past 12 months compared to 26,540 reported in 2013. The 2014 National STI program data also indicates that a total of 15,838 (8,046 males and 7,792 females) people who reported with genital ulcer disease during the 2014 reporting period. This was lower than the 19,130 (9,264 males and 9,866 females) figure reported in 2013.

e) Male Circumcision

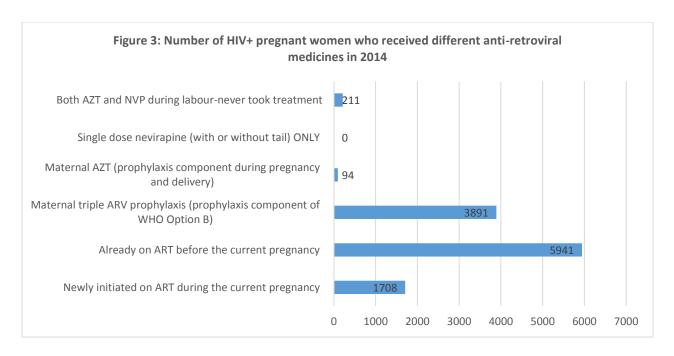
According to the Male Circumcision program data, a total of 30,033 males (21,689 aged 0-14 years and 8,344 aged 15 years and above) were circumcised in 2014. Although male circumcision in males 10-64 years remains low in Botswana, it rose significantly from 11% in 2008 to 24.5% in 2013 (BAIS IV). The set national target is 80% amongst HIV negative men aged 0-49 years, translating to 385 000 men by 2016. Most clients who have come forward for male circumcision have been adolescents and young adults.

4.2: Target 3 - Eliminate New HIV Infections among Children by 2015 and Reduce AIDS-Related Maternal Deaths

The risk of mother-to-child transmission can be significantly reduced by providing antiretroviral medicine (as lifelong therapy or as prophylaxis) for the mother during pregnancy, labour and delivery, with antiretroviral prophylaxis for the infant, and antiretrovirals to the mother or child during breastfeeding (if breastfeeding), and use of safe delivery practices and safer infant feeding. The data will be used to track progress toward global and national goals towards elimination of mother-to-child transmission; to inform policy and strategic planning; for advocacy; and leveraging resources for accelerated scale up. It will help measure trends in coverage of antiretroviral prophylaxis and treatment, and when disaggregated by regimen type, will also assess progress in implementing more effective regimen and ART.

In 2014, the PMTCT programme was available in all the 634 health facilities that provide Maternal Child Health services. The percentage of pregnant women who were tested for HIV and received their results (during pregnancy, during labour and delivery, and during the post-partum period, including those with previously known HIV status) was 94.3% in 2014, lower than the percentage for 2019 (99%). However, male involvement remains low at 18% in 2014 a slight increase from 11% in 2011. The PMTCT data also shows that for the same period, the absolute number of women who newly tested HIV positive gradually decreased from 14,058 in 2011 to 11, 845 in 2014. The 2014 HIV positivity rate among pregnant women re-tested at 36 weeks of gestation remained below 2%.

In 2014 PMTCT data shows that 90.8% (11845) of HIV-positive pregnant women received antiretroviral medicine to reduce the risk of mother-to-child transmission compared to 95.9% in 2013. The 2014 PMTCT data also reveals that out of the 11 845 HIV positive pregnant women who received antiretroviral medicine, about half of them (50.2%) were already on ART before their pregnancy in 2014 as illustrated in Figure 3 below.



A total of 1730 women living with HIV were provided with antiretroviral medicines for themselves or their infants during the breastfeeding period in 2014. In 2014 the percentage of infants born to HIV-positive women who received a virological test for HIV within two (2) months of birth was lower (41.6%) than that for 2013 (47%). The Early Infant Diagnosis (EID) data also shows that the proportion of HIV exposed infants tested at age 6-8 weeks and found to be HIV positive over the 2011-2014 was decreasing. The estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months was 1.8% in 2014 compared to a high of 2.49% in 2013.

Botswana has introduced HIV DNA PCR testing to facilitate early infant HIV diagnosis before they became symptomatic. The Early Infant Diagnosis (EID) program data revealed that early infant diagnosis, babies receiving a virological test for HIV within 2 months of birth, has remained below 50% since introduction of the program. In 2014, 46% of infants were tested for HIV within two months of birth.

The PMTCT program data show a levelling off in the uptake of Co-trimoxazole among HIV exposed babies at 6-8 weeks from 70% in 2011 to 65% in 2013 and 68.2% in 2014. The data also indicates that breastfeeding which is a recognised viable option to reduce child mortality regardless of HIV status, was chosen by only 18% of the HIV infected mothers in 2014. The percentage of infants born to HIV-infected women (HIV-exposed infants) who received antiretroviral prophylaxis to reduce the risk of early mother-to-child- transmission in the first 6 weeks (i.e. early postpartum transmission around 6 weeks of age) was 92.8% in 2014, up from 95.6% in 2013 and higher at 88.04% in 2012.

4.3: Target 4 - Reach 15 million people living with HIV with lifesaving antiretroviral treatment by 2015.

Evidence indicates that antiretroviral therapy (ART) reduces HIV-related morbidity and mortality amongst those living with HIV, as well as HIV transmission. Botswana continues to provide free ARVs to its citizenry. The ARV data flow consists of satellite clinics reporting to the 'mother' hospital, which in turn combines all data for the ART site, and then reports to the national office. As of December 2014, there were 34 ART sites and 561 satellite clinics across the country dispensing ARVs in Botswana. The ARV program data indicates that by the end of December 2014, there were 247,947 children and adults on HAART. This translates to 63.2% of total people living with HIV, which is lower than 69.9% recorded in 2013. A total of 8 578 of these were children. A total of 229,224 patients were on treatment in the public sector. It should be note that in 2014, all patients that were being treated in the private sector under the Government's outsourcing Program were transferred to the public sector. The program data also shows that 18,723 patients were being treated in the private sector through Medical Aid Schemes.

One of the goals of any antiretroviral therapy programme is to increase survival among infected individuals. As antiretroviral therapy is scaled up in Botswana, it is also important to understand why and how many people drop out of treatment programs. This indicator measures progress in increasing survival among infected adults and children by maintaining them on antiretroviral therapy. These data can be used to demonstrate the effectiveness of those programs and highlight obstacles to expanding and improving them. In 2014, the retention data for 12 months, 24 months and 60 months were not collected and hence it was difficult to determine percentages of adults and children with HIV known to be on treatment 12, 24 and 60 months after initiation of antiretroviral therapy. This was due to the fact that the data warehouse has not been updated since 2012. Only data from the Integrated Patient Management System (IPMS) was available in the data warehouse, while data from other sources such as Patient Information Management System (PIMS) and manually collected data have not been updated due to lack of funds.

Whilst data on the number of people who had a virological test was available, the number of people who were virally suppressed could not be determined with the current system. Botswana uses a threshold of less than 400 copies for viral suppression compared to 1000 copies per ml used for GARPR reporting. Furthermore, information on ARV stock out was not collected at facility level in 2014. However, the 2014 Central Medical Stores (CMS) program data shows that there were 86 distribution centers (not ARV dispensing facilities) throughout the country which collectively reported a stock out rate of 26%, and this should not be used as a proxy for ARV stock out.

4.4: Target 5 - Reduce tuberculosis deaths in people living with HIV by 50% by 2015

With a rate of 61% of patients with active tuberculosis (TB) being co-infected with HIV, tuberculosis is a leading cause of morbidity and mortality in people living with HIV in Botswana. Intensified TB case-finding and access to quality diagnosis and treatment of TB in accordance with national guidelines is essential for improving the quality and quantity of life for people living with

HIV. Therefore, this target provides opportunity for measuring progress in detecting and treating TB in people living with HIV.

In 2014, a total of 1543 people with HIV infection received ART in accordance with the nationally approved treatment protocol and were started on TB treatment. However, as is the case in the previous reporting periods, there was no data that could be used to determine the following indicators:

- Percentage of adults and children living with HIV newly enrolled in care who are detected having active TB disease,
- Percentage of adults and children newly enrolled in HIV care starting isoniazid preventive therapy (IPT), and
- Percentage of adults and children enrolled in HIV care who had their TB status assessed and recorded during their last visit

The revision of the data collection tools for TB/HIV integrated services has just been completed and the tools are being pilot tested in a few districts before rolling them out country wide. The revised tools do capture these indicators. However, an analysis of program data indicates that there is there is little attention being paid to the screening of pregnant women and lactating mothers for tuberculosis. In addition, there is no data on TB in pregnancy yet data from the tuberculosis program demonstrated that TB in under-five children, the usual source of which is their mothers, remained a challenge. This was compounded by the weak linkages between the TB and PMTCT programmes and services.

4.5.: Target 6 - Close the Global AIDS Resource Gap by 2015

This target determines how funds are spent at the national level and where those funds are sourced in an accurate and consistent manner. Due to the scarcity of resources, countries are expected to accurately track in detail the use of available resources for various HIV and AIDS-related programs at the national level and where the funds originate. The National AIDS Spending Assessment was not conducted in 2014. National Health Accounts, which incorporates NASA categories is currently underway. However, based on the Investment Case in 2014, the projected costs of HIV and AIDS-related spending were taken from the Spectrum modeling exercise. It should be noted that the results for the 2014 Investment Case are being updated taking into consideration revised AIM file in SPECTRUM, roll out of Option B+ in 2015, new drug costs and inclusion of TB module.

According to the Investment Case (NACA, 2014), total costs are projected to rise from USD274 million in 2014 to USD339 million in 2030 (measured in constant 2014 prices), assuming CD4 count of 350 with the current prevention strategies and when other scenarios are taken into consideration (Health System Strengthening CD4<350 + Max Prevention, without B+; HSS + CD4<350 + Max Prevention, including B+; HSS + CD4<500 + Max Prevention, without B+ and HSS + CD4<500 + Max Prevention, including B+), the total cost of each of the four enhanced scenarios varies between 9% and 14% above the baseline by 2030.

4.6: Target 7 - Eliminating Gender Inequalities

In sub-Saharan Africa, high HIV infection in women is linked to the problem of violence against women which is deep-rooted and pervasive gender inequalities. It is for this reason that the HLM calls for monitoring progress in reducing prevalence of intimate partner violence against women (as an outcome itself and as a proxy for gender inequality). The indicator on the proportion of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months provides such data. The reporting guidelines define an intimate partner as a cohabiting partner, whether or not they had been married at the time.

There was no new data available on this indicator. The data was collected in 2012 (GBV Indicator Study, 2012) and 2013 (BAIS IV). According to the 2012 data, (Botswana GBV Indicator Study Research Report, 2012) twenty nine percent (29%) of women reported having experienced some form of intimate partner violence in the last 12 months and 62% had experienced intimate partner violence in their lifetime. The same 2012 report further revealed that over two thirds (67.3%) of women in Botswana have experienced some form of gender based violence in their lifetime and a smaller proportion (44.4%) of men admit to perpetrating violence against women. Most of the violence reported occurs within intimate relationships. About three in every five women (62.3%) experienced while about half of the men (47.7%) perpetrated intimate partner violence. Other violence experienced is at the hands of non-partners. Almost similar proportions of women (11.4%) and men (10.7%) experienced or perpetrated non partner rape respectively.

The mutual relationship between GBV and vulnerability to HIV demands a comprehensive, integrated and multisectoral response. According to the Botswana AIDS Impact Survey IV conducted in 2013, for a country with a national prevalence rate of 18.5 percent, females had a relatively higher prevalence rate of 20.8 percent compared to 15.6 percent for males. As shown in Figure 1 below², BAIS IV demonstrates that the male and female patterns show differential peaks, with women's prevalence peaking (nearly 50.6 percent) at an earlier age (35-39 years) while that of males peaks to 43.8 percent in the 40-44 age group. For ages below 50 years, female prevalence was generally higher than male prevalence, while beyond age 50, male prevalence was higher.

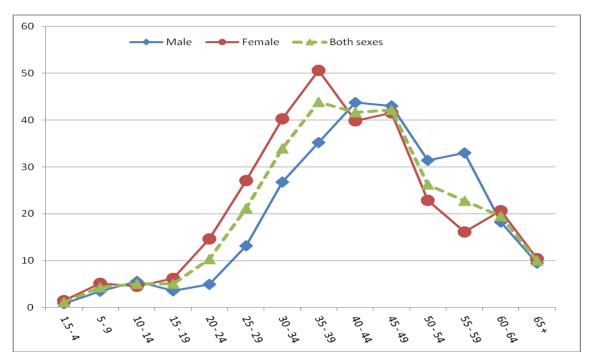


Figure 1: Botswana HIV prevalence rate by Age groups and Sex *Source:* Botswana AIDS Impact Survey IV, 2013

The same BAIS IV report also indicated that 24.8 percent of females with early sexual debut reported not giving consent at the time of intercourse and in the population of women aged 15 to 49, an estimated 3.1 percent reported sex without consent in the last 12 months. This points to the presence of intimate partner violence against women.

4.7: Target 8 - Eliminating Stigma and Discrimination

In 2014, data for assessing discriminatory attitudes towards people living with HIV in Botswana was not collected. Therefore the 13.2 percentage of women and men aged 15-49 who report discriminatory attitudes towards people living with HIV is based on the 2013 Global AIDS Response progress report that was based on BAIS IV results. Another study, the Botswana Stigma Index Survey, conducted in 2013 indicated that most people living with HIV experienced internalised stigma (24%), compared to external stigma (13%). The same report further indicates that males (aged 15-49 years) show a higher (5.0%) discrimination level compared to 2.7% by females.

Stigma and discrimination are major constraints to universal access and utilisation of HIV and AIDS services. Although, the National Policy on HIV and AIDS (2012) protects all people from any form of discrimination and stigmatisation (section 7 (7.1.4), currently interventions designed for the reduction of stigma and discrimination are not being implemented in the right scale and intensity to adequately address gender-based stigma and discrimination against PLHIV and other key populations.

4.8: Target 10 - Strengthening HIV Integration

Orphans and vulnerable children are some of the major outcomes of the devastating effects of HIV. Therefore school attendance among orphans and non-orphans (10-14 years old, primary school age, secondary school age) is of paramount importance. This indicator measures progress towards preventing relative disadvantage in school attendance among orphans versus non-orphans. In Botswana, the data for this indicator was not collected in 2014. However, in 2013, it was reported that 97.5% was the school attendance rate of orphans aged 10-14 primary school year age and 52.9% of children 0-17 years live with at least one parent. Furthermore, in 2013 about 1.8% (13451) of children aged 0-17 years were classified as double orphans (BAIS IV).

Literature demonstrates that economic support, with a focus on social assistance and livelihoods assistance, to poor and HIV-affected households, is a critical component of comprehensive care and support programs. This indicator reflects the growing international commitment to HIV-sensitive social protection. It recognizes that the household should be the primary unit of analysis since many of the care and support services are directed to the household level. In order to reach the target, countries need to track coverage of households with orphans and within the poorest unit and determine the proportion of the poorest households who received external economic support in the last 3 months. However, since 2011, Botswana has not collected data that measure progress in providing external economic support to poorest households affected by HIV and AIDS.

5. CHALLENGES AND WAY FORWARD

This chapter presents the major challenges of the national response and the way forward. It should also be noted that the country revised the strategy of HIV response in 2014 with a view of focusing on the challenges observed.

5.1: Target 1 - Halve Sexual Transmission of HIV by 2015

Although, the HIV incidence rate has marginally decreased, Botswana needs to design and implement innovative prevention measures in order to achieve the target of an HIV incidence of less than 1%. The current HIV incidence for Botswana is 1.35%. Some of the key challenges that might be hampering the reduction of sexual transmission of HIV include:

- Inadequate involvement of civil society in rolling out behavior change interventions as a result of limited funding. Most donors that have been supporting prevention programs have scaled down and very few civil society organizations have access to financial resources to deliver comprehensive behavior change interventions.
- Low uptake of condoms and condoms are being distributed through conventional mechanisms
- There is no clear strategy to engage vulnerable out of school youth.
- Legal and human rights barriers affects access to interventions such as stigma and discrimination of FSW and MSM by service providers; distribution of condoms and

- lubricants in prisons, distribution of lubricants targeting key populations like female sex workers and MSM.
- There is poor STI partner tracing in health facilities because index patient are reluctant to disclose partner information (especially in MCP situations). The social stigma associated with contracting an STI also impedes health workers from carrying out proper contact tracing protocols. In Botswana passive (as opposed to active) partner tracing is employed, making all tracing index partner dependent through the use of contact slips issued at facilities. The private sector is not participating adequately in the National STI program in that: they do not follow national treatment and contact tracing guidelines and do not conform to national reporting requirements
- Inadequate demand creation is largely due to inadequate human resources and gaps in the education about safe male circumcision. There is still a lack of understanding regarding the purpose and objectives of safe male circumcision by people and benefits of the procedure. Weak linkages between HIV testing centers and VMMC providers, thus limiting the referral of patients

The country has to invest more in behavioral interventions that are specifically aimed at reducing multiple concurrent partnerships, promotion of consistent use of condoms and increase in knowledge about HIV among young people at all levels the national response. Specifically, the following interventions are critical in resolving the above challenges:

- Civil society should be engaged in Social and Behavior Change Communication (SBCC) interventions with a focus on youth and key populations, including alcohol and substance abuse.
- Through the civil society, there is need to intensify condom programming and social marketing for both male and female condoms. More condoms will be required and distribution mechanisms need to be strengthened to include engaging communities in the distribution of condoms as well as increased advocacy for condom use among the youth and general population. There is also a need to explore the use of community advocates and volunteers as distribution points
- The national response needs to conduct campaigns targeting out of school youth using mobile clinics. These efforts will be supported by IEC materials and use social media, television, radio talk shows and spot announcements. Parents and other community members need to be provided with skills on communication around sexuality issues with their children.
- With Ministry of Health in the lead, a variety of programs targeting key affected populations are being rolled out. These include test and treat initiative for female sex workers, ART for refugees, counselling and support services for MSM and assisted access to health services for prisoners.
- Although there are ongoing initiatives to improve community awareness and knowledge on STIs, there is need to engage the private sector in scaling up IEC for STI using radio, TV, print and social media. This is expected to improve community awareness and result in higher contact partner responses.
- A major effort is underway to strengthen safe male circumcision demand creation interventions and linkages to service provision. These efforts will include interpersonal communication through house to house mobilization using volunteers and health education assistants. Of particular emphasis for this funding request as informed by the

Investment Case (2014) and the Mid-term review of NSF II, is re-focusing demand creation on adolescent youth, including the use of special behavior change interventions such as the use of social media.

5.2: Target 3 - Eliminate New HIV Infections among Children by 2015 and Reduce AIDS-Related Maternal Deaths

Although, PMTCT program has done very well in Botswana, there are some challenges that need to be addressed in order to eliminate the new HIV infections. Some of the challenges include:

- Low testing (46%) for children from 6 weeks to 2 months as reported in BAIS IV report due to poor turnaround times at the level of the laboratory. While the percentage of these babies who will ultimately receive their results improves over time, the purpose of early infant diagnosis and subsequently early treatment is lost for those who do not receive their results in time. There is poor integration of services such as routine HIV testing, ART, TB and SRH
- There are inadequate skills on pediatric treatment initiation by medical officers
- There is still high stigma attached to infant formula feeding as revealed by the Stigma Index survey of 2013
- Low rates of testing among partners of pregnant women enrolled in PMTCT (19%, PMTCT program data) and inadequate involvement of communities and civil society organizations is a challenge.

Proposed mitigation measures

- The Ministry of Health has determined that the main reason for low rates of infant HIV testing is that early infant diagnosis is too centralized. Testing capacity is being rolled out starting with creating a second testing center in Francistown. There are plans to roll out to four (4) additional sites (for a total of 6 sites) are underway.
- SRH-HIV linkages project that was piloted in 3 districts will be rolled out to all facilities nationwide. This will greatly improve family planning for women, within the context of HIV. It will also increase the capacity of health facilities to cater for the SRH rights of HIV positive women. This strategy also specifically targets males to become more involved in SRH issues including partner testing and antenatal care. Furthermore, The Ministry of Health is currently pursuing the treatment of all HIV+ pregnant women with triple ARV therapy, regardless of CD4 count, hence adoption of Option B+. It is expected that this intervention will be more efficacious, and much simpler to implement.
- The Ministry of Health is scaling up re-fresher training for medical officers in pediatric ART therapy. This will be done in partnership with the Baylor-Botswana Children's Centre of Excellence.
- The civil society organizations and community leaders are being mobilized to fight the stigma of infant formula feeding and health facilities have also stepped up counselling of mothers.
- The Ministry of Health has stepped up its engagement of civil society organizations to assist in the most critical components of PMTCT that include partner testing, tracing of

infants to return for testing and test results and general community awareness of TB/HIV/RMCH.

5.3: Target 4 - Reach 15 million people living with HIV with lifesaving antiretroviral treatment by 2015.

Although the ARV program has done well since inception, there are concerns with loss to follow-up rates which have steadily increased among adults. Among the challenges encountered with growing numbers has been less time for one on one counselling of patients and aggressive follow up through community channels for those who fail to honor clinic appointments. There are also high treatment failure rates for adults (an increase in first line adult failure rate from less than 6% recorded in 2012 to over 10% in 2013) due to the challenges of adherence to counselling and monitoring. As a mitigation measure, the Ministry of Health is strengthening the integration of HIV/TB/RMNCH/SRH-R/NCDs services at all levels in order to ensure that those who are lost to follow up at one program can be recovered when coming to utilize a different program. The ART coverage is also compromised by the low testing rate of 63.7% (according to BAIS IV) of the population aged 15- 49 years who in the 12 months preceding the survey had an HIV test and were informed of the results.

Proposed mitigation measures

- Strengthen integration of HIV/TB/ RMNCH/SRH-R/NCDs services at all levels, as mentioned in the PMTCT section above. Integration will increase awareness of health providers in order to ensure that those who are lost to follow up at one program can be recovered when coming to utilize a different program. The repeat in-service training for all caregivers is being rolled out in order to refresh on skills and knowledge unique to pediatric treatment. This training will include improving the ability of health workers to train caregivers on the special techniques of promoting strict adherence in children and adolescents.
- Rollout treatment centers of excellence to offer specialist services in TB and HIV services is also underway
- Providers are being requested to scale up initiatives aimed at addressing increasing lost to follow-up rates including the more effective use of treatment buddies and intensified patient education.
- The Ministry of Health in partnership with CSO has scaled up stigma reduction initiatives for FSW and MSM at health facility level, through training providers to be open to provision of services in a non-discriminatory environment. A special test and treat program for FSW has been initiated and should go a long way towards de-stigmatizing the provision of services to key populations
- Through the Health Partners Forum, communication with the private sector in the area of M and E is being improved. Private practitioners are being sensitized to submit data for national M and E initiatives.
- Improve quality of care to reduce or avert results in treatment failure
- Strengthen civil society capacity to implement treatment care and support services, including, treatment literacy, community HIV/TB care

5.4: Target 5 - Reduce tuberculosis deaths in people living with HIV by 50% by 2015

TB/HIV collaboration implementation in Botswana conforms to the 2004 WHO recommendations to widen the scope of TB/HIV care for dually infected patients. Whilst TB/HIV collaborative has been up-scaled to all the districts and all health facilities are providing integrated TB/HIV services, the country still experiences some challenges, which include:

- Weak TB/HIV linkages with other programs (SRH, PMTCT) due to policy inadequacy which limit access to TB/HIV services (for example TB screening among PLHIV, contraceptive services among HIV positive women).
- TB screening among PLHIV in infectious diseases control clinics is not consistently done
 with challenges of poor documentation despite the introduction and dissemination of the
 recording and reporting tools. Pregnant HIV positive mothers are not screened for TB. This
 is because of the weak linkages between the two programs, whereby those presenting in
 HIV clinics are not screened for TB.
- Low ART uptake among TB/HIV co-infected patients (74% against the national target of 85%) due to poor documentation and knowledge deficit for service demand among clients
- Shortage of skilled manpower (especially midwives) to provide TB/HIV/RMNCH integrated services.
- Inadequate TB screening among health care workers due to issues of confidentiality, stigma and discrimination.

Proposed mitigation measures

- Integrate and implement TB/HIV/RMNCH into the already existing training curricula for lower secondary and tertiary educational institutions
- Train service providers including community volunteers on integrated TB/HIV/RMNCH services.
- Conduct consistent mentoring and support supervisory visits to the districts and health facilities.
- Create community awareness about TB, TB treatment and ART for patients TB/HIV co-infection.
- Educate staff on TB infection control, TB Screening and put in place supportive systems for testing and treatment of staff.

5.5: Target 7 - Eliminating Gender Inequalities

According to the Gender Assessment done in 2014, domestic violence and social norms on masculinity serve as barriers to the uptake of HIV prevention and treatment services. Key human rights barriers and gender inequalities impede access to health services. According to the Botswana Gender Assessment report (2014), there are a number of gender related bottlenecks that prevent access, utilization, and adherence to HIV prevention services. These include stigma and discrimination; gender-based violence; harmful social norms and lack of access to resources.

While these barriers are present in various forms, including cultural acceptance, there is a need for programs that target these societal challenges, particularly those to address the unequal power relations between men and women in relationships. Gender inequalities are often rooted in cultural and economic practices and tend to increase the vulnerability to HIV infection.

Proposed mitigation measures

The 2014 Gender Assessment report recommends the following measures:

- Strengthen the social, policy and legal environment, to enable the planning and implementation of transformative gender-HIV and AIDS interventions. This will include the review of punitive legislations and policies, and accelerating the conclusion of the draft National Gender and Development Policy among others.
- Systematically target negative socio-cultural norms and practices that increase risks and vulnerability of HIV infection among the different population sub-groups.
- Strengthen national capacity for gender analysis, planning, budgeting and monitoring.
- Strengthen the national M&E system to ensure functionality and robustness of the system, and mainstreaming the use of gender sensitive indicators in the national multisectoral HIV and AIDS response.
- Focus and intensify implementation of targeted interventions around the HIV hotspots.
- Develop targeted interventions for women and girls, and key populations.
- Identify and mainstream effective male involvement strategies, especially those that reduce the risk of infection among women and girls.
- Strengthen national capacity to address gender inequalities and gender-based violence including intimate partner violence. This will include strengthening capacity of key duty bearers such as community leaders, law enforcement officers and the judiciary officers

5.6: Target 10 - Strengthening HIV Integration

The Government of Botswana is reinforcing an aggressive national response that is focused on comprehensive service provision in a systematic and proactive manner to all Batswana as outlined in the 2011 revised National Health Policy (NHP) and the 2010 -2020 Integrated Health Service Plan (IHSP). Although there are inadequate systems for identification and registration of orphans, weak linkages with government services across ministries for continuity of care and inadequate coordination of the program mainly due to lack of human resources, the main mitigation initiative is to strengthen coordination mechanisms, including a comprehensive family-centered plan of action for the protection, care, and support of OVC and their care-givers.

6: Conclusion

The country has defined its future direction in the revised NSF II. Specifically, the national response has acknowledged the need to identify and reapply new knowledge and appropriate technologies such that successes and best practice models documented in different parts of the country and internationally. The areas identified include "test and treat" interventions, pre-exposure prophylaxis (PreP); community testing that includes self-testing; one stop shop and decentralized services; point of care diagnostics, new and improved regimens and formulations.

The national response is also being urged to prepare for the rising trend of complications that arise from treatment regimens and other interventions. Such conditions include oncological morbidities, heart disease, and diabetes, among others. While maintaining the priority focus on addressing HIV infection and the treatment of AIDS, concurrent programs must be put in place for capacity building to deal with the increasing disease burden over the implementation of the new strategies.

The country has started offering health services in an integrated manner. The integration of services (HIV/RNMCH/TB) will usher in a holistic approach to patient care and treatment that will increase case detection. This capacity building should also improve the ability to treat asymptomatic patients, as diagnostic skills and knowledge improve. This should also be coupled with recruitment of Monitoring and Evaluation officers so as to improve data quality, data analysis and data interpretation. Furthermore, the roll out of the electronic system that is replacing the paper based system of data collection needs to be fast tracked.

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