



# Influence of Country of Origin on the Assessment of Daytime Sleepiness: Analysis of the CAATCH Data

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## Introduction

Epidemiologic and clinical research has shown a significant race/ethnic difference in reported sleep complaints and daytime sleepiness.

Emerging evidence also suggests that sleep-related complaints could reflect differences based on individuals' country of origin or place of birth.

This study assessed the influence of country of origin on subjective daytime sleepiness among hypertensive blacks, participating in the Counseling African-Americans to Control Hypertension (CAATCH) Trial.

## Methods

Data from the present study emanated from the CAATCH study, a multi-level intervention to improve blood pressure control among hypertensive blacks. Specific details on study design and methodology are published elsewhere (Circulation 2009;2:249-256). The present analysis focuses on baseline data, which includes socio-demographic, medical history, and daytime sleepiness assessed with the Epworth sleepiness scale (ESS); a cut-off score of  $\geq 10$  was used to classify EDS.

Participants were diagnosed with hypertension and were receiving antihypertensive medications. All provided informed consent under the supervision of the IRB at New York University Medical

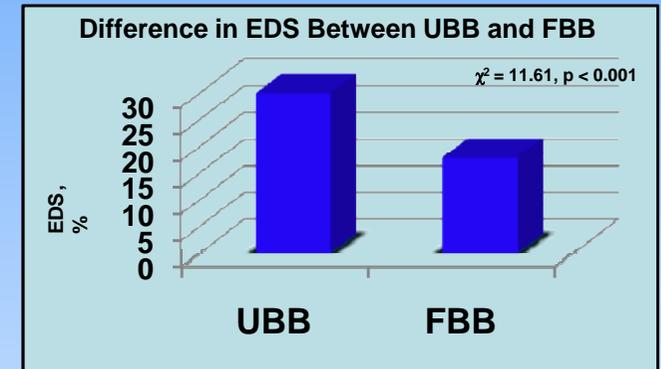
All participants provided informed consent under the supervision of the IRB at New York University Medical Center. Data analysis was performed using SPSS 15.0.

## Results

A total of 1059 participants provided baseline data for the analysis; 73% were US-born blacks (UBB), 27% were foreign-born blacks (FBB). As shown in the table, there was no significant group difference in term of age or gender. However, FBB participants were more likely to be employed, but less likely to have received more than a high school education, less likely to report alcohol consumption, and less likely to report a smoking history.

Logistic regression analyses showed that UBB participants were twice as likely as their FBB counterparts to exhibit EDS (OR = 1.85, 95% CI:1.52-2.73,  $p < 0.01$ ); effects of age, sex, education, history of smoking and/or education were adjusted in the model.

Variable	UBB (15%)	FBB (85%)
Age (Mean $\pm$ SD)	56 $\pm$ 13	58 $\pm$ 13
Gender (%)	71	73
Employed (%)	45	29*
High school (%)	23	31*
Alcohol Consumpt. (%)	18	39*
Smoking history (%)	24	63*



## Conclusions

Results of the study demonstrate the importance of considering country of origin in the analysis of the epidemiologic sleep data. Future studies should assess whether UBB are at greater risk for sleep problems (e.g., sleep apnea) associated with daytime sleepiness.