Document details

International Medical Journal Malaysia Open Access
Volume 18, Issue 2, 2019, Pages 69-76

Psychosocial distress and blood pressure among young adults: Role of cortisol as mediator (Article)

Wan Fatein Nabeila, W.O.[a], Azarisman, S.M.S.[b], Jamalludin, A.R.[c], Norlelawati, A.T.[d], Ramli, M.[e], Aida, N.S.M.S.[b], Sithu, A.[a], Aszrin, A.[a]

[a]Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia, Jalan Sulan Ahmad Shah, Bandar Indera Mahkota, Kuantan, Pahang, 23200, Malaysia
[b]Department of Internal Medicine, Kulliyyah of Medicine, International Islamic University Malaysia, Jalan Sulan Ahmad Shah, Bandar Indera Mahkota, Kuantan, Pahang, 23200, Malaysia
[c]Department of Community Medicine, Kulliyyah of Medicine, International Islamic University Malaysia, Jalan Sulan Ahmad Shah, Bandar Indera Mahkota, Kuantan, Pahang, 23200, Malaysia

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Abstract

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Introduction: Hypertension is the most prevalent risk factor of cardiovascular diseases in Malaysia. 17.3% of hypertension cases in Malaysia is attributed to adults aged 18 to 39 years. Psychosocial distress is a possible risk factor for elevated blood pressure in young adults, and cortisol could be the mediating factor. The aim of this study is to evaluate the mediating role of cortisol in hypertension and psychosocial distress in young adults. Methods and materials: A comparative cross-sectional study was conducted in 240 young adults aged 18 to 45 years. The body mass index, waist circumference and blood pressure parameters were recorded. Serum cortisol, creatinine, fasting blood glucose and lipid profile were measured following acute mental stress test. Psychosocial distress was assessed using the DASS-21 questionnaire. Results: Mean (standard deviation) values for SBP, DBP, MAP were 126.0(16.3), 84.1(12.2) and 98.1(13.1) mmHg respectively. Anxiety was significantly associated with systolic blood pressure (β=0.644), diastolic blood pressure (β=0.454) and mean arterial pressure (β=0.516) after adjusting for sex, age and cortisol. However, it was not mediated by cortisol. Depression and stress were not found to have any effect on blood pressure of the young adults studied. Conclusion: The data suggest that there is no elevated risk for psychosocial distress and hypertension that cortisol poses in young adults. © 2019 Default.

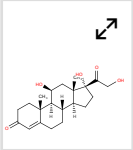
SciVal Topic Prominence

Topic: Hypertension | Depression | Hypertensive patients

Prominence percentile: 62.805

Chemistry database information

Substances



Author keywords

Blood Pressure | Cortisol | Mediation | Psychosocial distress | Young adults

Funding details

Funding sponsor	Funding number	Acronym
International Islamic University Malaysia	RIGS15-077-0077,RIGS15-076-0076	IIUM
Ministry of Higher Education, Malaysia	FRGS16-056-0555	MOHE

Funding text

This study was jointly funded by the Ministry of Higher Education Malaysia (FRGS16-056-0555) an International Islamic University Malaysia (RIGS15-076-0076, RIGS15-077-0077)

ISSN: 18234631
Source Type: Journal
Original language: English
Document Type: Article
Publisher: International Islamic University Malaysia

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Aszrin, A.; Department of Basic Medical Sciences, Kulliyyah of Medicine, International Islamic University Malaysia, Jalan Sulan Ahmad Shah, Bandar Indera Mahkota, Kuantan, Pahang, Malaysia; email:draszrin@iium.edu.my