

Demographic characteristics and barriers for physical activity among adults residing at community La Mesa, Caguas, Puerto Rico 2012

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INTRODUCTION

Physical activity (PA) has been reported to have many health benefits including reduced risk of mortality and the prevention of chronic diseases such as cardiovascular disease, diabetes, cancer, hypertension, obesity and depression [1]. According to CDC to obtain these health benefits adults must engage in at least 30 minutes of moderate intensity PA for 5 days a week [2]. Available data indicate that only 28.0% of the Puerto Rican population complies with these recommendations [3]. Thus, 72% of the population has a 20% to 30% increased risk of all-cause mortality. Studies from other countries has shown that on average, men are more active than women, while factors such as sedentary behavior during occupational and domestic activities, increase in use of "passive" transport and increase urbanization discourage participation in PA [4]. Few studies have focused on PA among Puerto Ricans, therefore, little is known about the risk factors that lead this population to have a very low prevalence of PA.

OBJECTIVE

The aim of our study is to assess demographic characteristics and perceived barriers engaging in PA in a low income community in Puerto Rico.

METHODS

Our study consisted of a descriptive design with a sample of 110 adults 18 years and older. We conducted face to face interviews to Puerto Ricans living in the community La Mesa located at the municipality of Caguas, Puerto Rico. PA level engaging and barriers were assessed using the *Global Physical Activity Questionnaire* (GPAQ) ^[5] and the *Questionnaire of Perceived Barriers to Physical Activity Practice* ^[6]. We collected information regarding to sociodemographic variables such as: gender, age, education, occupation, number of children, tobacco use, alcohol consumption, sport practice, Body Mass Index (BMI) and number of chronic diseases. Univariate analysis were conducted using SPSS version 17.0.

RESULTS

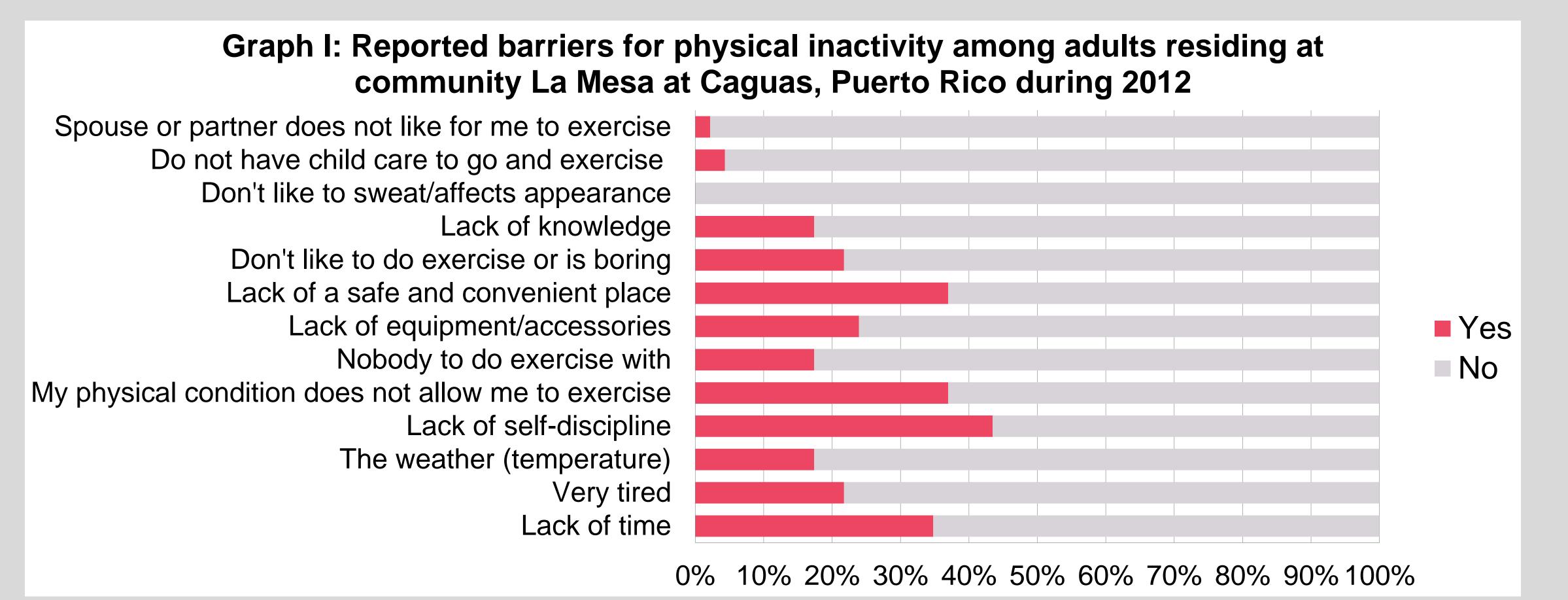
Table I: Sociodemographic characteristics among inactive* adults residing at community

La Mesa at Caguas, Puerto Rico during 2012

Characteristics	N	%
Gender		
Female	28	60.9
Male	18	39.1
Age		
18-24	5	10.9
25-34	4	8.7
35-44	7	15.2
45-54	11	23.9
55 and older	19	41.3
Education		
Did not complete high school	11	23.9
Completed high school	22	47.8
Completed technical or college	13	28.3
degree	10	20.0
Occupation		
Salaried	10	21.7
Self-employed	2	4.3
Unemployed	4	8.7
Housewives/husbands	12	26.1
Student	3	6.5
Retired	12	26.1
Not able to work	3	6.5
Children		
One child	9	19.6

Characteristics	N	%
Two children	6	13
Three children	10	21.7
Four or more	13	28.3
Tobacco		
Smokers	6	13
Non-smokers	40	87.0
Alcohol		
Alcohol 1 day/week	11	23.9
Alcohol 2 days/week	4	8.7
Non-consumer	31	67.4
Sports		
Practice sport	2	4.3
Do not practice any sport	44	95.7
BMI		
Normal weight	10	21.7
Overweight	16	34.8
Obese	15	32.6
Extreme obesity	5	10.9
Chronic diseases		
Non-chronic disease	14	30.4
One chronic disease	16	34.8
Two chronic diseases	8	17.4
Three or more	8	17.4

^{* 41.8%} of respondents did not meet PA recommendations.



CONCLUSIONS

- Our results suggest that the majority of the respondents have low levels of physical activity.
- Most of the respondents that did not meet PA recommendations: were females, did not consume alcohol, did not practice any sports, and were overweight or obese.
- The main barriers were based on psychological, biological and physical environment factors. These reported barriers included: lack of self-discipline, physical conditions, lack of a safe and convenient place and lack of time.

RECOMMENDATIONS

- Immediate process for planning and implementing educational and interventional prevention strategies, focused specifically on increasing the prevalence of PA.
- Further studies should assess the reliability and validity of the barriers questionnaire in the Puerto Rican population and study the relationship between the barriers of PA and the sociodemographic factors.
- Our initial findings suggest action to address infrastructural and behavioral aspects in Puerto Rican communities to promote healthy lifestyle and PA. Therefore it is highly recommended for this community to conduct needs assessment research, evaluate existing programs and promote empowerment.

REFERENCES

- OMS- Organización Mundial de la Salud. (2010). Recomendaciones mundiales sobre la actividad física para la salud. [Global recommendations on physical activity for health]. Retrieved from http://whqlibdoc.who.int/publications/2010/9789243599977_spa.pdf
- 2. Centers for Disease Control and Prevention. (2011). *How much physical activity do adults need?* Retrieved from website: http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html
- Instituto de Estadísticas de Puerto Rico. (2010). Tendencias en la salud: PRBRFSS. [Health Trends: PRBRFSS]. Retrieved from http://www.estadisticas.gobierno.pr/iepr/Publicaciones/Proyectosespeciales/ TendenciasenlaSaludPRBRFSS/PRBRFSS.aspx
- 4. World Health Organization, Global Health Observatory (GHO). (n.d.). *Prevalence of insufficient physical activity*. Retrieved from website: http://www.who.int/gho/ncd/risk_factors/physical_activity_text/en/
- 5. Organización Mundial de la Salud, Departamento de Enfermedades Crónicas y Promoción de la Salud. (n.d.). *Cuestionario Mundial sobre Actividad Física (GPAQ)*. [Global Physical Activity Questionnaire (GPAQ)]. Retrieved from website: http://www.sdprc.org/lhn-tools/gpaq-spanish.pdf
- 6. Bautista, L., Reigninger, B., Gay, J. L., Barroso, C. S. & McCormick, J. B. (2011). *Perceived barriers to exercise in Hispanic adults by level of activity*. Journal of Physical Activity and Health, 8(7), 916-925. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3174095/pdf/nihms-321552.pdf

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