

PREVALENCE AND RISK FACTORS OF HYPERTENSION IN CHILDREN IN DAR ES SALAAM TANZANIA

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ABSTRACT

Introduction

The number of children diagnosed with hypertension is low in comparison to adults; the increase in magnitude of hypertension in children is of serious concern. Hypertension has been shown to start in early life and to track into adulthood. Detecting children with hypertension and hypertension will aid early intervention and reduction of associated morbidity and mortality. There are several reports showing gaps between children from different social economic backgrounds. Several guidelines are recommending routine blood pressure measurements on children aged three years and above whenever physical examination is performed.

Methodology

A descriptive cross sectional study was conducted between August 2011 to August 2012 to determine the prevalence and risk factors for hypertension among primary/ school children in Dar es Salaam, Tanzania. Eight hundred and ninety two (892) children aged between four and eighteen years were recruited. Structured questionnaires were used to obtain socio-demographic characteristics of the children and their parents or guardians. Blood pressure and anthropometric indices including the weights and heights were recorded. Data were analyzed using Statistical Package for Social Sciences (SPSS) version 16.0.

Results

In this study 892 children 442(49.6%) females and 450 (50.4%) males were enrolled in the study. Of recruited children 445(54.4%) were from public schools. Two hundred and thirty children (25.8%) were hypertensive. One hundred and thirty nine children (15.6%) were overweight, and 306(34.3%) were obese. Female children were more obese (37.7%) compared to male children (30.9%). Among 230 who had elevated BP, 132(57%) had high BMI. Among 407 children from private schools, 116(28.5%) were hypertensive while in 485 children from public schools, 114(23.5%) were hypertensive. Four hundred and eight children who had sedentary lifestyle, 117(50.1%) were hypertensive, while 484 with active physical activities, 113(49.1%) were hypertensive. Among 442 female children, 111(48.3%) were hypertensive and 450 male children,

119(51.7%) were hypertensive. Fifty one percent (51.7%) of children from high social economic status were hypertensive.

Conclusion

The prevalence of hypertension among primary school children in Dar es Salaam was found to be high (25.8%). Higher prevalence of hypertension 28.5% was seen in children from private primary schools compared to 23.4% prevalence of hypertension in children from public primary schools. There was an increased association between hypertension in children with obesity, sedentary lifestyle and children those from high social economic status.

Recommendation

It is suggested to use the findings of this study as markers for increased likelihood of elevated blood pressure in children. As such it is recommended that children in primary schools should be evaluated for obesity and its related risk factors to hypertension.