

# Perceived social support and stress during early pregnancy in multi-ethnic Suriname: preliminary results of the CCREOH- MekiTamara Study

A.R. Gokoel, C.W.R. Zijlmans, M.S. Mac Donald-Ottevanger, M.Y. Lichtveld, E.W. Harville

## INTRODUCTION

Social support during pregnancy may have a protective effect against illness caused by stress. Systematic reporting on the association between social support and perceived stress is lacking in Suriname, a LMIC country in South America. This study aimed to assess the association between social support and perceived stress among pregnant women during their first or second trimester of pregnancy in Suriname.

## METHODS

This study has a cross-sectional study design. Data of 760 pregnant women from the Caribbean Consortium of Research in Environmental and Occupational Health research program were analysed using the Social Support List (SSL12) (divided at median, 30) and the Cohen Perceived Stress Scale questionnaires (cut off  $\geq 20$  for high stress) to assess social support and perceived stress respectively. The association between social support and perceived stress was examined using logistic regression analyses, adjusted for demographic factors.

## RESULTS

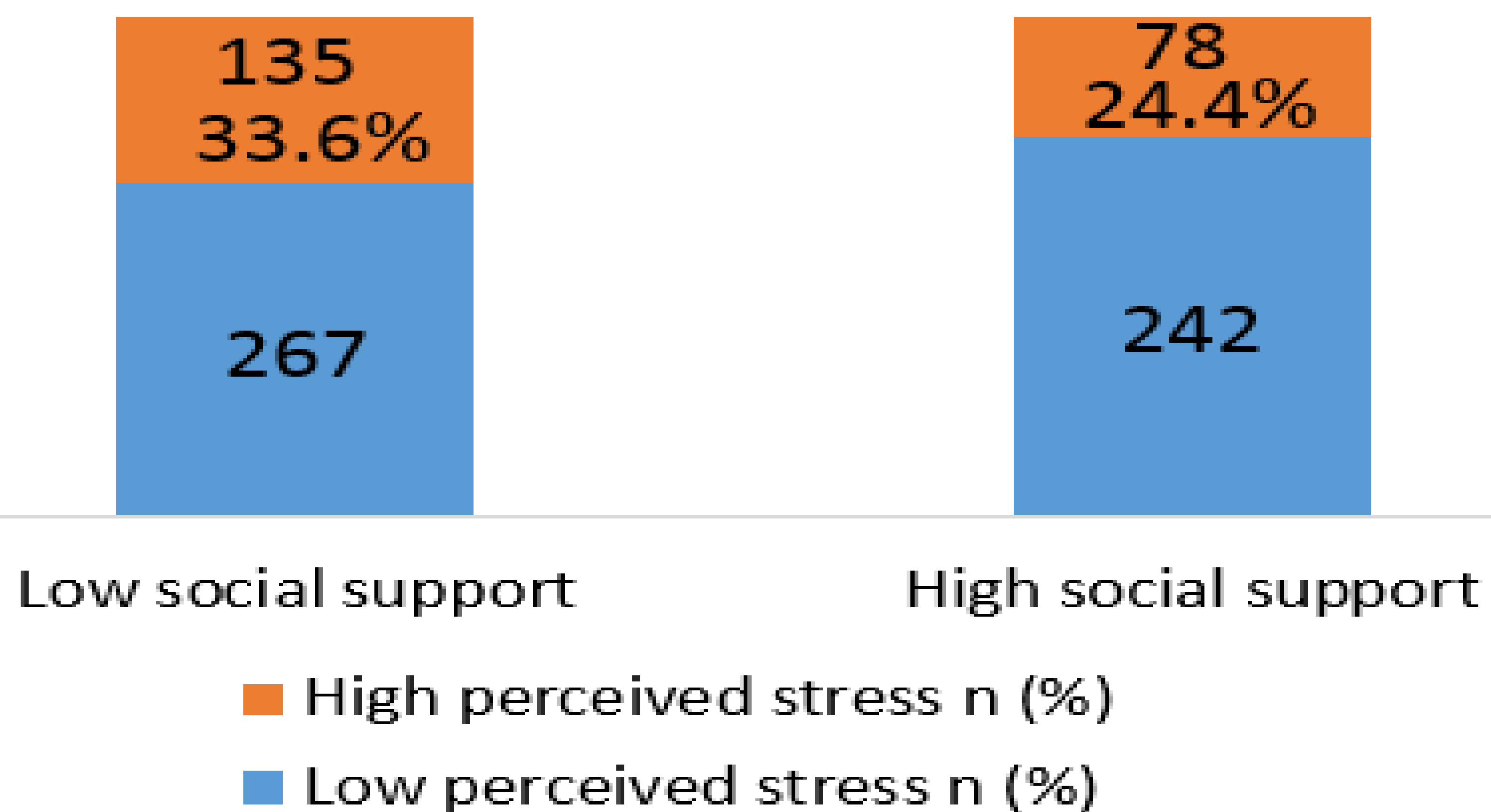


Figure 1: Distribution of high perceived stress in low and high social support

**63% of the pregnant women with high levels of perceived stress received social support below the median.**

**Women with lower social support had 1.6 the odds of having high perceived stress.**

Table 1: Multivariate Logistic Regression

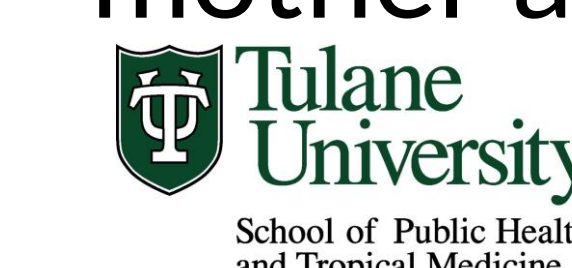
	Perceived stress		Multivariate OR (95% CI)	p-value
	Low perceived stress n (%)	High perceived stress n (%)		
<b>Social support</b>				<b>0.01</b>
Low social support	267 (66.4)	135 (33.6)	1.59 (1.10-2.29)	
High social support	242 (75.6)	78 (24.4)	1	
<b>Education</b>				<b>0.009</b>
$\leq$ secondary lower	235 (62.8)	139 (37.2)	1.66 (1.13-2.43)	
secondary upper or higher	267 (77.8)	76 (22.2)	1	
<b>Household income (SRD)</b>				0.39
<3000	274 (68.0)	129 (32.0)	1.19 (.80-1.78)	
$\geq$ 3000	185 (75.8)	59 (24.2)	1	

Table 2: Association between demographic factors and social support

	Social support		Bivariate OR (95% CI)	p-value
	Low social support n (%)	High social support n (%)		
<b>Age</b>				0.88
16- 19 year	45 (57.7)	33 (42.3)	1.12 (.691-1.80)	
20- 34 year	298 (55.0)	244 (45.0)	1	
35+ year	70 (56.5)	54 (43.5)	1.06 (.716-1.57)	
<b>Ethnic group</b>				0.095
African descent	207 (59.1)	143 (40.9)	1.20 (.82-1.75)	
Asian descent	115 (50.0)	115 (50.0)	0.83 (.55-1.24)	
Other	87 (54.7)	72 (45.3)	1	
<b>Marital status</b>				0.23
Married/cohabitating	339 (54.2)	287 (45.8)	1	
Not married/not living together	67 (60.4)	44 (39.6)	1.29 (.85-1.95)	
<b>Education</b>				<b>0.001</b>
$\leq$ secondary lower	244 (65.1)	131 (34.9)	2.27 (1.68-3.06)	
secondary upper or higher	157 (45.1)	191 (54.9)	1	
<b>Household income* (SRD)</b>				<b>0.001</b>
<3000	247 (60.5)	161 (39.5)	2.05 (1.48-2.82)	
$\geq$ 3000	105 (42.9)	140 (57.1)	1	

## DISCUSSION & CONCLUSION

Approximately two third of the pregnant women with high perceived stress received lower-than-average social support during pregnancy. Intervention programs improving social support during pregnancy may help to maintain mental health and to reduce stress and its potential adverse health effects on mother and child.



This work is supported by the NIH Fogarty International Center (grant numbers U01TW010087 and U2RTW010104). The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.