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Relationship between Coping Mechanisms to Psychosocial Stress with Blood Pressure in Young Adults: A Pilot Study

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Abstract

Background: Hypertension is a major risk factor for cardiovascular diseases, one of the leading causes of death worldwide. Prehypertension is a precursor of hypertension, with high prevalence in young adults. Psychosocial stress can be one of the modifiable risk factors for hypertension. The objective of the study is to assess the relationship between coping mechanism to psychosocial stress and the blood pressure of young adults. Methods: A comparative cross-sectional pilot study was conducted in 36 young adults aged less than 45 years. The pulse rate, blood pressure and body mass index of the respondents were recorded. Psychosocial stress was measured by plasma cortisol following an acute mental stress test; and the level of stress and the coping strategies to stress were assessed using validated Malay Version questionnaires: DASS-21 and Brief R-COPE questionnaires. Results: Forty four percent of subjects had normotension and fifty six percent had above-normal blood pressure (prehypertension and mild hypertension). Subjects with above-normal blood pressure were associated with high plasma cortisol levels ($p = 0.032$), and high body mass indexes (BMI) ($p = 0.004$). Maladaptive coping strategy was found to be associated with high stress scores ($p = 0.019$). The relationship between stress and cortisol was not significant, though a higher cortisol level was noted in the high blood pressure group. Conclusion: In conclusion, higher cortisol levels and greater BMIs were associated with above-normal blood pressure in young adults. These findings are useful for future research in this area, and the continuation of this study will hopefully yield a more significant relationship.

Keywords

Author Keywords: [Psychosocial stress](#); [hypertension](#); [plasma cortisol](#)

KeyWords Plus: [HYPERTENSION](#); [COHORT](#); [WORK](#); [PREHYPERTENSION](#); [PREVALENCE](#); [DISEASE](#); [WOMEN](#); [MEN](#)

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Cited References: 25Showing 25 of 25 [View All in Cited References page](#)*(from Web of Science Core Collection)*

- Role of catecholamines in young adults with essential hypertension** Times Cited: 1
 By: Abdullah, A; Mohd Shah, AS; Abdul Razak, T; et al.
 8 ANN SCI M MAL SOC Published: 2011
[\[Show additional data\]](#)
- Prevalence of Cardiovascular Risk Factors in a Selected Community at Kuantan, Pahang, Malaysia** Times Cited: 5
 By: Akter, S. F. U.; Fauzi, A. R. M.; Nordin, M. S.; et al.
 International Journal of Medicine and Medical Sciences Volume: 2 Issue: 10 Pages: 322-328 Published: 2010
[\[Show additional data\]](#)
- Coping styles and lifestyle factors among hypertensive and non-hypertensive subjects** Times Cited: 10
 By: Ariff, F.; Suthahar, A.; Ramli, M.
 SINGAPORE MEDICAL JOURNAL Volume: 52 Issue: 1 Pages: 29-34 Published: JAN 2011
- The role of psychosocial stress at work for the development of cardiovascular diseases: a systematic review** Times Cited: 161
 By: Backe, Eva-Maria; Seidler, Andreas; Latza, Ute; et al.
 INTERNATIONAL ARCHIVES OF OCCUPATIONAL AND ENVIRONMENTAL HEALTH Volume: 85 Issue: 1 Pages: 67-79
 Published: JAN 2012
- Development of blood pressure and the incidence of hypertension in men and women over an 18 year period: Results-of the Nijmegen Cohort Study** Times Cited: 30
 By: Bakx, JC; van den Hoogen, HJM; van den Bosch, WJHM; et al.
 JOURNAL OF CLINICAL EPIDEMIOLOGY Volume: 52 Issue: 6 Pages: 531-538 Published: JUN 1999
- Title: [not available] Times Cited: 58
 By: Barrett, KE; Barman, SM; Boitano, S; et al.
 Ganong's Review of Medical Physiology Published: 2012
 Publisher: The McGraw- Hill Companies, United States