

**STI/HIV AMONG FEMALE SEX  
WORKERS BEFORE AND AFTER  
IMPLEMENTING THE PROJECT  
“COMMUNITY ACTION FOR  
PREVENTING HIV/AIDS” IN 5 BORDER  
PROVINCES OF VIETNAM, 2002 & 2004**

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# INTRODUCTION(1)

- STI increase the risk for HIV infection
- The Project “Community Action for HIV/AIDS Control and Prevention” sponsored by ADB implemented in 5 border provinces: Laichau, Quangtri, Dongthap, Angiang, Kiengiang to control the transmission of STI/HIV in the community– Female sex workers (FSW) were the population to be actively intervened

# INTRODUCTION(2)

- A cross-sectional survey on HIV, syphilis, herpes, gonorrhoea & chlamydia was carried out in 2002 to evaluate STI status among FSW
- The intervention accomplished → a similar cross-sectional study need to be done to assess trends of STI/HIV among FSW

# OBJECTIVES

- To determine prevalence of STI/ HIV among FSW in Vietnam in 2004
- To evaluate the differences of prevalence of genital chlamydia, gonorrhoea, herpes, syphilis & HIV among FSW between 2 years 2002 & 2004

# METHOD

- Design: cross-sectional study
- Study site: Laichau, Quangtri, Dongthap, Angiang, Kiengiang
- Mapping hot spots was done before study
- Study subjects & enrollment criteria:
  - Direct sex workers (DSW): brothels, streets, inns, bus stations, ferry stations
  - Indirect sex workers (ISW): hotels, restaurants, karaoke clubs, massage parlors...
- Sampling: each province's sample was stratified by the estimated number of FSW of districts and hot spots (**2002**: n=911; **2004**: n=982)

# DATA COLLECTION

- Interview & risk assessment: FSW were asked about socio-demographic characteristics, sexual behaviors, history of STI & some features of husband/lover using a standardized questionnaire
- Collection of urine & serum:
  - Urine sample used to detect gonorrhoea & Chlamydia
  - Serum used to detect HIV, syphilis, HSV-2

# LABORATORY TECHNIQUES

- NG & CT: Using PCR (PCR; Amplicor, Roche)
- **Syphilis**: Using **RPR & TPHA** (Bio-Rad)
- **HIV**: Using **Determine** (Abbott) & **ELISA** (2 different test kits, Genscreen & Murex)
- **Herpes simplex 2**: Using **ELISA** (Test kit EC131, Genzyme Virotech GmbH, Germany)

# Data Management & Analysis

- Data were treated & analyzed using EPI-INFO 6.04d (CDC, Atlanta, 2001)
- Uni-analysis was done to evaluate the differences of prevalence of STI/HIV in 5 border provinces before and after intervention

# RESULTS

# Socio-demographics Characteristics of FSW in 5 Border Provinces of Vietnam, 2002 vs. 2004 (1)

Characteristic	2002		2004		P-value
	n	%	n	%	
Kinh ethnicity	826	91.1	911	93.1	0.11
Age	911		981		0.0007
Mean		26.59		25.47	
Single (single, widowed, separated, divorced)	673	73.9	818	83.5	<0.0001
Low education level (illiterate/primary school)	546	60.1	497	50.8	<0.0001
Working period (month)	880		978		0.0005
Mean		28.41		34.11	

# Socio-demographics Characteristics of FSW in 5 Border Provinces of Vietnam, 2002 vs. 2004 (2)

Characteristic	2002		2004		P-value
	n	%	n	%	
Income (1.000VND/month): Mean	801		975		<i>&lt;0.0001</i>
		1.126		1.464	
DSW	407	44.7	450	45.8	0.62
Number of clients per week Mean	908		828		<i>0.005</i>
		6.20		5.55	
Age at first sex $\leq$ 15 years of age	32	3.7	35	3.9	0.80

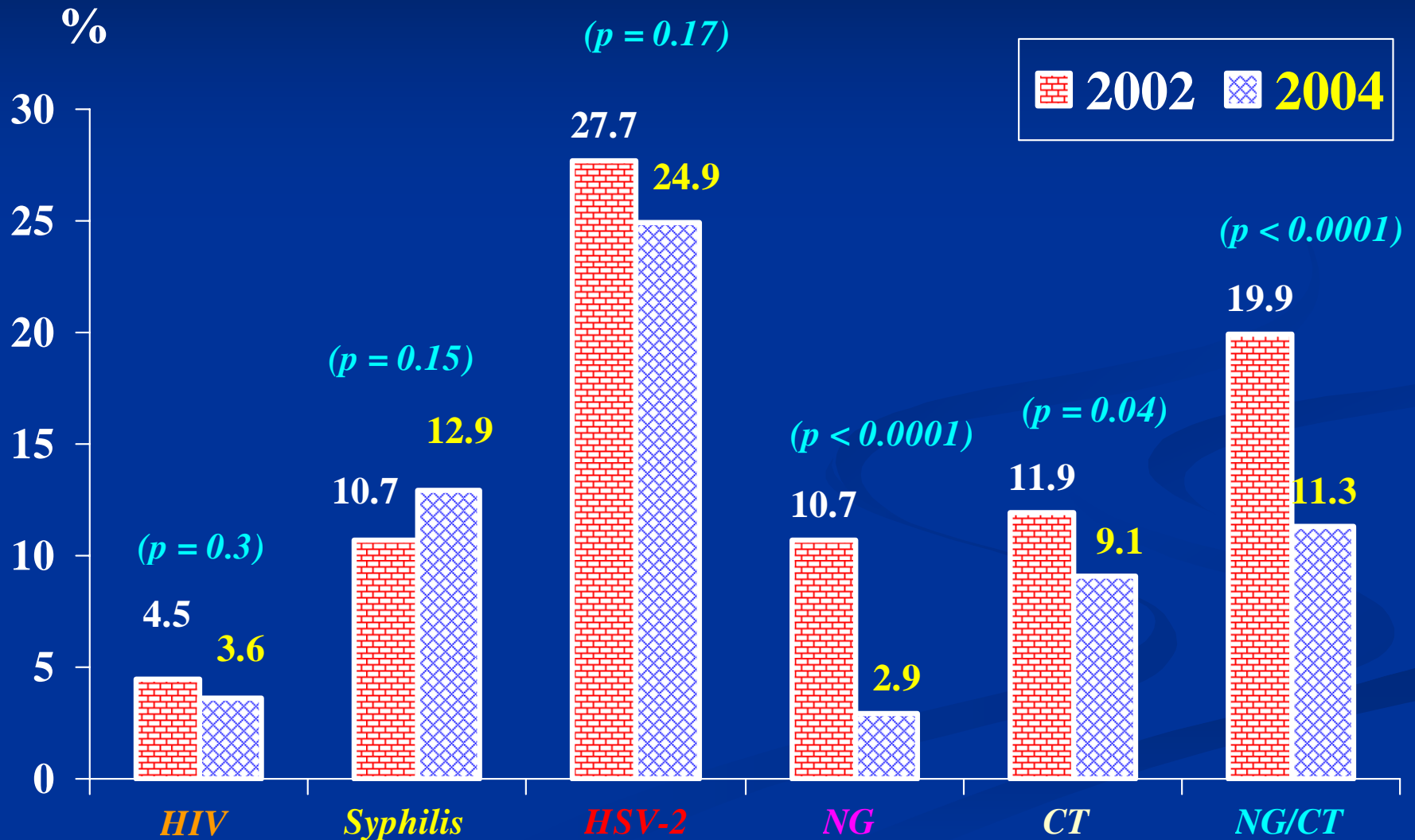
## Socio-demographics Characteristics of FSW in 5 Border Provinces of Vietnam, 2002 vs. 2004 (3)

Characteristic	2002		2004		P-value
	n	%	n	%	
Ever used illicit drugs	27	3.9	19	2.0	0.02
Always used condoms with clients	404	45.3	441	52.8	0.002
Always used condoms with husband	22	9.2	60	35.3	< 0.0001
Husband complaints of painful intercourse in the last 3 months	14	6.5	3	1.9	0.03
Husband had urethral discharge in the last 3 months	5	2.4	1	0.6	0.24 <sup>F</sup>

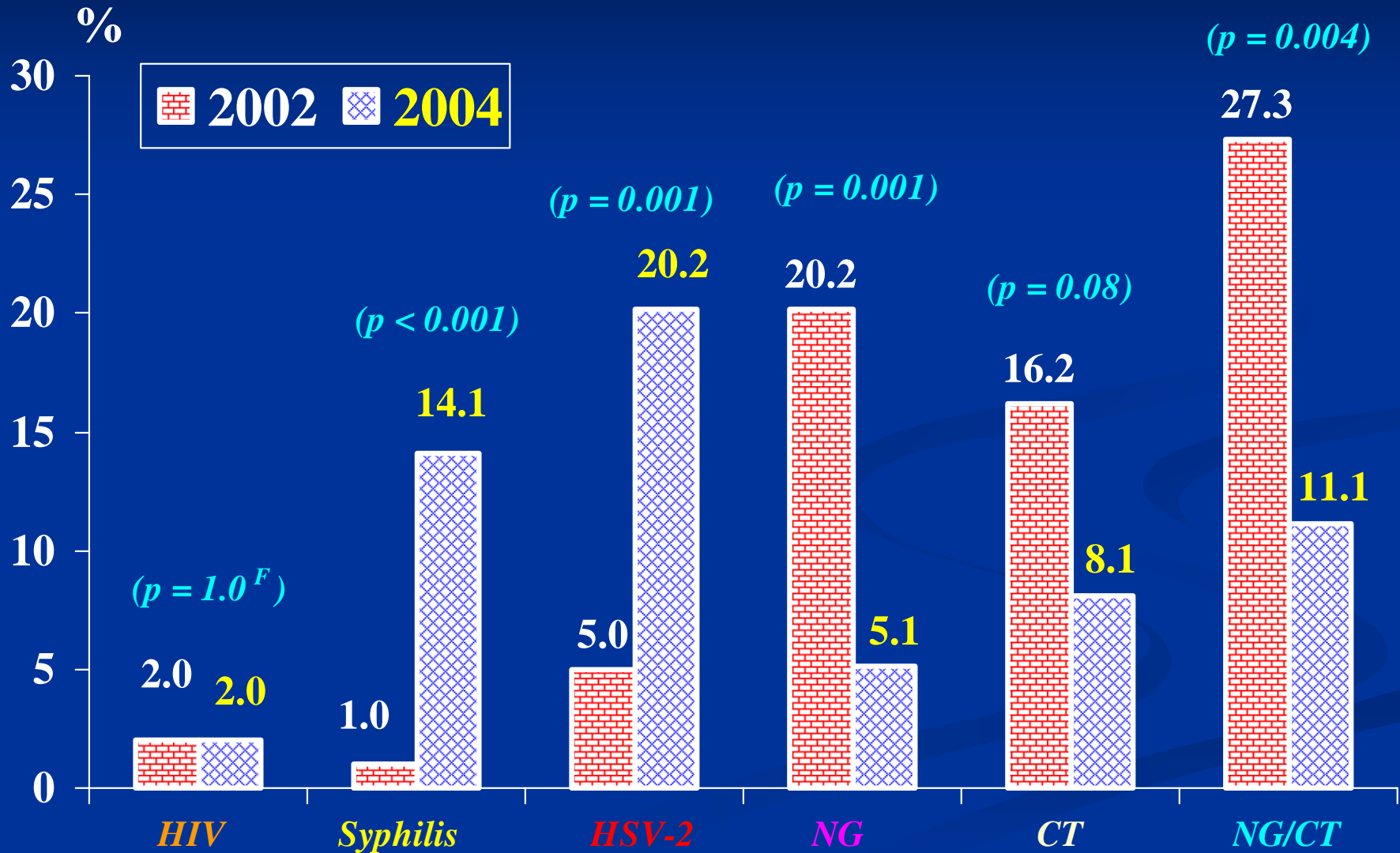
## Socio-demographics Characteristics of FSW in 5 Border Provinces of Vietnam, 2002 vs. 2004 (4)

Characteristic	2002		2004		P-value
	n	%	n	%	
Had lover	477	52.4	209	21.3	< 0.0001
Always used condoms with lover	56	20.6	90	43.3	< 0.0001
Lover complaints of painful intercourse in the last 3 months	11	4.9	2	1.3	0.06
Lover had urethral discharge in the last 3 months	8	3.7	0	0	0.02 <sup>F</sup>

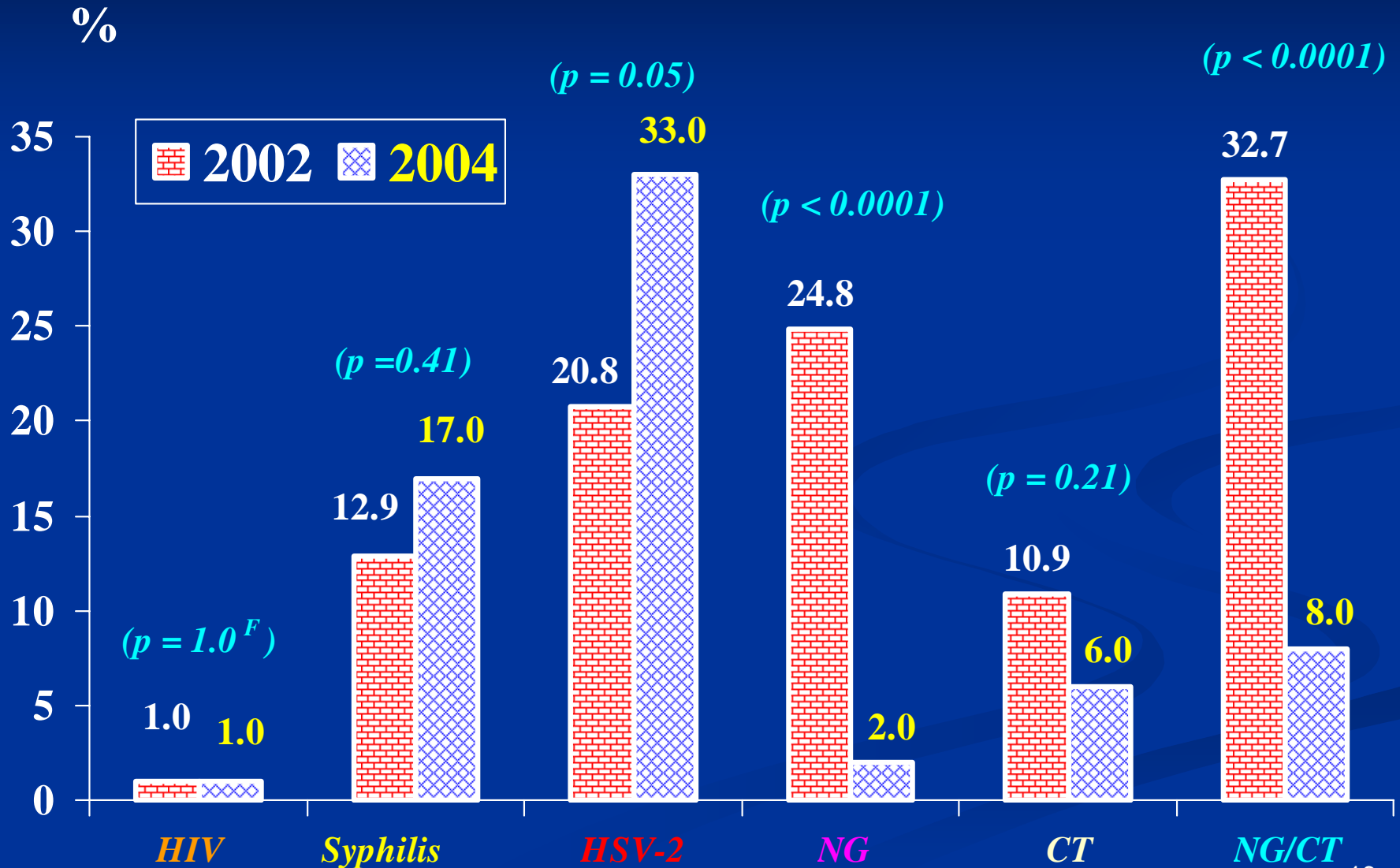
# STI/HIV among FSW in 5 border provinces: LC, QT, DT, AG, KG 2002 vs. 2004



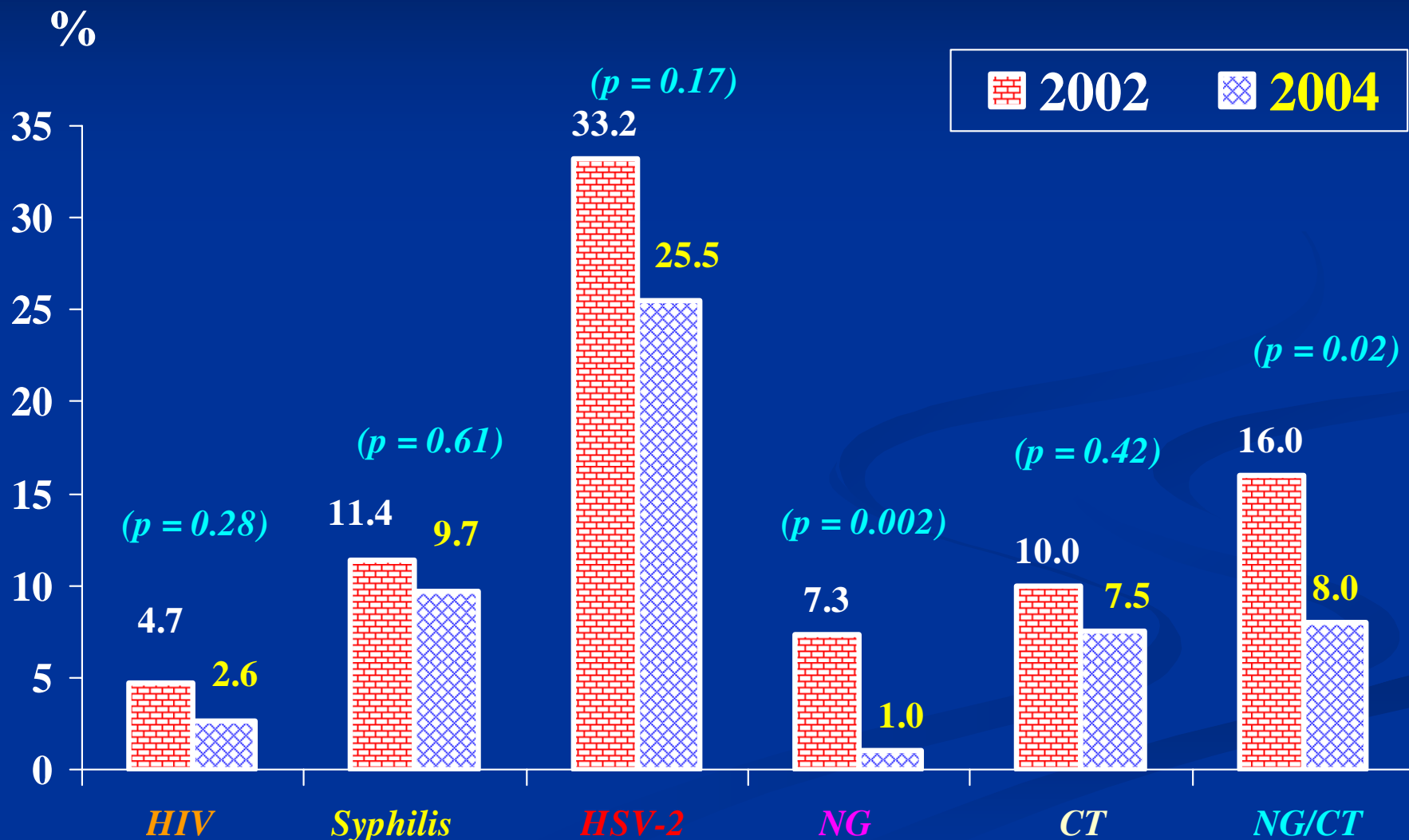
# STI/HIV among FSW in Laichau, 2002 vs. 2004



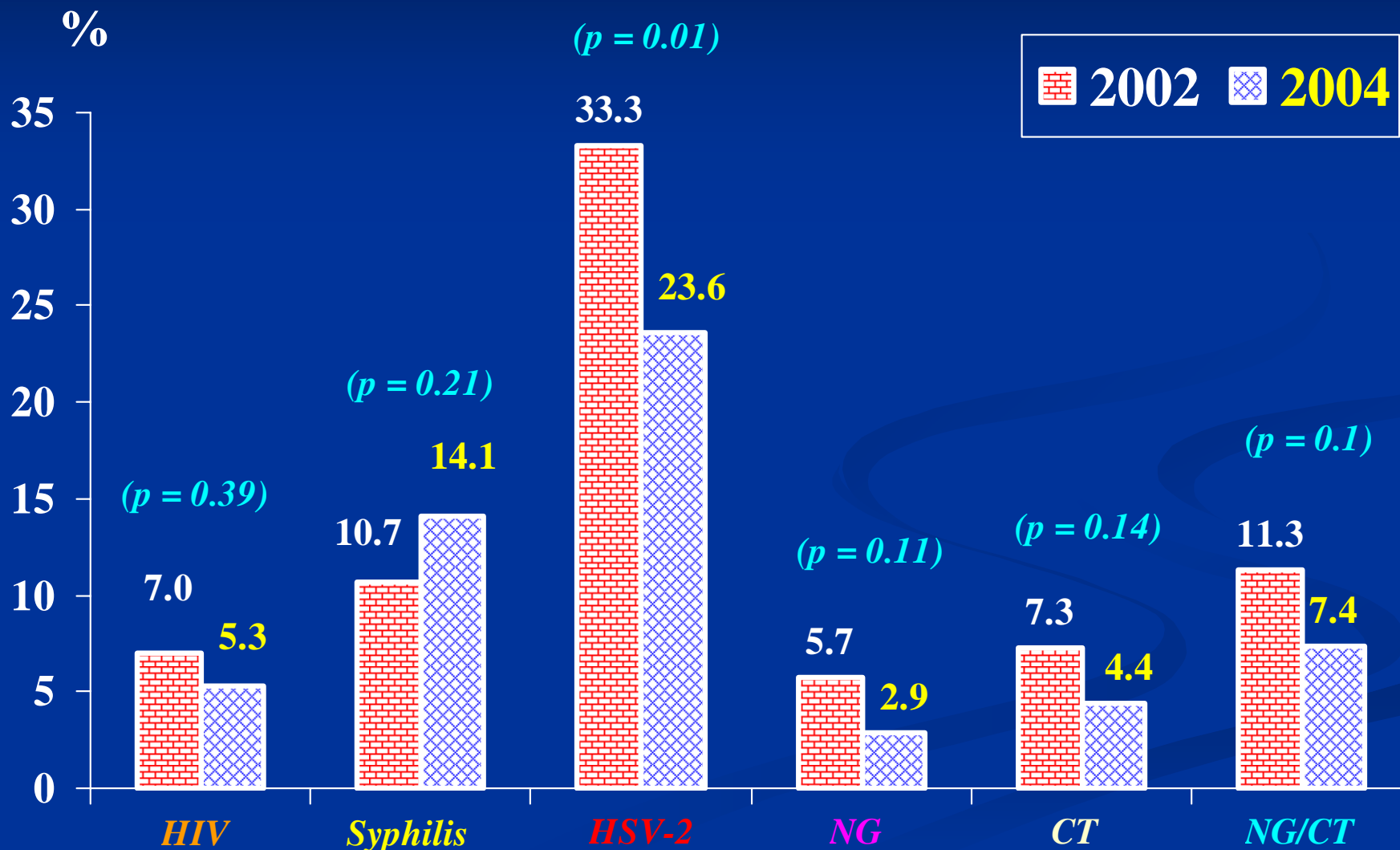
# STI/HIV among FSW in Quangtri, 2002 vs. 2004



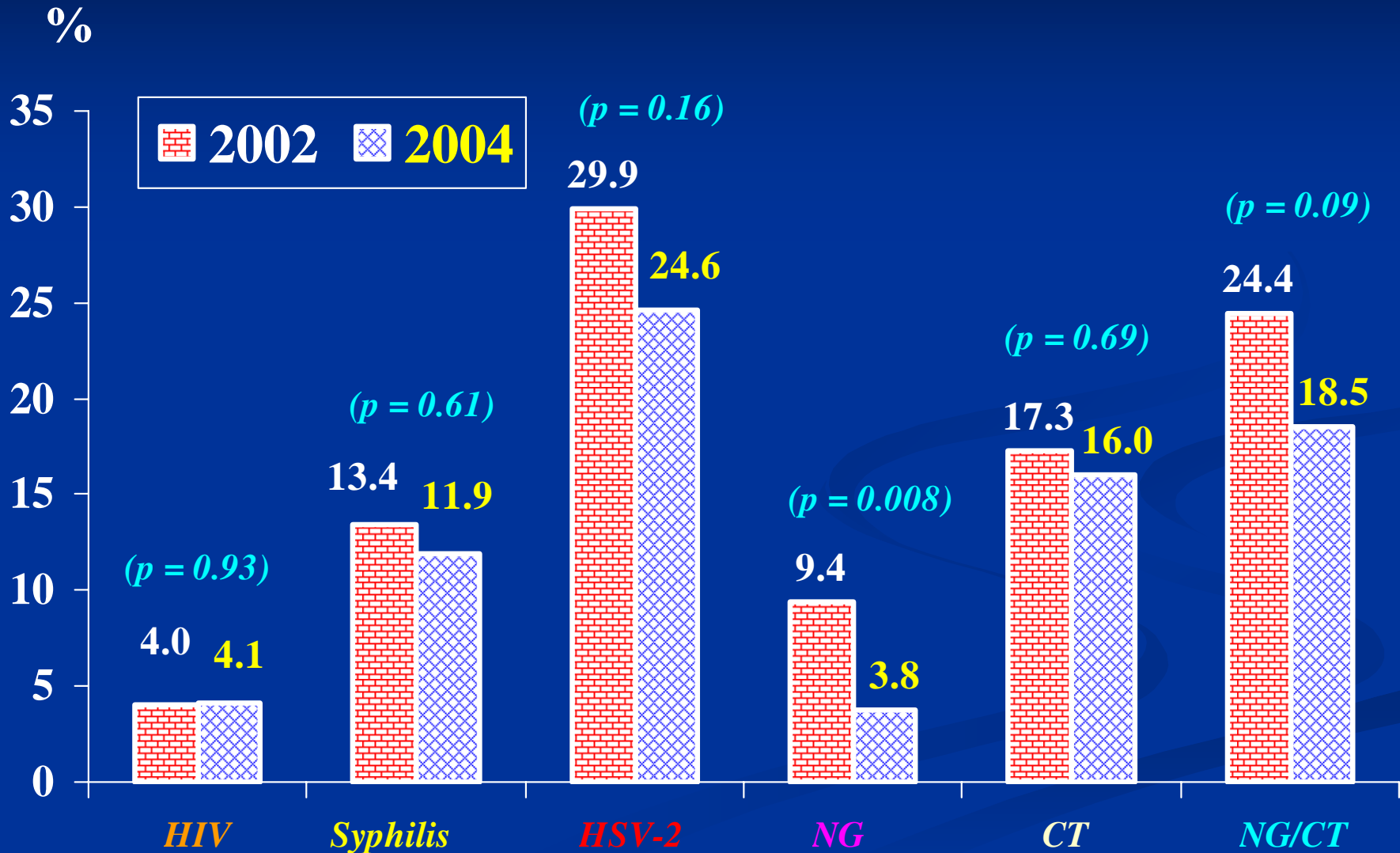
# STI/HIV among FSW in Dongthap, 2002 vs. 2004



# STI/HIV among FSW in An Giang, 2002 vs. 2004



# STI/HIV among FSW in **Kiengiang**, 2002 vs. 2004



# Conclusion & Recommendation (1)

- Decrease in NG/CT may partly due to routinely Periodic presumptive treatment of FSWs. This could be an effective strategy for STI control
- HIV slightly decreased
- Sero HSV-2 was high, but still lower than that of other Asian nations. However, HSV-2 is still a public health concern.
- Syphilis tended to increase, particularly in Laichau (>10times) → Need to strengthen surveillance. Health officials should discuss to find out better ways to contain syphilis. Screening for all FSWs with RPR should be considered.

# Conclusion & Recommendation (2)

- Improvement of some socio-demographic characteristic & behavior was documented in the study --> STI/HIV decreased
- The results may be the outcome of treatment intervention of STIs, but could partly be affected by the mobile feature of FSWs.
- Intervention program should be comprehensively & continuously implemented to assure the success of STI/HIV control & prevention in FSWs.

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