

**Knowledge, Attitudes, Beliefs and  
Practices Related to HIV/AIDS  
among Adolescents in  
León, Nicaragua**

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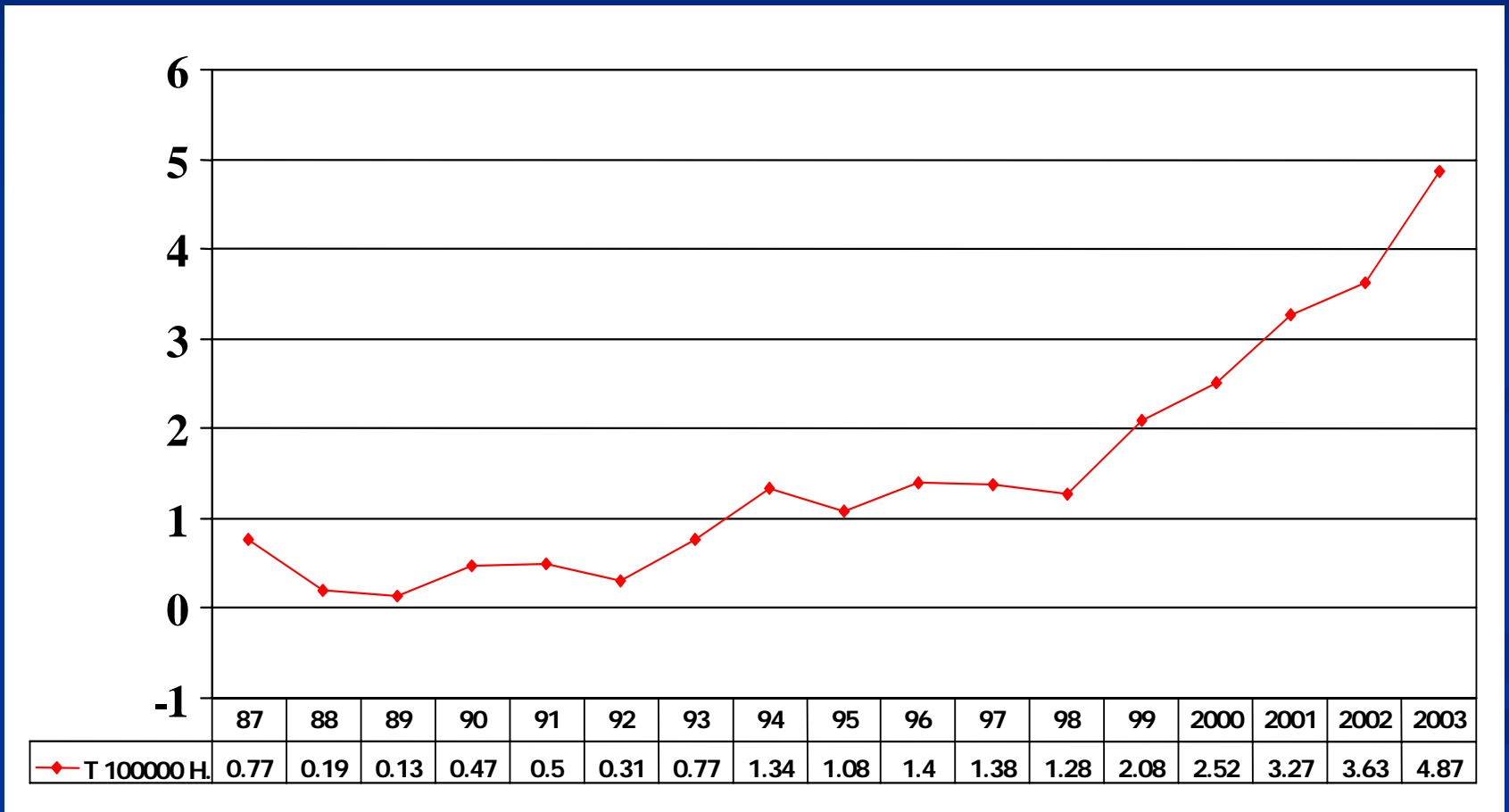
# Nicaragua



# HIV/AIDS in Nicaragua

- Estimated prevalence among adults is 0.2% (UNAIDS, 2002)
- 90% of transmission due to sexual contact
  - 2/3 heterosexual, 1/3 men having sex with men
- Severe lack of data

# Incidence Rate of Reported HIV/AIDS Cases by Year of Diagnosis Nicaragua, 1987 – September 2003



(Programa Nacional de ITS/VIH/SIDA, MINSA)

# Future of HIV/AIDS in Nicaragua

## Reasons for Concern

- I. Spread from neighboring countries
- II. Deteriorating social and economic conditions
- III. High-risk behaviors
- IV. High prevalence of STIs

Need for focused interventions

# Purpose

- To survey the **Knowledge, Attitudes, Beliefs and Practices** relating to **HIV/AIDS** and **other STIs** among the adolescents (15-19 years) in **León, Nicaragua**
- To make this information available to local NGOs, academic institutions and others to develop targeted interventions

# Methodology

- Sampling Frame: Demographic and Health Surveillance System (DHSS-León), Centre for Demographic and Health Research [CIDS]
  - open cohort of all the households located in 50/208 randomly selected geographic clusters of León (34 urban, ~9000 households, ~50,000 people)
- Sample: simple random sample of adolescents (15-19 years) in the urban clusters
- 141-item structured survey administered to adolescents

# Sample Population

- N=246 adolescents
  - 134 female, 112 male
  - 68% participation rate
- Median Age: 17.1 years
- 75% of adolescents still in school

- Average household size - 6.5 people
- ~10% of the adolescents had a child
- Religion:
  - Catholic (64%)
  - None (20%)
  - Evangelical (12%)
  - Other (4%)

# Sexually Transmitted Infections

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STI	Knowledge of Transmission
HIV/AIDS	99%
Gonorrhea	61%
Syphilis	46%
Herpes	38%
Genital Warts	34%

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## With Exception of HIV/AIDS...

- 17% had knowledge of transmission of all the above STIs
  - 9 % - 15-17 y
  - 27% - 18-19 y
  - Multivariate odds ratio 2.1,  $p < 0.0001$
- 28% had no knowledge of transmission for any of the above STIs
  - 34% - 15-17 y
  - 21% - 18-19 y
  - Multivariate odds ratio 0.7,  $p = 0.0007$

# Knowledge of HIV Transmission Methods

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Method of Transmission	Those with correct knowledge
Vaginal	96%
Oral	50%
Anal	66%
Sharing Needles	95%
Vertical	91%

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Sex once without  
condom

94%

Seemingly Healthy  
but HIV+

59%

Mosquito bite

79%

Kissing

71%

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## Reported Sexual Activity of Adolescents

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	Percent of adolescents	Mean Age of Initiation
Vaginal Intercourse	45%	15.1
Oral	24%	15.7-15.8
Anal (Receptive)	2%	15.3
Anal (Insertive)	18%	15.5

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## Predictors of having had sexual intercourse (vaginal)

	OR	CI	<i>p</i>
Age	1.6	1.2-2.0	0.0003
Sex (Male)	6.5	3.3-13	<0.0001
Not in School	18.7	7.5-46.6	<0.0001
Catholic	1.2	0.6-2.4	0.65

# Beliefs and Practices – HIV Risk

- 95 % of adolescents believe HIV/AIDS is incurable
- 95% believe they can prevent being infected
- 85% believe consistent condom use can prevent AIDS
- 87% say it is better to avoid having intercourse if no condom is available

- Only 21% of those who were sexually active in the last three months always used a condom
- 57% believe condoms should only be used for occasional sex partners

# Attitudes towards sex

- 66% believe women should remain virgins till marriage
- >84% disagree with statements that people can engage in homosexual or bisexual acts
- >85% of both sexes believe they could ask their partners to use a condom

# Summary

- Good awareness of HIV/AIDS as an STI, but poor awareness of other STIs
- Incomplete knowledge of HIV/AIDS transmission – anal sex, healthy HIV +, oral sex
- Correlates of sexual intercourse: dropping out of school, being male, age
- Discrepancy between beliefs and practices related to condoms

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