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Children's health inequalities and genetic diseases

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INTRODUCTION

The practice of consanguineous marriages has been widespread for hundreds of years, and is still very common, especially among various Middle Eastern, Asian and African populations. Their health consequences are primarily linked to the increased risk of congenital malformations and autosomal recessive diseases.

REASONS

- The belief that intrafamilial marriage offers an advantage in terms of compatibility of the bride with her husband's family;
- Reinforcement of family ties;
- Marriage stability;
- The desire to retain property within the family.

OBJECTIVES

Prospective Study

Describe children's health inequalities and analyze the social factors that contribute to the formation and persistence of these inequalities. Particular attention is paid to the factors determining the practice of consanguineous marriage.

DATA and METHODS

Prospective study

Souissi maternity in Rabat / Morocco.

Sample

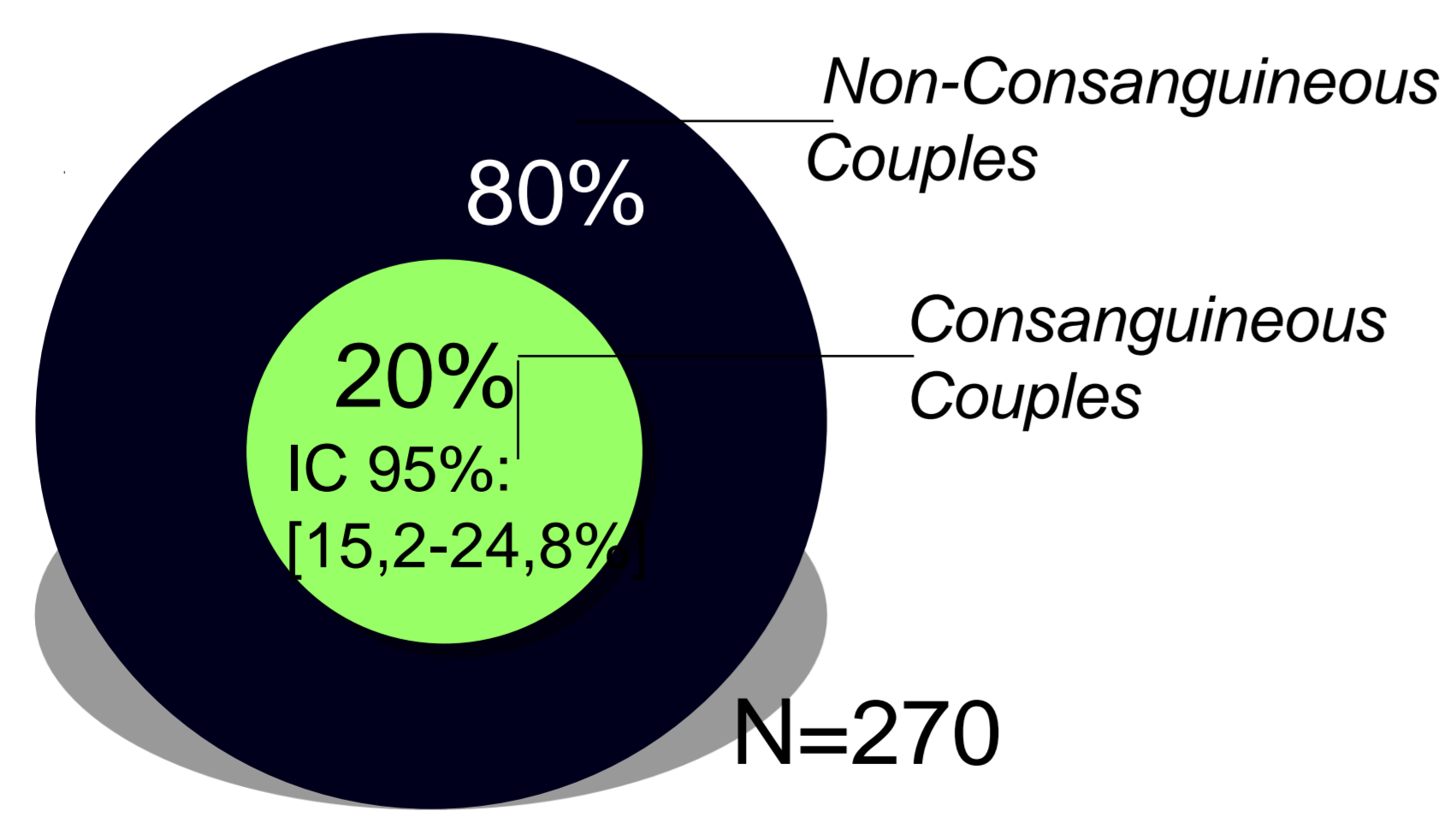
270 married women "selected randomly"

Data analysis

STATA 9.2

RESULTS

CONSANGUINEOUS MARRIAGES



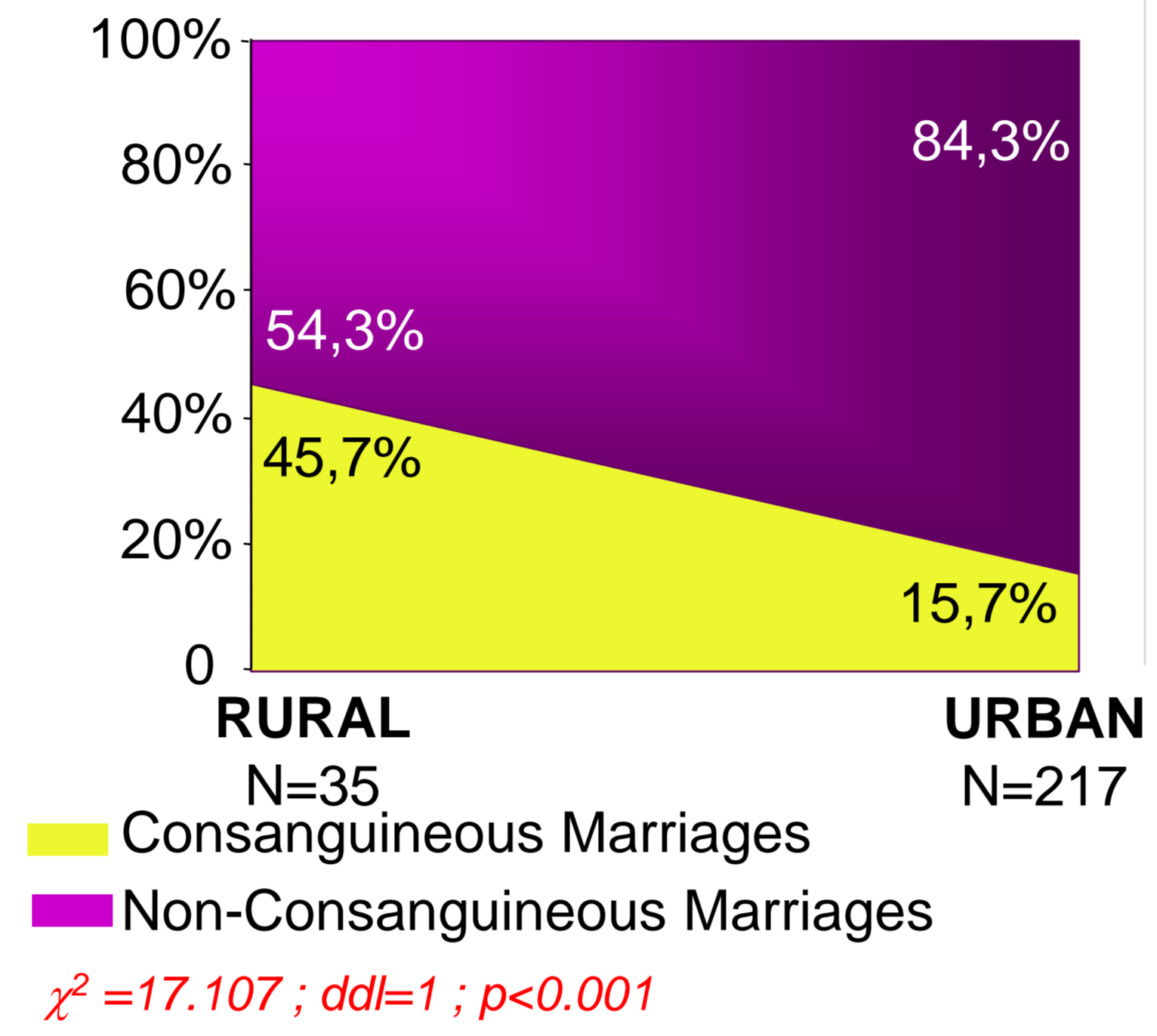
Inbreeding Coefficient

* $F = 10.28 \cdot 10^{-3}$ * Up to Second Cousin

The rate of consanguinity was high in the city of Rabat : One in five women has married her cousin.

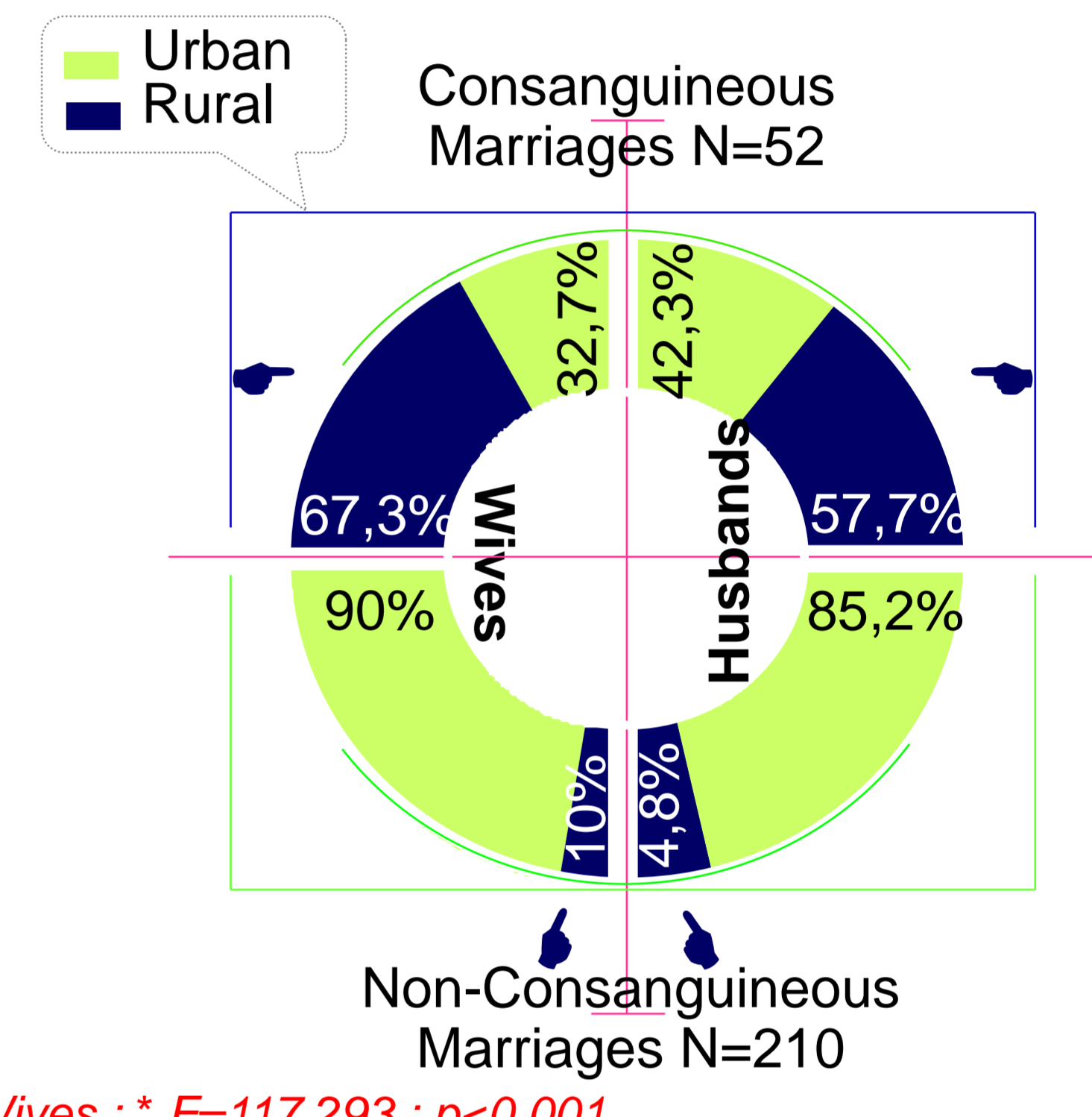
CHOICE OF CONSANGUINEOUS MARRIAGE : BIVARIATE ANALYSIS

PLACE OF RESIDENCE



Consanguineous marriages are more prevalent in rural (45.7%) than urban areas (15.7%) ($p < 0.001$).

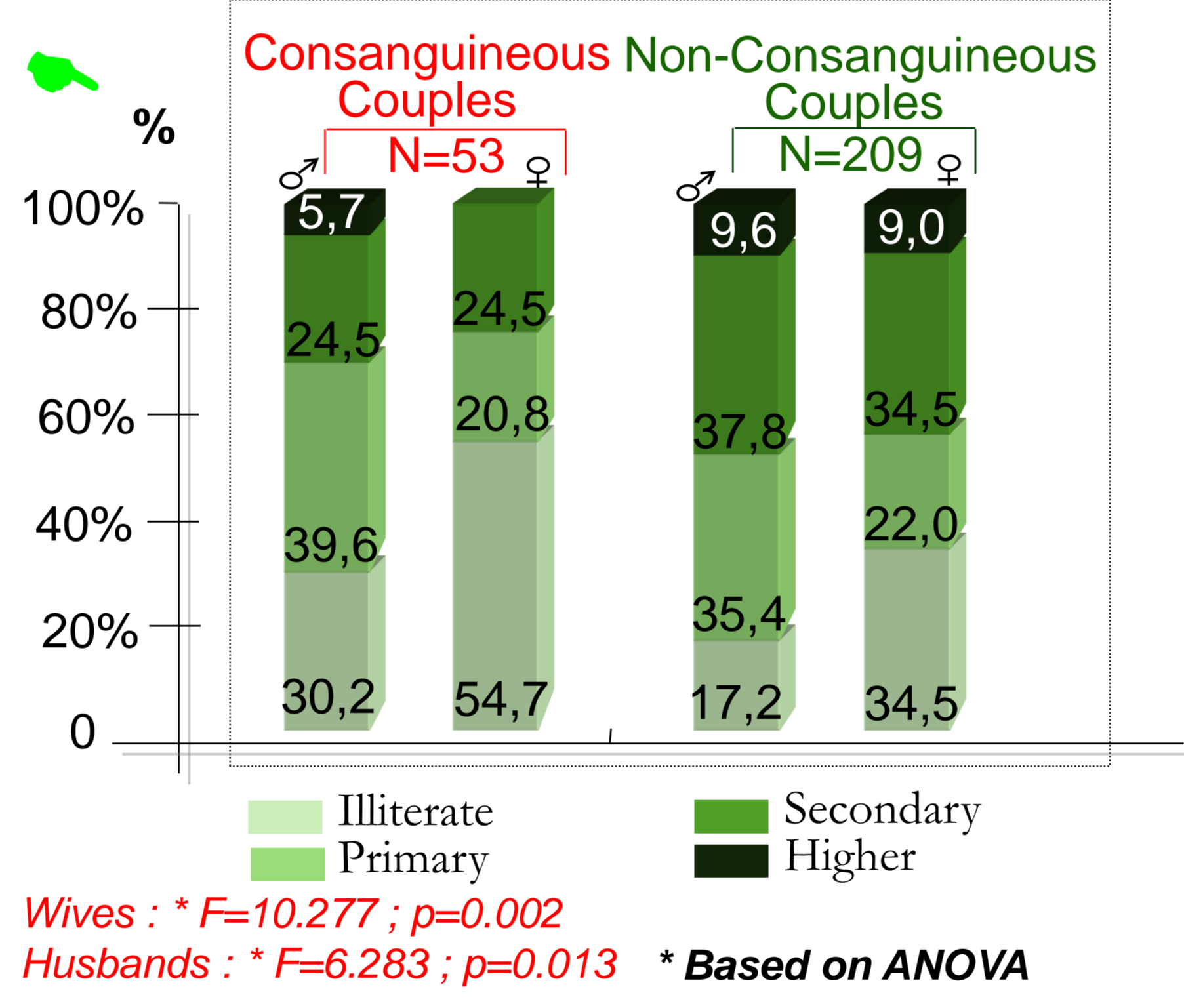
CHILDHOOD RESIDENCE



Urban-rural childhood residence have significant independent effect on consanguinity.

Wives : * $F=117.293$; $p < 0.001$
Husbands : * $F=51.059$; $p < 0.001$ * Based on ANOVA

EDUCATIONAL LEVEL



An inverse relationship between the prevalence of consanguineous marriages and a wives's and husband's education .

AGE AT FIRST MARRIAGE (Years)

	[10-20[[20-30[30+	Total	
Husbands	C	5,4%	62,2%	32,4%	100%(37)
	NC	1,9%	46,8%	51,3%	100%(156)
Wives	C	51,1%	42,2%	6,7%	100%(45)
	NC	24,8%	55,8%	19,4%	100%(165)

C: Consanguineous Marriages; NC: Non-Consanguineous Marriages
* Based on ANOVA

Consanguineous marriages have been positively associated with early age at marriage.

* $F=5.061$; $p=0.026$
* $F=12.475$; $p=0.001$