



Impact of Using Arts Programming to Support Treatment in Adolescents Living with HIV in Eswatini

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Background

- In 2018, approximately 1.6 million adolescents were living with HIV worldwide, with about 89% of them being located in sub-Saharan Africa.
- Eswatini continues to have the highest prevalence of HIV in the world at 27.3% despite having one of the highest rates of antiretroviral coverage in the region (86%) for people living with HIV (PLHIV).
- Significant stigma and discrimination surrounding HIV works against the substantial progress that is being made.**

Adolescent and young adults face unique psychosocial challenges coupled with having a stigmatizing disease at their age, and they struggle more than any other age group with medication adherence. Despite the fact that the WHO highlighted the urgent need for tailored HIV services for adolescents in 2013, there is minimal previous research exploring distinctive approaches to treatment support specifically in this population.

Objectives

Our group sought to pilot a unique approach to treatment support through the use of creative arts programming combined with community-building. Our intervention aims to explore the utility of creative arts programming in to empower adolescents and young adults and provide them with skills to actively participate in society. We believe that addressing the factors contributing to poor retention and adherence rates among this age group will also improve retention and adherence themselves.



Methods

- Intervention:** Two-week theater camp conducted in collaboration with a non-profit organization of professional teachers, actors, and musicians.
- Inclusion Criteria:** Adolescents and young adults enrolled at the Baylor College of Medicine-Bristol-Myers Squibb Children's Clinical Center of Excellence in Mbabane, Eswatini.
- Exclusion criteria:** Participant had not yet had their HIV status disclosed by caregiver(s) or participant whose was required in annual traditional Swazi festival of Umhlanga.
- Outcomes:** Treatment adherence approximated by CD4 counts and viral load data and impact on perceived stigma, confidence, and sense of community.
- Analysis:**
 - Comparison of viral loads pre- and post- camp
 - Comparison of pre- and post- camp survey on areas such as personal stigma, sense of community, and confidence
 - Qualitative survey post-camp for free-form response on how the experience impacted the participants.

Figure 1: English version of survey questions. Each question answered on 5-point Likert scale.

Brief HIV Stigma Scale

Personalized stigma

Some people avoid touching me once they know I have HIV
People I care about stopped calling after learning I have HIV
I have lost friends by telling them I have HIV

Disclosure concerns

Telling someone I have HIV is risky
I work hard to keep my HIV a secret

I am very careful who I tell that I have HIV

Concerns about public attitudes

People with HIV are treated like outcasts

Most people believe a person who has HIV is dirty

Most people are uncomfortable around someone with HIV

Negative self-image

I feel guilty because I have HIV

People's attitudes about HIV make me feel worse about myself

I feel I'm not as good a person as others because I have HIV

Future Outlook Questions

I feel ready to tell someone that I have HIV

I am excited for my future

I feel that I have a community of people to support me in managing my HIV in the future

I feel that HIV will not hold me back from achieving my dreams

Medication Adherence Motivation Questions

I feel that taking my medications is important for my health

I am motivated to take my medicines every day

If I am considering not taking my medicines, I would reach out to a friend

If I had a friend that stopped taking their medicine, I would encourage them to restart

Table 1: Demographics of camp participants

	Demographic Value					Frequency	
		Number	Percentage	Median	Q1-Q3		
Gender	Male	14	70%	-	-		
	Female	6	30%	-	-		
Age	12 - 17	10	50%	17.5	14-20		
	18 - 23	10	50%				
ARV Regimen	First-line	8	40%	-	-		
	Second-line	12	60%	-	-		
Challenge Clinic	Enrolled	8	40%	-	-		
	Not Enrolled	12	60%	-	-		
Pre-camp Viral Load	Detectable	6	30%			Log 1.3-2.6 (20-525.5 copies)	
	Not Detectable	14	70%				
CD4 Count	<400	4	20%	623	535.25-802		
	>400	16	80%				



Results

- Twenty participants: demographic break down in Table 1.
- 25% showed a substantial decrease in viral load after the camp ($>0.1 \log_{10}$ change) while only 10% showed a substantial increase.
- Pre- and post-camps surveys analysis revealed a significant decrease in personalized stigma (Q1-3, $p=.025$) and less agreement with the statement "I am very careful who I tell that I have HIV" ($p=.046$).
- Qualitative survey results indicated participants felt the camp helped them with confidence (13/18), teamwork (13/18), and friendships (11/18) with quotes supporting this growing sense of community, confidence, and decreased personal stigma that are found in Table 2

Table 2: Quotes from camp participants in response to the question "What did you like about theater camp?"

Theme	Participant Quote
Confidence	"Theater camp helped me a lot. It taught us to be brave and confident in what we do."
	"Theater camp helps me know that I have a talent and I can do a lot of things in life to achieve my future goals although I am HIV positive."
	"Theater camp helped me with being brave."
Skills	"What I liked about theater camp is they teach you public speaking."
	"Theater camp has helped me in many ways. Sharing ideas and opinions to tell a story."
	"Self-expression, realizing my emotions, storytelling techniques."
Community/ Teamwork	"Progress is faster when two or more people are synced as a team."
	"The thing I loved most is that I made friends and felt comfortable around people who I have the same (HIV) status."
	"I liked the fact that I met young adults who are like me and having them in my corner."

Conclusion

Overall, our pilot study shows creative arts programming:

- Has beneficial psychosocial effects**
- Aids in community building**
- Potentially enhances the effectiveness of medical treatment**

Although our intervention was brief (two weeks) it has laid the foundation for further projects that are more longitudinal in nature and with the capacity to involve more participants. Further programs and studies should continue to investigate creative arts as an avenue for self-expression and community building to augment treatment support among vulnerable populations.