**Mood instability and cardiovascular modification in cardiovascular disease outpatients. The ABC study on heart disease.**

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**Keywords:** Mood instability; Cardiovascular Modification; Cardiovascular Disease outpatients.

**Introduction:** Mood instability (MI) is a condition characterized by unpredicted frequent fluctuations in a person's emotional state. It is a common personality trait observed in the general population, and it has been reported to be associated with a range of adverse health outcomes, and may also serve as an additional risk factor for cardiovascular morbidity.

**Purpose:** To assess mood instability and its effects on cardiovascular function among CVD outpatients.

**Methods:** Consecutive patients who were presented to the cardiac outpatient clinic in the last 5 years were recruited and divided into 2 groups according to the presence or absence of MI symptoms based on the patient's self-assessment psycho-emotion questionnaire. Cardiovascular functions were assessed and compared between both groups.

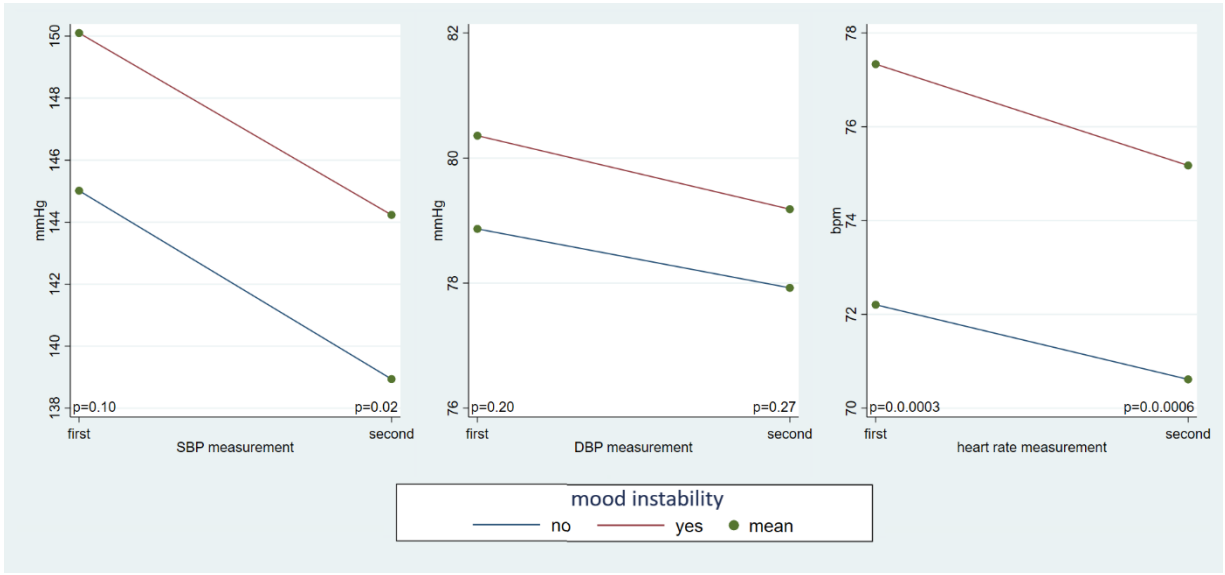
**Results:** A total of 415 patients were included in this preliminary analysis. Patients' mean age was 66±18 years, and 57% were males. Coronary artery diseases were registered in 93(22%) patients. 137 (33%) patients suffered mood instability symptoms, and they shared most demographic and clinical characteristics with patients who did not suffer from MI. However, males were more frequent among patients with no MI symptoms.

Interestingly, we observed a significant difference in systolic blood pressure values (SBP) between both groups, (SBP= 150±23 Vs 145±21 mmHg, p= 0.02, for patients with and without MI, respectively). Yet, no difference was observed in diastolic blood pressure (DBP) values (80±12 Vs 79±11 mmHg for patients with and without MI, respectively, p<0.19). Patients with MI symptoms had also a higher heart rate (HR) (77±15 bpm) than patients without symptoms (72±13 bpm, p=0.0003).

Using multivariable linear regression models, mood instability (β±SE= 4.3±2.2, p<0.049) and age (β±SE= 0.4±0.05, p<0.0001) were independent predictors for higher SBP values. Mood instability was also independently associated with a higher heart rate (β±SE= 5.1±1.4, p=0.001). Results Kept true even stronger with repeated BP and HR measurements.

**Conclusion:** Our results showed that mood instability is associated with a significant increase in systolic blood pressure and heart rate values in cardiac outpatients.

**Figure 1:** Blood pressure and heart rate values according to mood instability status in cardiac outpatients.


mmHg
150
148
146
144
142
140
138
p=0.10
p=0.02
first
second
SBP measurement
mmHg
82
80
78
76
p=0.20
p=0.27
first
second
DBP measurement
bpm
78
76
74
72
70
p=0.0.0003
p=0.0.0006
first
second
heart rate measurement
mood instability
no
yes
mean