Knowledge of the need for physical activity and its correlation with physical activity level and waist-to-hip ratio among persons living with diabetes in Ho municipality

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**Objective**

To investigate the correlation between Physical Activity (PA) knowledge level and Physical Activity practice among persons living with diabetes in the Ho Municipality and to determine how these variables relate with their waist-to-hip ratios (WHRs) and sociodemographic variables.

**Method**

Consenting persons with diabetes attending the Ho Municipal and Ho Teaching Hospitals’ Diabetes Clinics were recruited into this cross-sectional study and a questionnaire designed to determine their PA Knowledge Level (KL) score out of 17. The International Physical Activity Questionnaire (IPAQ) investigated PA levels and a measuring tape determined waist and hip circumferences. Responses were given numeric codes and IPAQ scores were subsequently converted to Metabolic Equivalent (MET) values, then categorised from low to high PA. Pearson’s correlation determined the association between the PA variables and WHRs (p=0.05).

**Results**

Participants were 106 in total with 54 (64.3%) females and 54.8% within the 60 to 70 years old. Mean KL was 12.68±1.58 with 34.90% and 9% engaged in low and high levels of PA respectively. 67.5 (27%) males and 77.27 (51%) females had WHR values above 0.9 (men) and 0.85 (women) respectively. Weak negative correlation was found between MET values and WHR. There was no significant correlation across demographic groups between KL and PA (r=0.161) or KL and WHR (r=0.006) values.

**Conclusion**

The majority of participants engaged in low and moderate physical activity and were at metabolic risk owing to unhealthy WHR values despite knowing about exercise benefits. Thus, actual exercise therapy should complement physical activity education in Diabetes Clinic services.