

Activities of Daily Living and Active Life Expectancy among Older Cambodians: Preliminary Findings from the 2004 Survey of the Elderly in Cambodia

Zachary Zimmer

I would like to acknowledge the assistance of other members of the research team: John Knodel, Kiry Sovan Kim and Sina Puch.

This research was assisted by a grant from the National Institute on Aging

Background on Cambodia

Older people in Cambodia are survivors of a violent and unstable history

More peaceful conditions have prevailed over the last decade, but living circumstances are still difficult

Previous reports on the health of older adults in Cambodia are rare

Recent renewal of academic institutions allows for data collection

Study Aims

- 1. Examine the disability status and ALE for older Cambodians**
- 2. Compare with surveys conducted in other countries in the region**
- 3. Examine some common correlates of disability**

2004 Survey of the Elderly in Cambodia

1. N = 1,273

2. Survey examines:

- Living conditions
- Health
- Effects of Cambodia's turbulent history on aging
- Impact of AIDS on the elderly

3. Multi-stage systematic sampling

4. Covers six provinces containing over half of Cambodia's population

- Battambang
- Kampong Cham
- Kandal
- Phnom Penh
- Prey Veng
- Takeo

Map of Cambodia

Showing districts sampled

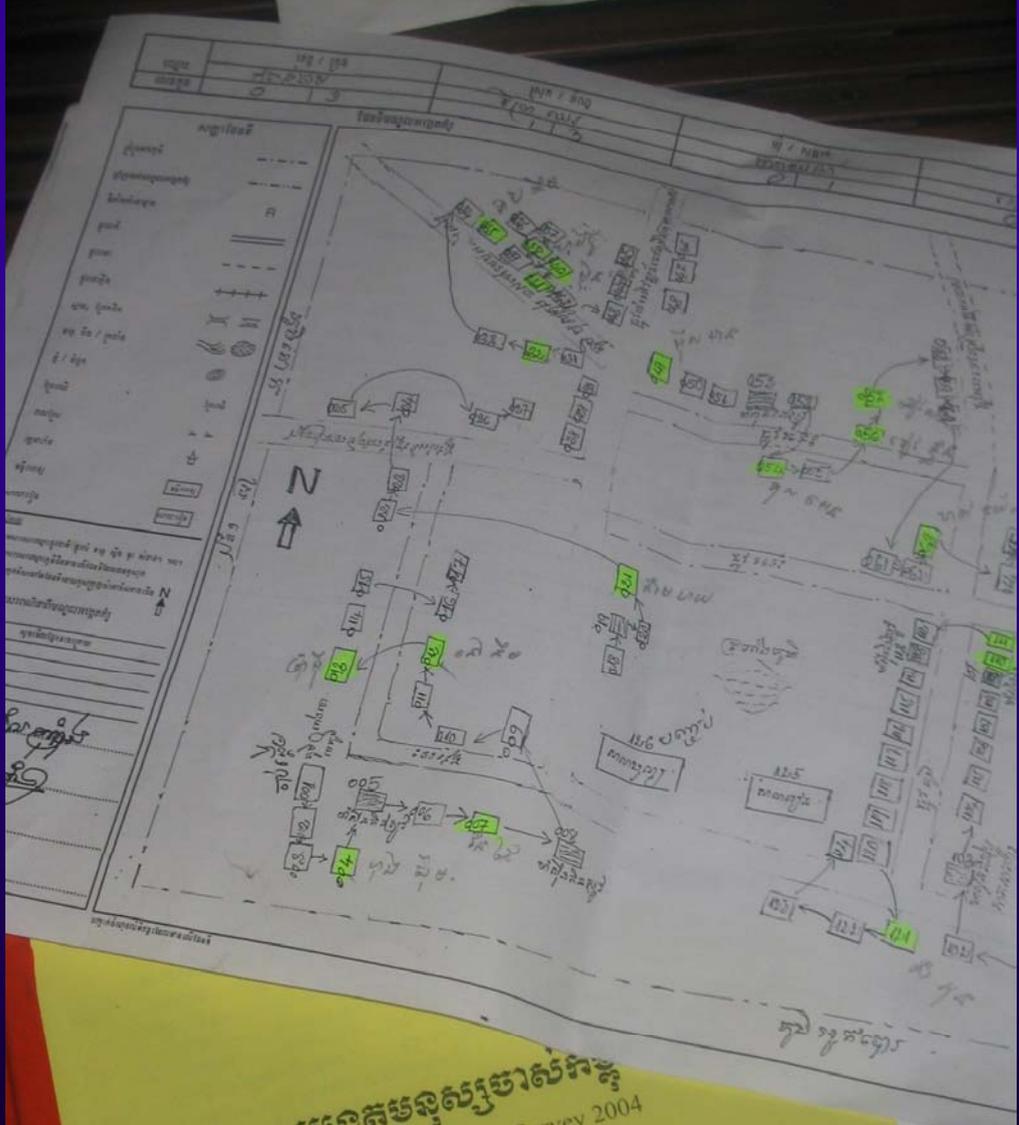
 approximate area with 100 interviews











អង្កេតមនុស្សចាស់កម្ពុជា
Cambodian Elder Survey 2004

(Provinces: កំពង់ចាម Code 03)
 (Districts: ទឹកស្រី Code 13)
 (Khum : ក្រុមប្រឹក្សាភិបាល Code 01)
 (Villages: ភូមិស្រីស្រី Code 08)

Measures

Four ADL items

1. Eating
2. Bathing
3. Dressing
4. Getting up from lying down



A little difficulty – not severe

A lot of difficulty – severe

Unable to do the task - severe

Percent Reporting Specific ADL Limitations

Getting up

Eating

Bathing

Dressing

**Any
difficulty**

18.8

8.7

8.4

6.2

**Severe
difficulty**

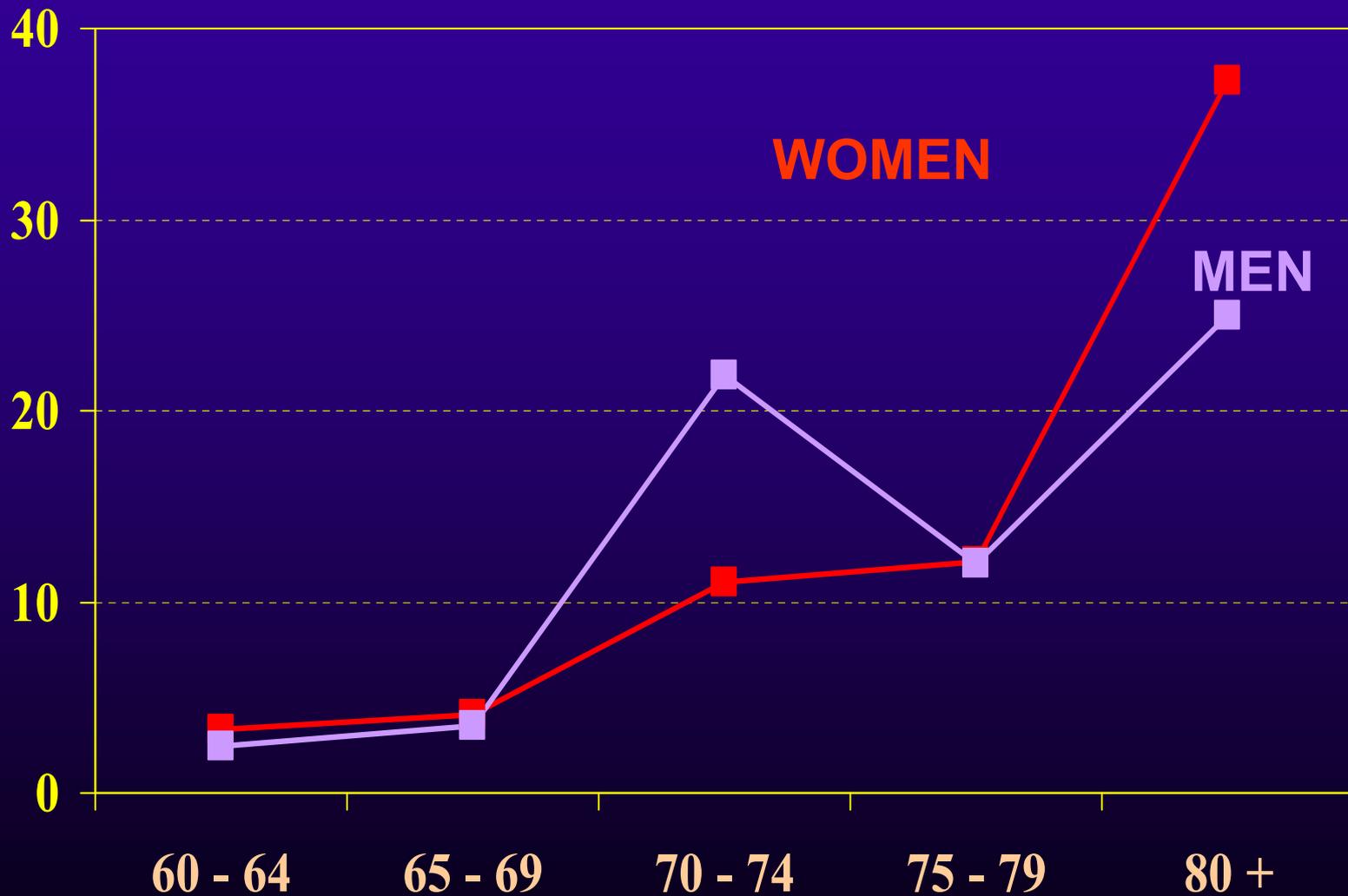
7.3

3.6

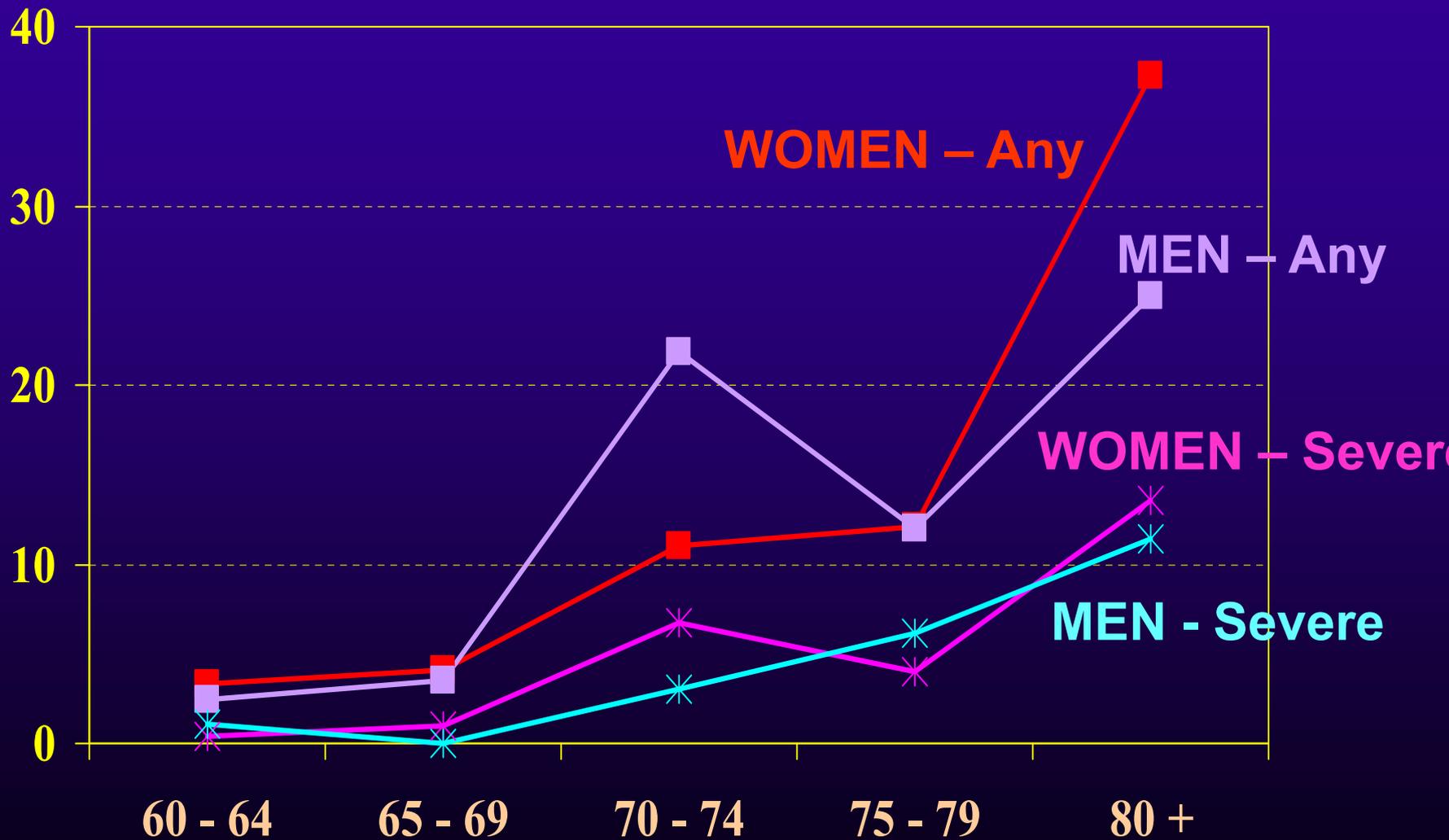
3.1

2.4

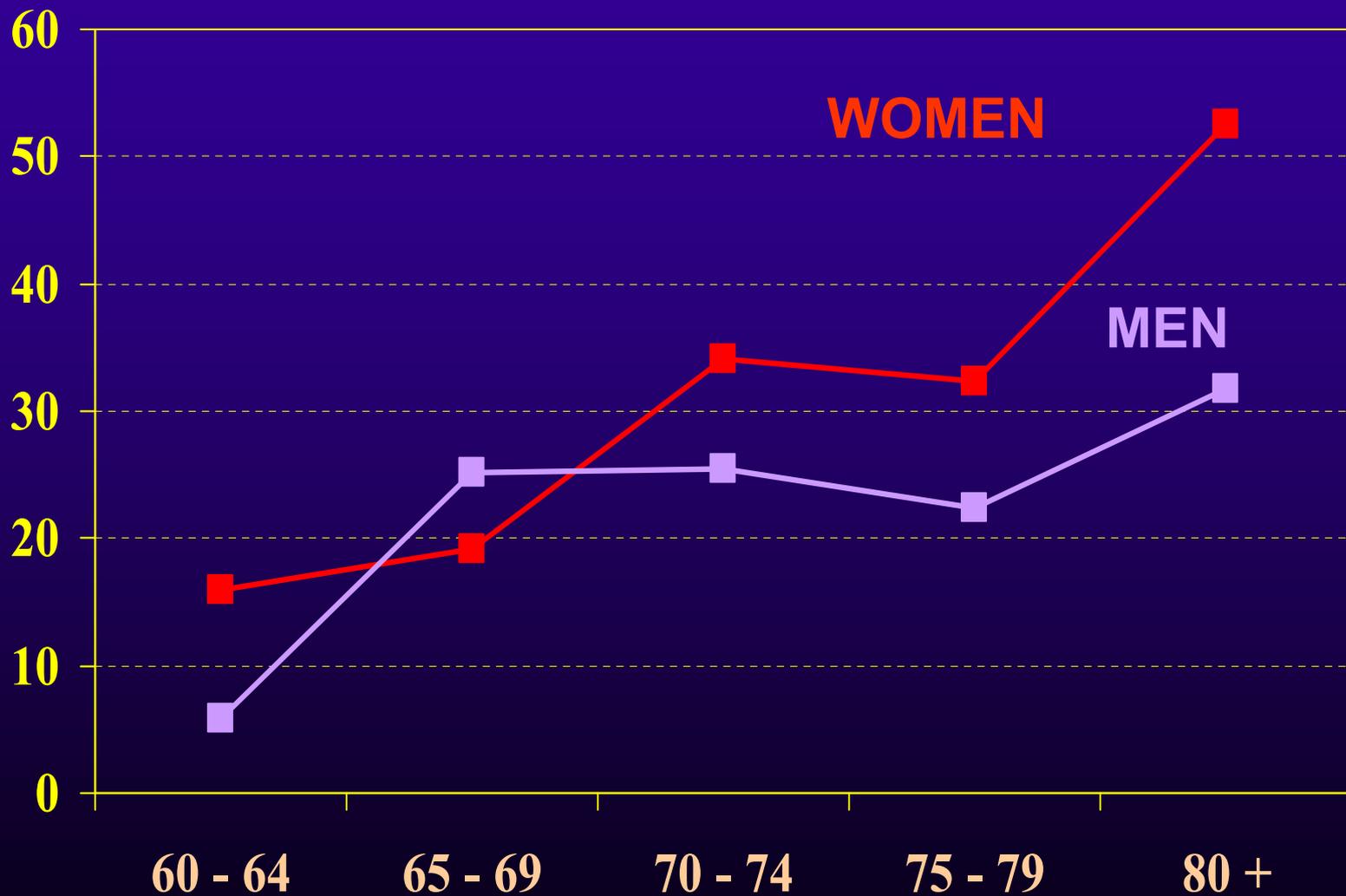
Percent Reporting Bathing Disability by Age and Sex



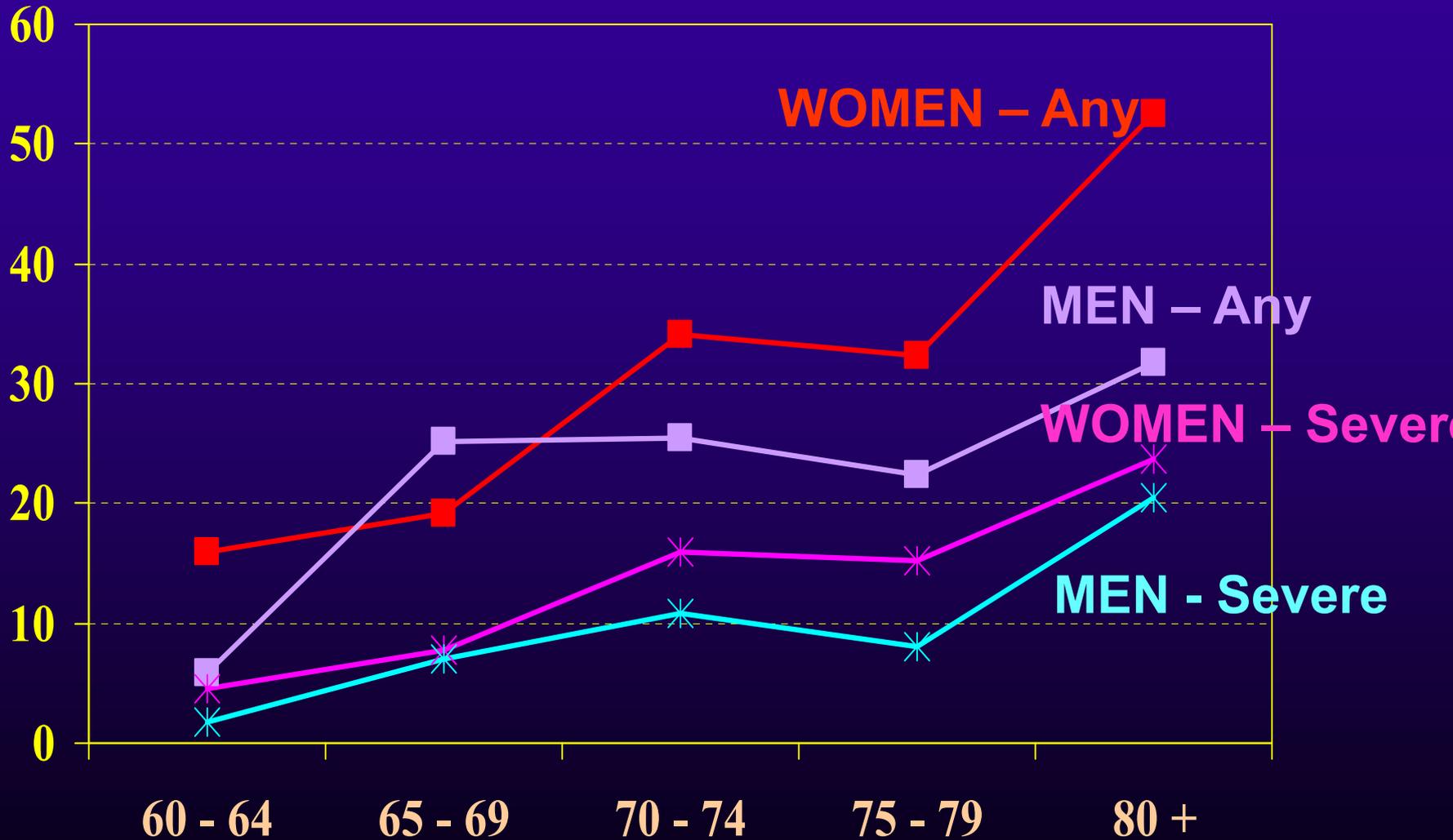
Percent Reporting Bathing Disability by Age and Sex



Percent Reporting Any Disability by Age and Sex



Percent Reporting Any and Any Severe Disability by Age and Sex



Comparing Percent with Specific ADL Limitations in Cambodia and Other SE Asian Countries

	<u>Getting up</u>	<u>Eating</u>	<u>Bathing</u>	<u>Dressing</u>
Cambodia	18.8	8.7	8.4	6.2
Burma	7.8*	5.4*	6.4*	5.0*
Indonesia	3.8*	3.1*	3.0*	2.2*
Philippines	na	4.5*	7.2	5.9
Thailand	na	3.7*	6.2*	3.2*

* Significantly different from Cambodia

Calculating Active Life Expectancy

Health states

- 1) Disability-free
- 2) Non-severe disability
- 3) Severe disability

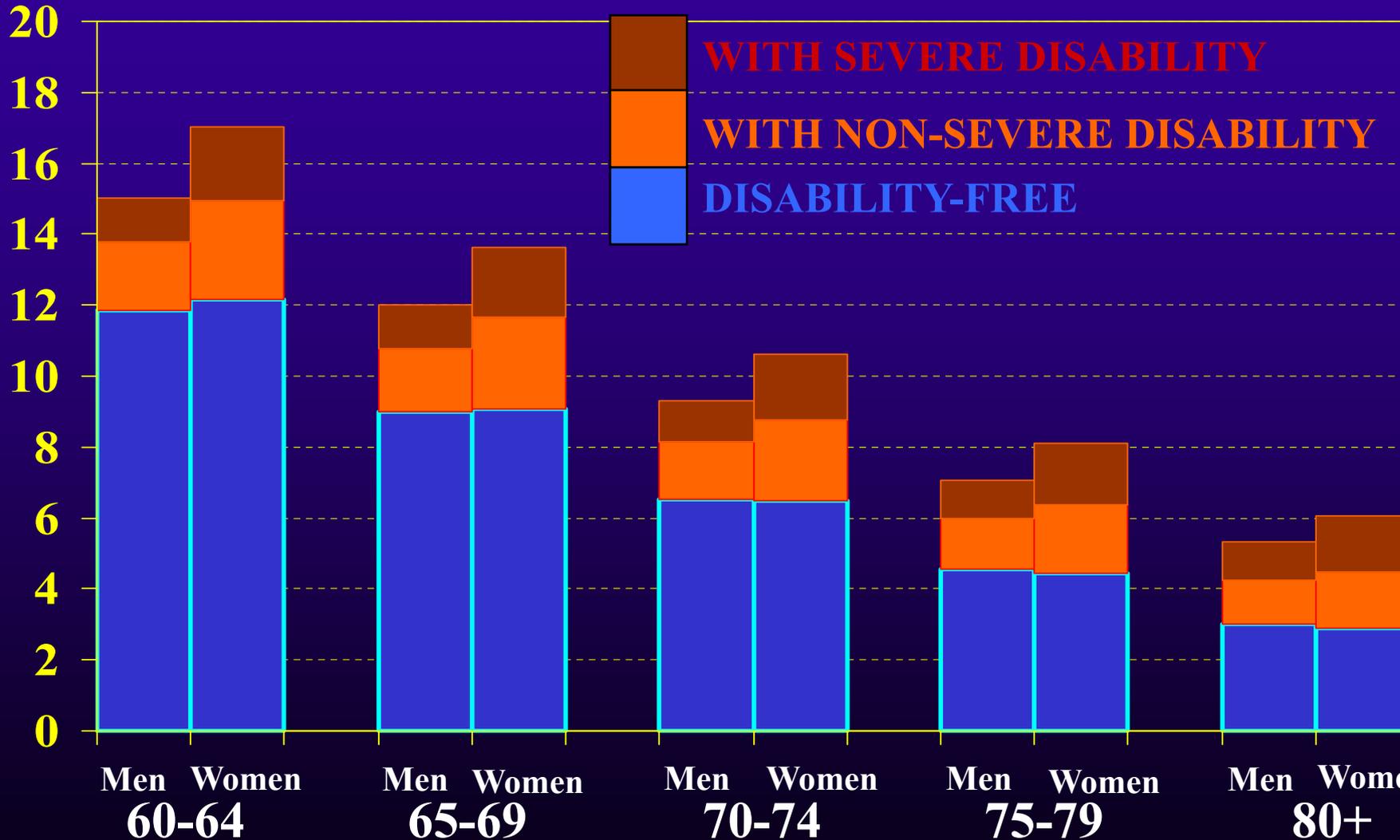
Method = Sullivan

Prevalence rates smoothed using maximum likelihood estimation

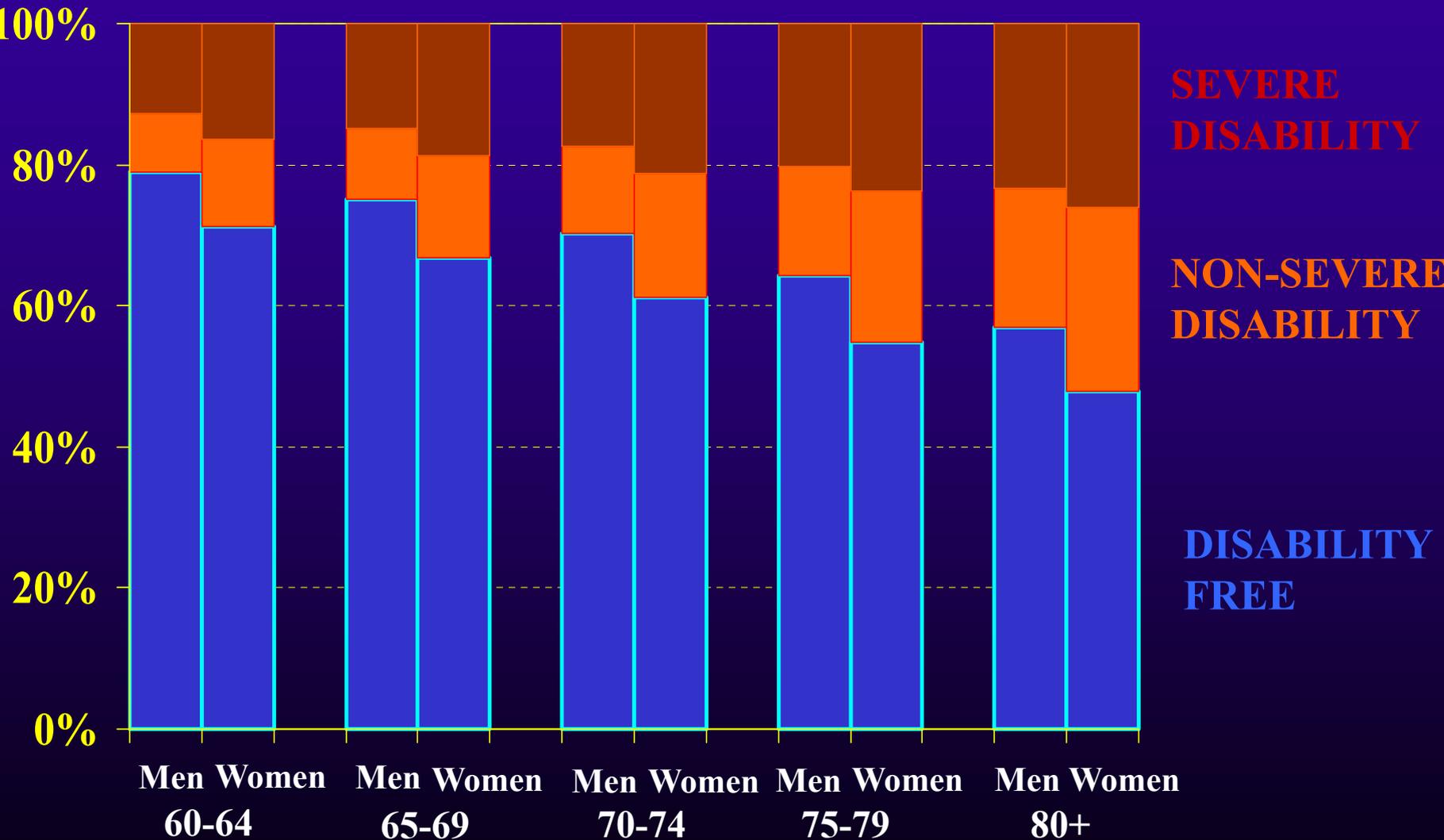
ALE estimates by age and sex

		Total life expectancy	Disability-free life expectancy	Severe disability-free life expectancy
Men	60-64	15.02	11.87 (12.45-11.29)	13.77 (14.18-13.37)
	65-69	11.99	9.00 (9.62-8.39)	10.78 (11.22-10.34)
	70-74	9.30	6.53 (7.21-5.86)	8.15 (8.64-7.66)
	75-79	7.06	4.54 (5.30-3.78)	5.97 (6.54-5.39)
	80+	5.31	3.03 (3.88-2.17)	4.26 (4.95-3.57)
Women	60-64	17.04	12.15 (12.69-11.62)	14.96 (15.37-14.55)
	65-69	13.63	9.09 (9.64-8.55)	11.65 (12.07-11.22)
	70-74	10.62	6.50 (7.07-5.94)	8.75 (9.21-8.30)
	75-79	8.09	4.45 (5.06-3.83)	6.36 (6.88-5.84)
	80+	6.08	2.91 (3.66-2.16)	4.48

Life Expectancy Segregated into Various States of Disability by Age and Sex



Percent of Life Expected in Various States of Disability by Age and Sex



Significant Correlates Disability

	<u>Any</u>	<u>Severe</u>
Age	+	+
Female (vs. Male)	+	
Not married (vs. Married)		
Rural (vs. Urban)	+	
Literacy (vs. Literate)	+	
- Semi-literate		
- Illiterate		
Income satisfaction (vs. Satisfied)		
- Somewhat satisfied	+	+
- Not satisfied	+	+

Conclusion

Examination of disability is suitable place to begin a health dialogue about a population of which little is known

In many ways, results shown conform to expectations:

- * women and older people more likely to be disabled**
- * rural residence and SES relate to disability in expected ways**
- * women live longer than men, but live more years in disabled states**

Comparisons With Other Samples from Southeast Asia

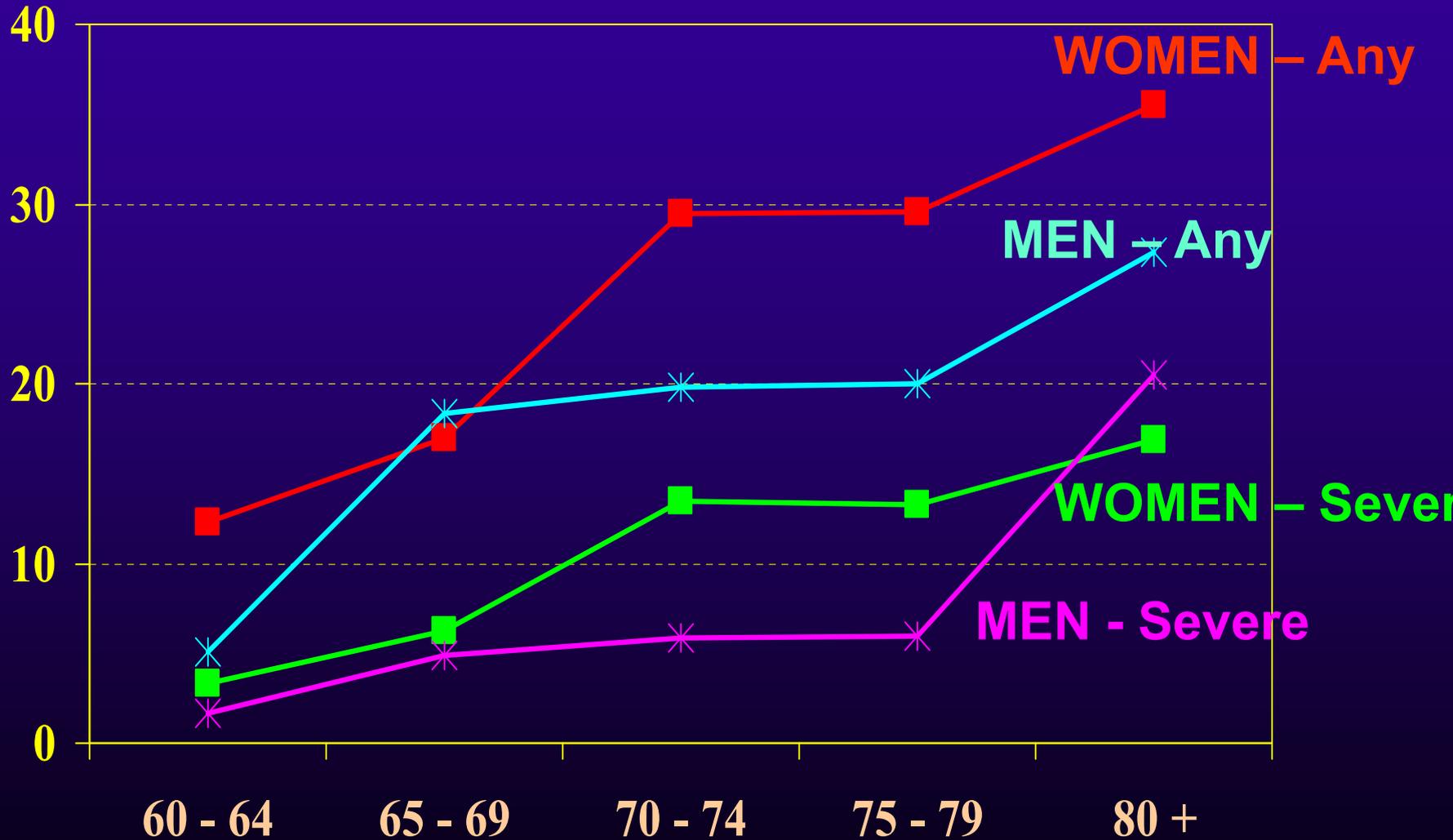
Cambodian prevalence rates are much higher than in Burma, Indonesia and Thailand, and moderately higher than Philippines

Comparisons of ALE with Lamb (1999) and cited by Saito, Qiao and Jitapunkul (2003) suggest Cambodians live greater percent of remaining life in disabled states than counterparts in other SE Asian countries

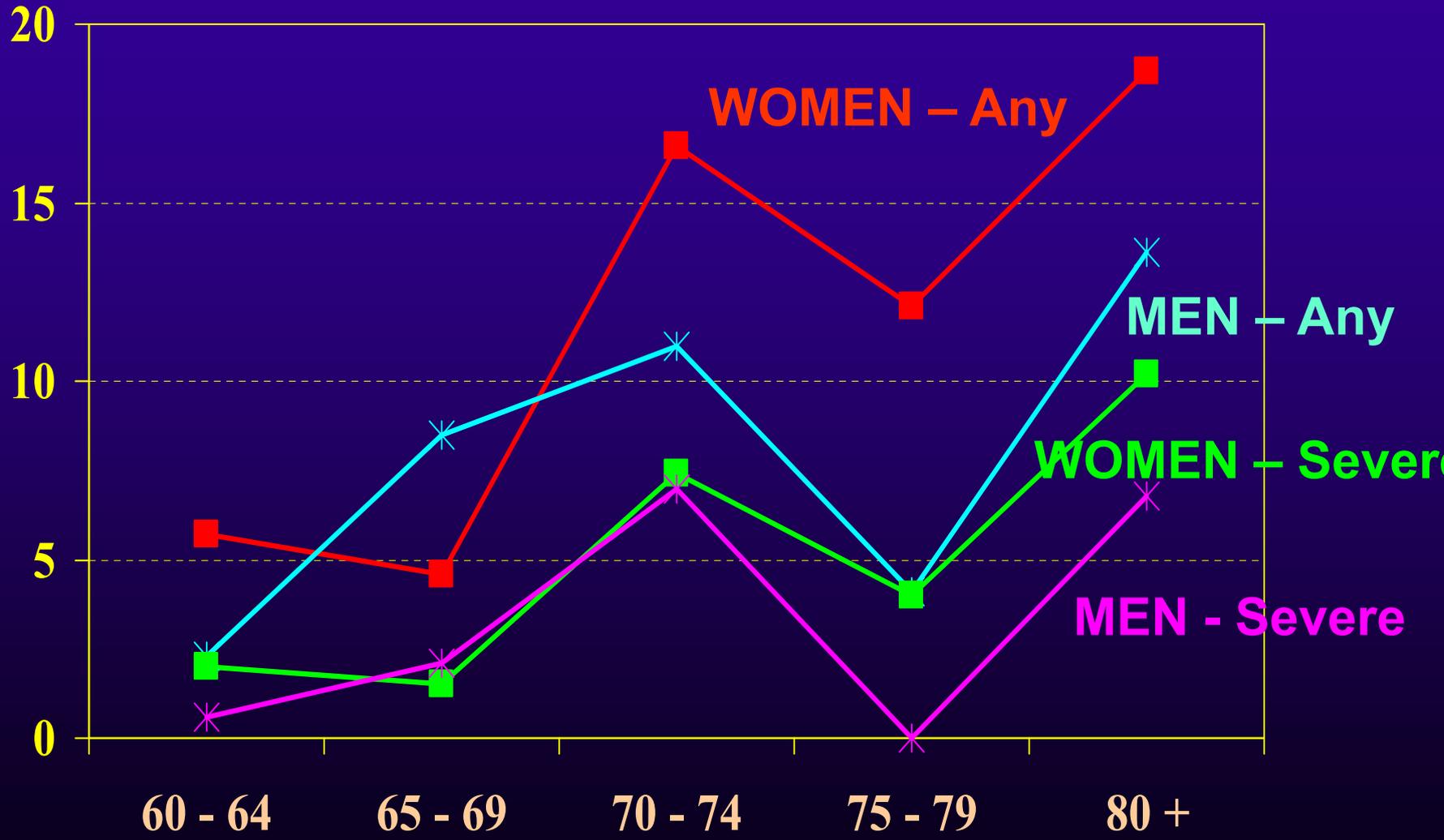
Is it reasonable that older Cambodians are less healthy?

- 1. No other country has experienced social disruption to the same degree**
- 2. Cambodia is more underdeveloped than other countries in the region**
- 3. Cambodian elders contend with real environmental barriers**

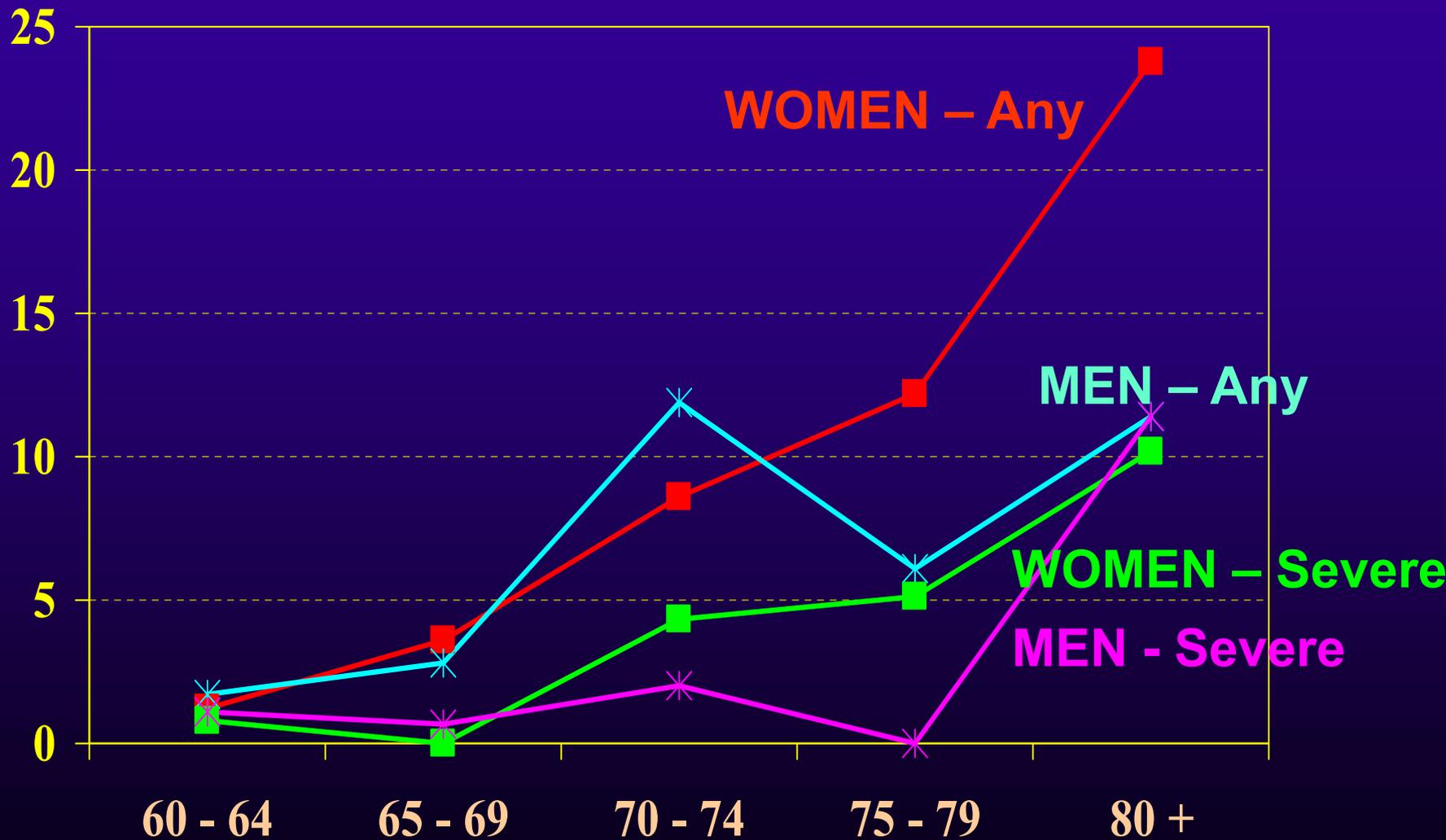
Percent Reporting Getting Up Disability by Age and Sex



Percent Reporting Eating Disability by Age and Sex



Percent Reporting Dressing Disability by Age and Sex



Significant Logistic Regression Coefficients for Specific ADL Disabilities

	<u>Getting up</u>	<u>Eating</u>	<u>Bathing</u>	<u>Dressing</u>
Age	+	+	+	+
Female (vs. Male)	+			
Not married (vs. Married)		+	+	+
Rural (vs. Urban)	+		+	
Literacy (vs. Literate)	+			
- Semi-literate				
- Illiterate				
Income satisfaction (vs. Satisfied)				
- Somewhat satisfied		+	+	
- Not satisfied	+		+	

Correlates of Disability

1. **Age:** Measured continuously
2. **Sex:** WOMEN vs. MEN
3. **Marital Status:** NOT MARRIED vs. MARRIED
4. **Residence:** RURAL vs. URBAN
5. **Literacy:** SOMEWHAT LITERATE, and ILLITERATE
vs.
FULLY LITERATE
6. **Income adequacy:**
SOMEWHAT ADEQUATE and NOT ADEQUATE
vs.
ADEQUATE