

Educating Cameroonian Preadolescent Girls to increase Behavior Skills and Intentions to Postpone Sexual Activity

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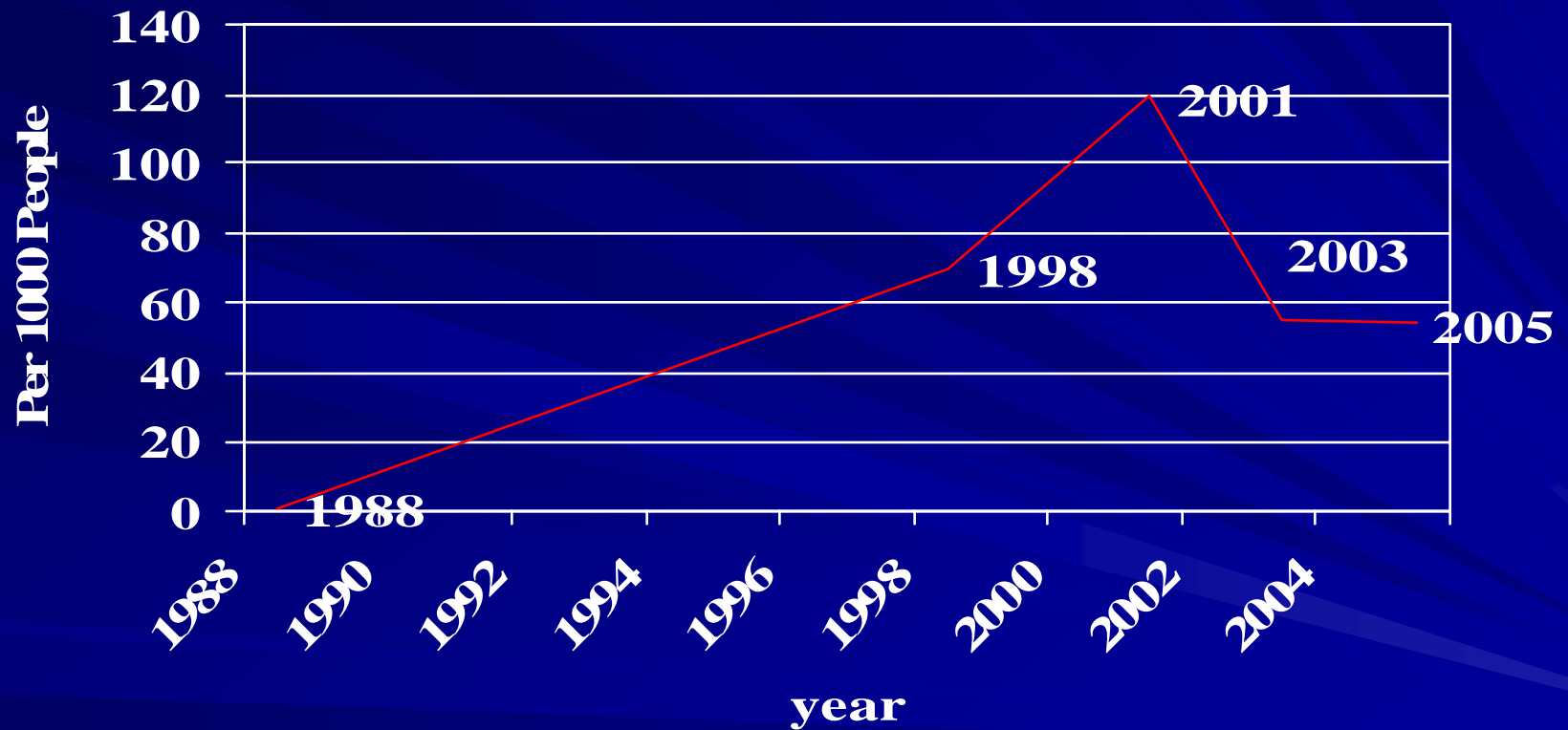
Introduction

- **HIV/AIDS pandemic on the rise**
 - No cure, no vaccine, costly
- **Sub-Saharan Africa**
 - Disproportionate burden
 - Primarily a heterosexual disease
 - Less than 20% of those infected have access to antiviral therapy

In Cameroon

- **One in four adolescents estimated at risk (Musa, 1998)**
- **Young females are at greater risk (Rwenge 2000; UNAIDS, 2006)**
- **Little known about strategies that can reduce vulnerability**

Trends in Prevalence Rates in Cameroon



Significance

- **Lack of effective interventions in the region, among groups with greatest need**
- **A decrease in infection rates among young females has potential benefits to:**
 - **Young females themselves, future partners, future children, country's economy**

Purpose of this Pilot

Test the appropriateness and effectiveness of culturally tailored WHO curriculum-based educational intervention

Research Objectives

- **Feasibility of recruitment strategies**
- **Appropriateness of intervention**
- **Adequacy of measures**
- **Effectiveness of intervention**

Literature Review

- Many ongoing national surveillance studies paint grim picture for the future of the region
- Complex nature of HIV related sexual behaviors
- Descriptive Studies in Cameroon
 - Rwenge (2000)
 - Meeker & Calves (1997)

Literature Review

■ Intervention Studies

- Numerous in developed countries, relatively few in Sub-Saharan Africa, older participants

■ Intervention studies in Cameroon

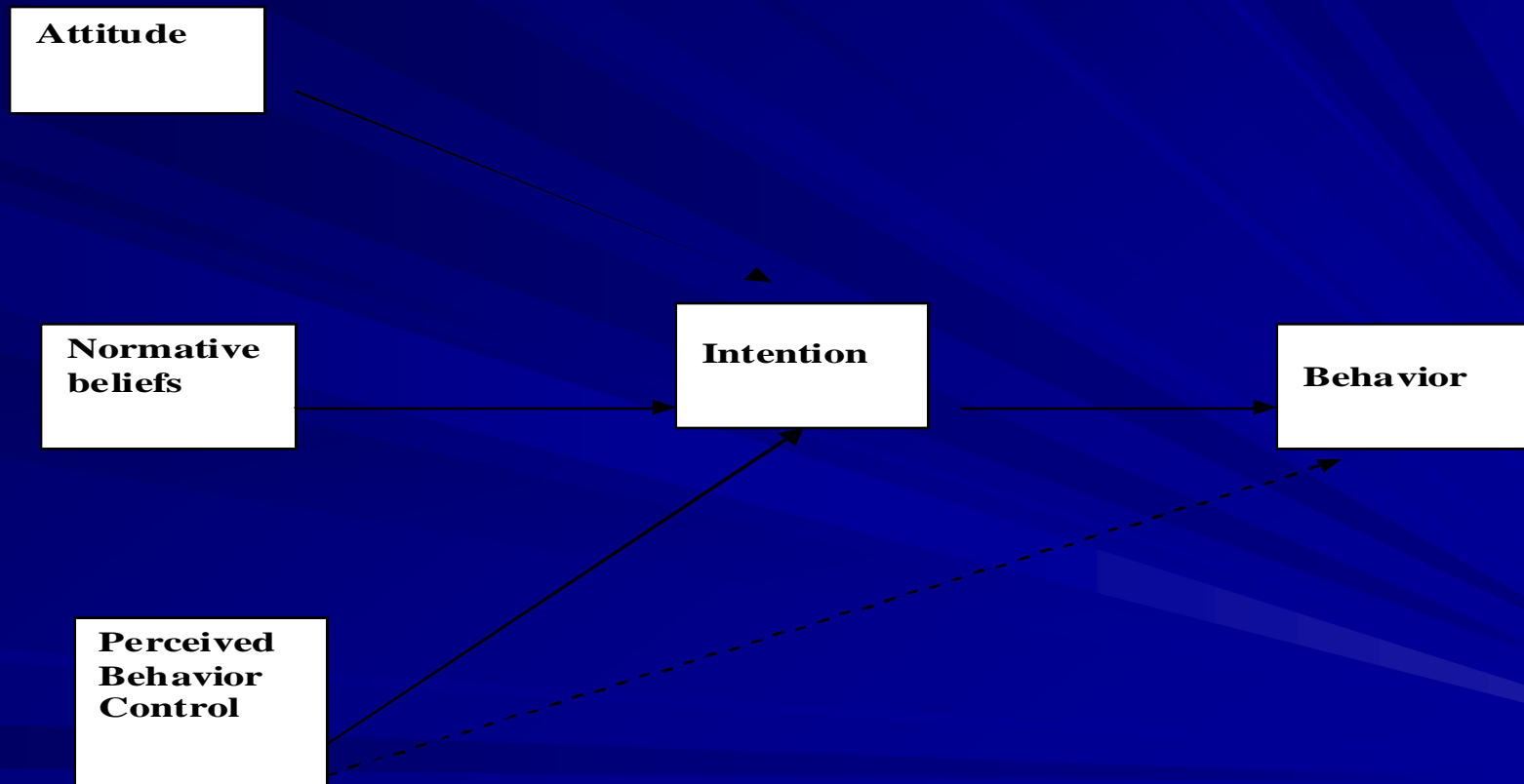
– Van Rossem & Meekers (2000)

- Sexually active participants, peer educators, media

– Speizer, Tambashe & Tegang (2001)

- Corroborated self reports with STD rates, peer educators

Theory of Planned Behavior



Study Design

- **Quasi –experimental: one group pretest/post test design**
- **10-12 year old females in one primary school**
- **Principal, parents, and students gave consents**

Intervention

■ Content

- Cultural and age adapted WHO 1994 curriculum with theme from Jemmott, Jemmott & McCaffee (1996)
- Antecedents of intentions and behavior
- Body and HIV transmission knowledge, life mappings, attitudes, norms, assertive communication training, recognizing and dealing with threats of violence

■ Format: Interactive

- Discussions, role play, small groups, question and answer sessions

Results

- **Recruitment feasible: 100% willingness of parents to allow children to participate, 60 participants**
- **75 % considered all aspects of the study appropriate**
- **Students actively participated in intervention exercises**

Results: Instruments

- **Intentions to Postpone Sexual Activity Scale**
 - Reliability (.87 past studies and .92 current study)
 - Validity (Content and Construct-one factor)
- **Sexual Abstinence Behavior Scale**
 - Reliability (.67 current study)
 - Validity (Content and construct-2 factors)

Findings: Intentions to Postpone Sexual Activity

Pairs	M	SD	95% CI on Difference		t	Significance (2-tailed)
			Lower	Upper		
PREIPSA-POSTIPSA	1.15	2.26	0.47	1.83	3.40	.001
PREIPSA	5.70	4.00				
POSTIPSA	4.55	3.05				

Note: N=60, df =59

Findings: Sexual Abstinence Behavior Skills

Pairs	M	SD	95% CI on difference		t	Significance (2-tailed)
			Lower	Upper		
SABS-POSTSABS	1.50	2.57	0.84	2.17	4.51	.0001
SABS	10.28	4.18				
POSTSABS	8.74	3.98				

Note: N = 60, df = 59.

Clinical Significance

- **Moderate effect sizes and narrow CI**
 - Comparable to randomized trials

- **Cost/benefit Ratio**
 - Cumulative effect on decreasing incidence

Implications

■ Research

- Practical lessons
- Areas of further research: Evaluation of measures, randomized trial, sustainability issues, heterogeneous samples
- Training of facilitators

Implications

■ Practice

- Basis for school-based programs if replicated
- Need exists as part of multifaceted approach

■ Policy

- Basis of legislative action, creating programs

Limitations

■ Threats to Internal Validity

- Quasi -experimental study and self report data

- Instrumentation-floor effect, Reliability, Validity

■ Threats to external validity

Summary

- **HIV/AIDS is a serious threat to young Cameroonians**
- **School based interventions that use an established theory and are age appropriate can be effective**
- **Basis for programs that can contribute to reversing disturbing trends in Cameroon**