

INTRODUCTION

- The “triple burden of malnutrition” - undernutrition, overnutrition or obesity, and micronutrient deficiency - is one of the growing challenges in sub-Saharan Africa.^{1,2}
- Nutrition education and physical activity (PA) promotion are key elements of preventing malnutrition.³
- The on-going transdisciplinary FoCo-Active project aims to combat the triple burden of malnutrition through food consumption and PA behavioral changes, within a health literacy intervention program in rural and urban Tanzania.
- **The aim of the study was to assess baseline PA levels of women and men in the rural and urban study population to characterize the status quo of PA behavior in the FoCo-Active target groups for a tailored intervention program.**

METHODS

- A cross-sectional survey was conducted in Mkuranga (rural) and Ilala (urban) districts, Tanzania (March 2023).
- A multi-stage sampling with stratification was employed with a total of 715 participants (68% females, mean age M=38.0):
 - urban n=521 (71% females, mean age M=36.9)
 - rural n=194 (59% females, mean age M=40.8)
- Global Physical Activity Questionnaire (GPAQ) was used to provide information on PA status (intensities, settings).⁴

- In addition results indicate that rural participants were involved longer in VIA at work (M=24.2 hours per week, SD=14.8) than the urban participants (M=14.9 hours per week, SD=17.0; p<0.001) and less in moderate intensity activities (M=13.5 hours per week, SD=9.4) than urban participants (M=21.5 hours per week, SD=18.8; p<0.001).
- Furthermore, urban participants spent more time in vigorous intensity sports, fitness and recreational activities (M=5.3 hours per week, SD=7.6) compared to rural participants (M=3.2 hours per week, SD=2.6; p=0.217) (Table 1).

Table 1: PA dimensions between urban and rural participants

PA during weekdays		N (rf %)	Mean (h/w)	SD	p-value
Vigorous intensity activities (workplace)	rural	147 (75.8)	24.2	14.8	<0.001
	urban	119 (22.8)	14.9	17.0	
Moderate intensity activities (workplace)	rural	149 (76.8)	13.5	9.4	<0.001
	urban	379 (72.7)	21.5	18.8	
VIA (leisure time)	rural	21 (10.8)	3.2	2.6	0.217
	urban	57 (10.9)	5.3	7.6	
MIA (leisure time)	rural	21 (10.8)	3.7	3.6	0.490
	urban	56 (10.7)	4.8	7.1	

rf – relative frequency, h – hour, w – week, VIA – vigorous-intensity activities, MIA – moderate-intensity activities

CONCLUSION

- It should be indicated that only about ten percent of the participants reported being physically active in their leisure time, regardless of the district.
- In the next step, the project focuses on assessing the PA environment and intentions/motives of urban and rural participants for being physically active to create a solid foundation for the tailored intervention program to combat all forms of malnutrition.

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Figure 1: VIA work - rural area



Figure 2: VIA work - urban area

RESULTS

- There was a significant difference between rural and urban participants for vigorous intensity activity (VIA) at work. 75.8% of rural participants spent ≥ 10 min/VIA per day compared to 22.8% of urban participants (p<0.001). No significant difference between these two groups was found for other activity levels or settings (Table 1).

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