Title:
The Prevalence of Metabolic Syndrome Among Market Women in Kaneshie, Accra-Ghana

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ACCEPTED

Session Title:
Research Poster Session 2 (Monday/Tuesday, 18 & 19 November)
Slot:
RSC PST2: Monday, 18 November 2019: 8:00 AM-8:45 AM

Abstract Describes:
Ongoing Work/Project

Applicable category :
Clinical, Academic, Students, Researchers

Keywords:
Metabolic syndrome, market women and prevalence

References:
REFERENCES

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Abstract Summary:
Metabolic syndrome (MetS) is a common chronic condition that has become an important public health concern and considered a worldwide epidemic. MetS predisposes individuals to risk of developing cardiovascular diseases, type 2 diabetes, stroke, and coronary artery disease. The incidence of MetS could be remedied with education and lifestyle modification.

Content Outline:
- Background(MetS Prevalence;Global, in Ghana and among women)
- Problem Statement(Rational for conducting the study)
- Aim(main purpose of the study)
- Specific Objectives(Specific aims)
- Methods(Research design, sample size and sampling techniques, tool for data collection and data analysis)
- Results(Demographics and prevalence of MetS indicators)
- Major findings (prevalence of MetS, Obesity, Diabetes and Hypertension among the market women)
- Discussion and conclusion(Implications and recommendations)

Abstract Text:

Introduction: Metabolic syndrome (MetS) is a common chronic condition that has become an important public health concern and considered a worldwide epidemic. MetS predisposes individuals to the risk of developing cardiovascular diseases, type 2 diabetes, stroke, and coronary artery disease. Metabolic syndrome (MetS) is often called cardio metabolic disease and consists of a clustering of risk factors such as elevated visceral obesity, glucose intolerance, elevated triglycerides, reduced high density lipoprotein cholesterol and hypertension (Scaglione et al., 2010). The International Diabetes Federation (IDF) estimated that one-quarter of the world's adult population has metabolic syndrome (IDF, 2016). Kaur (2014) stated that, the current food environment globally, contributes to the development of metabolic syndrome. Lo, Chair & Lee (2015) asserted that MetS can be prevented through lifestyle changes.

Findings from a study conducted by Mandob, Minka & Oko-Ndjollo (2015) revealed an estimate of 7 to 56 % prevalence of metabolic syndrome in women globally. Arthur et al. (2013) in a study stated an increased incidence of metabolic syndrome among Ghanaian women. This was attributed to the increasing adaptation of ‘’Western lifestyle’’ coupled with an increase in body weight after child birth. Market work related factors such as a lack of physical activity and lack of proper nutrition due to preoccupation with trading activities, as well as lack of knowledge regarding the effect of this kind of work environment could predispose market women to the risk of MetS. However there is paucity of research on the prevalence of MetS among market women.
Aim: This study aimed to explore the prevalence of metabolic syndrome among market women in Kaneshie, Accra-Ghana.
Methods: The study adopted the descriptive cross-sectional survey. The simple random sampling procedure(table of random numbers) was used to select 348 market women between the ages of 25 and 65 (using the Raosoft sample size calculator, 2005) for the study. Anthropometric and Physiologic measurements were done to establish the prevalence rate of metabolic syndrome among the market women. Data was cleaned, captured on a Microsoft excel spreadsheet and imported into Statistical software package “STATA”. Descriptive statistics which entailed frequencies, percentages and reflection of means of the findings as well as the inferential statistical tests were used in analyzing the data.
Results: Considering the socio-demographic data, the results suggest that the minimum and maximum age of respondents were 25 years and 65 years respectively, with a mean age and standard deviation of (46 ± 10.64). The population was moderately a literate populace (87%). Participants had been trading in the market for a maximum of 47 years and a minimum of 0.7 years with a mean year of 18.48.
The findings of the study revealed that a vast majority of 168 (48.3%) participants were at risk for MetS. A significant minority of 100(28.7%) were positive for MetS with only 80(23%) being Negative. Out of the significant minority of 100(28.7%) that were positive for MetS, 44 (42.7%) were between the age group of 50-59 years, 30 (29.7%) were within 40-49 years. A majority of 286 participants (67.8%) were centrally obese hence had high Waist Circumferences. A significant majority of 235 respondents (67.5%) had abnormal High Density Lipoprotein (HDL) levels. A significant number of 124 participants (35.6%) had high BP level. Most participants (175, 50.4%) were obese with their BMI values exceeding 30kg/m^2. The study however revealed that majority of participants (338, 97.1%) had normal levels of triglycerides (TGL) in their blood stream, and only 78(22.4%) participants had high fasting blood sugar (FBS).
Discussion and conclusion: The results suggest that mostly, the aged respondents suffered more of MetS than the young adult respondents. Thus MetS increases with age. A vast majority of the market women were at risk and positive for MetS. This can be attributed to the fact that market women spend most of their time at the market and may not have the time to indulge in any physical activity, health visits and screening. The incidence of MetS among market women could be remedied with increased education, and a MetS wellness program for market women. Future research should therefore focus on the assessment of quality of life of market women with MetS as well as the development of a metabolic syndrome intervention for market women.