CORRELATION BETWEEN WAIST CIRCUMFERENCE AND BLOOD PRESSURE AMONG OVERWEIGHT STUDENTS IN SMA MUHAMMADIYAH 3 YOGYAKARTA

Student Research Project

This research is presented as partial fulfillment of the requirement for the attainment of the Bachelor of Nursing in Muhammadiyah University of Yogyakarta

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AGREEMENT PAGE

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Accepted by Adviser to be Examined by Board of the Research Examiners of Nursing Department of Medical and Health Sciences Faculty in Muhammadiyah University of Yogyakarta on:

30 July 2010

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RATIFICATION PAGE

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Examined by Board of the Research Examiners of Nursing Department of Medical and Health Sciences Faculty in Muhammadiyah University of Yogyakarta on:

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Research entitled Correlation between Waist Circumference and Blood Pressure among Overweight Students in SMA Muhammadiyah 3 Yogyakarta is presented as partial fulfillment of the requirement for the attainment of the Bachelor of Nursing in Muhammadiyah University of Yogyakarta. Writing this research has been a wonderful experience. Author realized that completeness of this writing is inseparable from many assistances, supports, and motivations. On this occasion, author would like to thank:

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MOTTO

❖ Allah akan meninggikan orang-orang yang beriman di antaramu dan orang-orang yang diberi ilmu pengetahuan beberapa derajat dan Allah Maha mengetahui apa yang kamu kerjakan " (Q.S. Al Muladilah : 11)

❖ Sesungguhnya Allah tidak mengubah keadaan sesuatu kaum sehingga mereka mengubah keadaan yang ada pada diri mereka sendiri (Q.S. Ar ra’d 13 : 11)

❖ Sesungguhnya kesulitan itu ada kemudahan maka apabila kamu telah selesai dari suatu urusan kerjakan dengan sungguh-sungguh urusan yang lain (Qs. Albaqarah, 145).

❖ Dan janganlah kamu mengikuti apa yang kamu tidak mempunyai ilmu tentangnya. Sesungguhnya pendengaran, penglihatan, dan hati itu akan diminta pertanggung jawabannya (Qs. Alisra’, 36).
DEDICATION

I dedicate this research paper to:

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- Ayahanda IBRAHIM OHORELLA dan ibunda NUR INTAN, ananda persembahkan skripsi ini sebagai tanda bakti dan cinta serta terima kasihku kepada ayahanda dan ibunda yang senantiasa memberikan motivasi, ketulusan, perhatian, dan kasih sayang serta tidak henti-hentinya mencurahkan do’a demi cita-cita dan masa depan ananda. Tanpa doa dan restu yang selalu mengalir untuk ananda, tak mungkin ananda bisa setegar ini. Tak akan ada satu apapun di dunia ini yang mampu menandingi dan menggantikan kasih sayang dari kalian. Ayah, ibu.... atas ridha Allah, suatu saat nanti ananda pasti bisa membagiakan kalian.

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Ohorella, Dwi. Hubungan antara Lingkar Pinggang dan Tekanan Darah pada Siswa Overweight di SMA Muhammadiyah 3 Yogyakarta

Pembimbing:
Yuniarti, Falasifah Ani, Ns., MAN.

INTISARI

Overweight dan obesitas merupakan kondisi dimana berat badan lebih dari kriteria berat badan normal. Anak-anak dan remaja yang memiliki BMI lebih dari atau sama dengan persentil 95 dikategorikan sebagai overweight. Overweight dan obesitas pada remaja berhubungan dengan beberapa penyakit. Namun, beberapa penilitian mempertimbangkan bahwa distribusi jaringan lemak pada orang overweight merupakan factor yang bermakna terhadap morbiditas dan mortalitas dibandingkan BMI. Lingkar pinggang pada remaja berhubungan dengan tekanan darah seperti yang terjadi pada orang dewasa.


Hasil penelitian ini menunjukan bahwa terdapat hubungan positif yang signifikan antara lingkar pinggang dan tekanan darah sistolik (p = .001 ; r = .573) serta tekanan darah diastolik (p = .009; r = .468 ). Hubungan antara lingkar pinggang dan tekanan darah pada ramaja overweight harus diperhatikan dengan baik agar dapat mencegah tingginya angka mortalitas dan morbiditas dari berbagai macam komplikasi yang disebabkan oleh overweight.

Kata kunci: overweight, remaja, lingkar pinggang, tekanan darah
Ohorella, Dwi. Correlation between Waist Circumference and Blood Pressure among Overweight Student in SMA Muhammadiyah 3 Yogyakarta

Adviser:  
Yuniarti, Falasifah Ani, Ns., MAN.

ABSTRACT

Overweight and obesity are both labels for ranges of weight that are greater than what is generally considered healthy for a given height. Children and adolescents who had BMI for age more than or equal to 95th percentile were considered to be overweight. Overweight or obesity in adolescent related to several diseases. However, research suggested that fat distribution may be a more important factor for morbidity and mortality than BMI. Waist circumference in overweight children and adolescents probably also had a correlation to blood pressure as what was happened in adult. There were just a few research in Indonesia describe this correlation.

The purpose of this research was to discover the correlation between waist circumference and blood pressure among overweight students in SMA Muhammadiyah 3 Yogyakarta. This research was non-experimental with cross sectional design. 30 overweight students who matched inclusion and exclusion criteria had blood pressure and waist circumference measurements. Equal, microtoise, sphygmomanometer, stethoscope, BMI-for-age percentile chart, measuring tape, and observational page were used as research design. The hypothesis of the study was tested by using the Spearman correlation.

The finding of the study showed a statistically significant correlation between waist circumference and (p = .001; r = .573), also diastolic blood pressure (p = .009; r = .468 ). Correlation between waist circumference and blood pressure among overweight adolescents must be taken as detailed as possible in order to decrease the mortality and morbidity from its variety of complications.

Keywords: overweight, adolescents, waist circumference, BMI.
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