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# Euro Nutrition 2018: Overweight and Obesity among Adults Aged 18-45 Years Residing in and around Giyani Town in Mopani District of Limpopo Province, South Africa- Motadi S A-University of Venda

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# **Abstract**

Historically, overweight and obesity were considered problems of the affluent countries, but and is progressively affecting developing countries like South Africa. In South Africa, obesity is basically driven by environmental changes such as urbanisation, accompanied by the cultural modernisation which promotes the acceptance of an unhealthy lifestyle plus unhealthy eating habits and decreased physical activity. obesity and overweight are still related with a sign of good health as well as the affluence, today this perception has radically changed on the basis of evidence that the obesity and the overweight are associated with a wide range of serious health problems and increase the risk non-communicable diseases (NCDs), such cardiovascular disease, type 2 hypertension, diabetes and high serum triglycerides which are important causes of death. In several developing countries and obesity has recognized itself as a public health anxiety with many communities having higher occurrence, particularly among those of higher social economic status. The highest rate of overweight and obesity among the adults in sub-Saharan Africa is found in the South African women (42%), though the combined rate of both overweight and obesity is 69.3%. In their review on low and middle income countries reported that South Africa was ranked as the country with the third prevalence of physical inactivity.

# Methodology:

The study was conducted in the Mopani District, which is one of 5 municipal districts of the Limpopo Province. Mopani district's economy is the predominately rural-based on the district was selected due to its huge development of modern shopping centres with all the well-known chain supplies and presented which could lead to lifestyle changes.

**Definition** Overweight, Obesity, Hypertension, Diabetes, Hyperlipidaemia and **Body** Percentages: Overweight was well defined as 25-29.5 kg/m2 and obesity was well defined as BMI>30 kg/m2 [23]. A glucose level between to 6.0-6.9mmol/L was measured as moderate while glucose level of >7mmol was considered high Hypertensive range was defined as a Systolic blood pressure of 140 mmHg and Diastolic blood pressure of >90 mmHg though systolic blood pressure of 130=139 mmHg and Diastolic blood pressure of 85-89 mmHg was considered as a

prehypertensive range. Hyperlipidaemia was defined as total fat of >7 mmol/L while 5.2-7 mmol/L was measured borderline high.

**Ethical Considerations:** Provincial Department of Health Research Committee. The study was performed in the accordance with the ideologies of the Declaration of Helsinki (2008), Good Clinical Practices and the laws of South Africa.

Discussion: The aim of the study was to be determining the occurrence of overweight and obesity among the adults aged 18-45 years exist in and around Giyani town in Mopani District of Limpopo Province, South Africa. The result of the study was revealed that the prevalence of overweight and obesity was 18.1% and 20.5% respectively. However, the prevalence was lower when looking at provinces with Limpopo having 24% and 32.6% compared with 16.3% and 11.5% for females and males, respectively Though, the prevalence was lower when looking at the provinces with Limpopo having 24% and 32.6% compared with 16.3% and 11.5% for females and males, respectively. The high occurrence of overweight and obesity in the current study may be clarified by the fact that the males are eating fast food daily and weekly combined (40%) while still have a low percentage of overweight obesity compared to the females. The consumption of the fast food may be improved by meals that cost less than R50 in various fast food openings which the public regards as cheap and convenient.

Results show that the females had advanced body fat percentages compared to their male counter parts, exceeding the recommended optimal body fat of 31-36% . Maybe the scientific explanations for females having a higher fat percentage may also be due to changes in hormones, hormone receptors and enzyme concentrations. Concurrently, Whitney and Rolfes stated that fat accumulation is higher in females than in males, due to vital body fat deposited in the mammary glands and pubic region in preparation for child bearing. Another factor that the might donate to females having a higher fat percentage than their male counterparts,

may be the use of hormonal contraceptives. The high occurrence of overweight and obesity specified by BMI values and the fat percentage of the female participants in line with the high prevalence of waist circumferences above the normal values of 88 cm for women. Only a small portion of the male participants had been greater than 102 cm waist circumference. The association between BMI and metabolic diseases among the adults was additional explored in this study. The results were indicated that, diabetes, hypertension and hyperlipidemia had a positive association with BMI and WC, which is steady with previous studies. One possible explanation for this is that BMI is very extremely correlated with WC. The risk of metabolic diseases can be more accurately predicted by WC after adjustment for the effect of BMI. The results further presented that people with BMI above the normal and very high WC have a higher to risk of metabolic diseases.

### **Conclusion and Recommendation:**

A high occurrence of both overweight and obesity exists between adults in urban areas of Giyani. The prevalence of overweight and obesity in the current study was in over than nationally and provincially. The high prevalence could be a consequence of dietary changes that have been observed in South Africa, from low fat diets to typical westernised high fat diets and market liberalisation which the people access fast food due to the market globalisation which leads to take change in dietary patterns. Nutrition education programs on the consequences of the overweight and obesity and the ingesting of fast foods should include to be importance of dietary diversification of meals, specially the inclusion of fruits and vegetables and the reduction of food that contain with high fat content and hidden fats. Physical activity should be presented at school level as this is known to prevent overweight and obesity which delays appearance of non-communicable disease.

**Note:** This work is partly presented Joint Event on Global Public Health Congress & Annual Congress on Nutrition & Healthcare October 18-20, 2018 Paris, France.