

Table 1. Sociodemographic and clinical characteristics of the adolescents studied

	Cases n=96 n (%)	Controls		
		School n=96 n (%)	Family n=96 n (%)	Community n=96 n (%)
Sex				
Male	43 (44.79)	47 (48.96)	44 (45.83)	49 (51.04)
Female	53 (55.21)	49 (51.04)	52 (54.17)	47 (48.96)
Age ($\bar{x} \pm DS$)	14.53 $\pm$ 0.89	14.21 $\pm$ 0.41	14.88 $\pm$ 2.04	14.26 $\pm$ 0.44
Level of Poverty☼				
Not poor nor vulnerable	39 (40.62)	17 (17.71)**	13 (13.54)**	17 (17.71)**
Multidimensional poverty	13 (13.54)	13 (13.54)	14 (14.58)	25 (26.04)
Vulnerable due to shortages	43 (44.79)	59 (61.46)	66 (68.75)	49 (51.04)
Vulnerable due to income	1 (1.04)	7 (7.29)	3 (3.12)	5 (5.21)
Albuminuria (median $\pm$ IQR)	65.4(41.9 – 163)	7.55 (5.3 – 12.4)**	8.6 (5.9 – 11.7)**	8 (5.2 – 13.85)**
Size (median $\pm$ IQR)	162 (158 – 168)	164 (157 – 167)	162 (158 – 168)	162 (158 – 167)
P. Size (median $\pm$ IQR)	42 (25 – 66)	33.5 (21 – 64.5)	36 (18 – 62.5)	32 (16.5 – 53.5)*
Weight (median $\pm$ IQR)	51.85 (45.35 – 62.35)	58.02 (51 – 63.72)**	56.95 (50.52 – 66.85)**	56.76 (50.05 – 67.85)**
P. weight (median $\pm$ IQR)	46 (20.5 – 80.5)	69 (36 – 83.5)	69 (39 – 87.5)*	67 (32 – 89)
Waist (median $\pm$ IQR)	73 (66-77.4)	73.75 (69 – 79.5)*	76 (68.5 – 81)*	74 (67.5 – 83)
P. Waist (median $\pm$ IQR)	71.5 (34.5 – 77)	77 (41.5 – 88)	77 (38 – 91)*	74.5 (38 – 92)
BMI (median $\pm$ IQR)	19.6 (17.4 – 22.6)	22.5 (19.55 – 24.25)**	21.75 (19.05 – 24.85)**	21.75 (19.55 – 26)**
P. BMI (median $\pm$ IQR)	52 (19 -81)	78 (44.5 – 88.5)**	78 (37.5 – 89)*	47.5 (71 – 94)**
BMI				
Normal weight	78 (81.25)	66 (68.75)**	64 (66.77)*	63 (65.62)*
Overweight	5 (5.21)	21 (21.88)	13 (13.54)	9 (9.38)
Obese	13 (13.54)	9 (9.38)	9 (19.79)	24 (25)
SAP (median $\pm$ IQR)	110 (100 – 117)	110 (100 – 116)	110 (100 – 120)*	110 (106.5 – 120)
DAP (median $\pm$ IQR)	70 (60 – 74.5)	70 (64 – 77)	70 (70 – 80)	71 (70 – 80)

*p $\leq$ 0.05, ** p $\leq$ 0.01, Pearson's chi squared, Student t for independent samples, Mann-Whitney U test. Abbreviations: P, Percentage, BMI, Body Mass Index; SAP, Systolic arterial pressure; DAP, Diastolic arterial pressure. ☼ National Council for the Evaluation of Social Development Policy (CONEVAL) methodological evaluation.

Table 2. Adjusted strength of the associations in the continuous dimension of social capital of health with the presence of chronic kidney disease in adolescents

Dimension Index	Cases n=96 and School Controls n=96 Multivariate model ☼		Cases n=96 and Family Controls n=96 Conditional Model m¥		Cases n=96 and Community Controls n=96 Multivariate model Ø	
	ORa	95% CI	ORa	95% CI	ORa	95% CI
Cognitive Domain						
Social harmony (continuous scale) ¹	1.11	1.003 – 1.24*				
Generalized norms (continuous scale) ²	0.86	0.78 – 0.96**	0.85	0.75 – 0.96**	0.82	0.75 – 0.90**
Sense of belonging (continuous scale) ³					0.85	0.73 – 0.99*
Confidence (continuous scale) ⁴	0.67	0.51 – 0.88**	0.61	0.46 – 0.83**	0.57	0.44 – 0.74**
Structural Domain						
Participation in organizations (continuous scale) ¹			0.70	0.56 – 0.88**	0.81	0.69 – 0.95*
Membership of institutions (continuous scale) ²	0.81	0.73 – 0.89**	0.85	0.77 – 0.95**	0.74	0.67 – 0.83**
Frequency of the activities (continuous scale) ³	0.71	0.63 – 0.81**	0.73	0.63 – 0.86**	0.70	0.62 – 0.80**
Size of the networks (continuous scale) ⁴	0.70	0.61 – 0.80**	0.63	0.49 – 0.81**	0.66	0.58 – 0.76**
Collective actions (continuous scale) ⁵	0.68	0.59 – 0.77**	0.75	0.65 – 0.86**	0.66	0.58 – 0.75**
Degree of civic responsibility (continuous scale) ⁶	0.65	0.56 – 0.75**	0.57	0.43 – 0.76**	0.60	0.51 – 0.70**
Diversity (continuous scale) ⁷	0.67	0.57 – 0.80**	0.77	0.63 – 0.95**	0.65	0.54 – 0.77**
Belonging to groups with resources (continuous scale) ⁸	0.73	0.63 – 0.86**	0.65	0.51 – 0.83**	0.69	0.59 – 0.81**

Cognitive Domain ☼ Multivariate models adjusted for: sex, age, poverty (CONEVAL), overweight/obesity, crop field, gestational age. 1. R2 = 0.2230 H-L: Chi² = 168.27, p=0.23; 2. R2 = 0.2353 H-L: Chi² = 171.45, p=0.39; 4. R2 = 0.2457 H-L: Chi² = 146.33, p = 0.45.

¥ Conditional models adjusted for: sex, age, poverty (CONEVAL), overweight/obesity, systolic arterial pressure, number of mother's pregnancies and number of gestation. 2. R2 = 0.4027 H-L: Chi²=188.62 p=0.26, 4. R2 = 0.4613 H-L: Chi²=166.71 H-L=0.55.

Ø Multivariate models adjusted for: sex, age, poverty (CONEVAL), overweight/obesity, guava production, gestational age, pesticide exposure at the fathers workplace, fathers contact with pesticides. 2. R2 = 0.2345 H-L: Chi² = 145.90, p=0.28; 3. R2=0.1583 H-L: Chi² = 113.57, p=0.44; 4. R2 = 0.2718 H-L: Chi² = 85.09, p=0.85.

Structural Domain ☼ Multivariate models adjusted for: sex, age, poverty (CONEVAL), overweight/obesity, crop field, gestational age. 2. R2 = 0.2772 H-L: Chi² = 182.50, p=0.08; 3. R2 = 0.3446 H-L: Chi² = 162.88, p=0.44; 4. R2 = 0.3594 H-L: Chi² = 163.97, p=0.39; 5. R2 = 0.4077 H-L: Chi² = 170.03, p=0.37; 6. R2 = 0.3989 Chi² = 151.75, p=0.85; 7. R2 = 0.3119 H-L: Chi² = 155.23, p=0.43; 8. R2 = 0.2752 H-L: Chi² = 170.32, p=0.20.

¥ Conditional models adjusted for: sex, age, poverty (CONEVAL), overweight/obesity, systolic arterial pressure, number of mother's pregnancy, number of gestation. 1. R2 = 0.4490 H-L: Chi² = 192.90, p=0.19; 2. R2 = 0.4212 H-L: Chi² = 185.42, p=0.22; 3. R2 = 0.5278 H-L: Chi² = 191.73, p=0.14; 4. R2 = 0.6355 H-L: Chi² = 195.11, p=0.15; 5. R2 = 0.5361 H-L: Chi² = 199.05, p=0.12; 6. R2 = 0.5966 H-L: Chi² = 210.36, p=0.06; 7. R2 = 0.4012 H-L: Chi² = 183.03, p=0.23; 8. R2 = 0.4622 H-L: Chi² = 183.51, p=0.24.

Ø Multivariate models adjusted for: sex, age, poverty (CONEVAL), overweight/obesity, guava production, gestational age, pesticide exposure at the fathers workplace, and fathers contact with pesticides. 1. R2 = 0.1661 H-L: Chi² = 128.42, p=0.18; 2. R2 = 0.2742 H-L: Chi² = 115.42, p=0.76; 3. R2 = 0.3224 H-L: Chi² = 165.72, p=0.68; 4. R2 = 0.3569 H-L: Chi² = 134.03, p=0.41; 5. R2 = 0.3745 H-L: Chi² = 155.8, p=0.08; 6. R2 = 0.4046 H-L: Chi² = 152.73, p=0.16; 7. R2 = 0.2879 H-L: Chi² = 133.70, p=0.28; 8. R2 = 0.2691 H-L: Chi² = 135.81, p=0.18.

*p ≤0.05 **p ≤0.01 H-L: Hosmer-Lemeshow Test.

Table 3. Preventable fraction of the continuous dimensions at the community level of social capital of health with the presence of chronic kidney disease in adolescents

Dimension Index	Cases n=96 and School Controls n=96	Cases n=96 and Family Controls n=96	Cases n=96 and Community Controls n=96
	PF	PF	PF
Cognitive Domain			
Social Harmony	0.09		
Generalized Norms	0.14	0.15	0.18
Sense of Belonging			0.15
Confidence	0.33	0.39	0.43
Structural Domain			
Participation in organizations		0.30	0.19
Membership of institutions	0.19	0.15	0.26
Frequency of activities	0.29	0.27	0.30
Size of the networks	0.30	0.37	0.34
Collective actions	0.32	0.25	0.34
Degree of civic responsibility	0.35	0.43	0.40
Diversity	0.33	0.23	0.35
Belonging to Groups with Resources	0.27	0.35	0.31

PF: Preventable fraction

Table 4. Proportional association strength of continuous dimensions of individual level of social capital in health with the presence of chronic kidney disease in adolescents

Dimension Index	Cases n=96 and School Controls n=96 Ordinal logistic Model ☼		Cases n=96 and Family Controls n=96 Ordinal logistic Model ¥		Cases n=96 and Community Controls n=96 Ordinal logistic Model Ø	
	ORp	95% CI	ORp	95% CI	ORp	95% CI
Cognitive Domain						
Social harmony (continuous scale) ¹	1.12	1.14 – 1.25*	1.11	1.01 – 1.22**	1.11	1.007 – 1.23*
Generalized norms (continuous scale) ²	0.86	0.78 – 0.95**	0.86	0.79 – 0.94**	0.84	0.77 – 0.92**
Confidence (continuous scale) ³	0.67	0.53 – 0.85**	0.59	0.47 – 0.74**	0.60	0.48 – 0.76**
Structural Domain						
Membership of institutions (continuous scale) ⁴	0.81	0.74 – 0.89**	0.84	0.77 – 0.91**	0.77	0.70 – 0.85**
Frequency of the activities (continuous scale) ⁵	0.72	0.65 – 0.80**	0.74	0.67 – 0.82**	0.74	0.66 – 0.82**

☼ Ordinal logistic model adjusted for sex, age, overweight/obesity, crop field, gestational age: 1. R2 = 0.10233; 2. R2 = 0.1093; 3. R2 = 0.1181; 4. R2 = 0.2184; 5. R2 = 0.2657.

¥ Ordinal logistic model adjusted for sex, age, poverty (CONEVAL), overweight/obesity, systolic arterial pressure, number of mother's pregnancy, and number of gestation: 1. R2 = 0.0890; 2. R2 = 0.1090; 3. R2 = 0.1158; 4. R2 = 0.1256; 5. R2 = 0.1677.

Ø Ordinal logistic model adjusted for sex, age, poverty (CONEVAL), overweight/obesity, guava production, gestational age, pesticide exposure at the fathers workplace, and fathers contact with pesticides: 1. R2 = 0.0943; 2. R2 = 0.1275; 3. R2 = 0.1602; 4. R2 = 0.1761; 5. R2 = 0.2359.

*p≤0.05 **p≤0.01