

# Fatigue, Quality of Life, Physical Function and Participation in Social, Recreational, and Daily Living Activities in Women Living with HIV: a Descriptive Study

Abigail Hum, MSc  
Cheryl King-VanVlack, PhD  
Wendy Wobeser, MD

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**CHANGING THE COURSE** OF THE  
**HIV PREVENTION, ENGAGEMENT AND**  
**TREATMENT CASCADE**

# Impact of HIV-Related Fatigue

- ✂ Relationships between fatigue and psychological factors (Barroso, Carlson & Meynell, 2003; Jong et al., 2010)
- ✂ Restriction in activities of daily living (ADLs) (Rusch et al., 2004)
- ✂ Limitations in complex role functioning (Crystal et al., 2000)
- ✂ Decreased quality of life (QoL) (Sama et al., 1999; Safren et al., 2012)
- ✂ Limited research specific to **women** with respect to the impact of HIV (and the related fatigue) on:
  - QoL
  - physical function
  - ADLs and participation

# Purpose:

To describe the impact of fatigue on quality of life, participation in social/recreational activities, ADLs, and physical function in women with HIV

# Procedure

## Recruit

HARS: discussed study procedure on phone and arranged meetings at Bethel Church

CIOC: approach clients during their medical appointments and explain study



## Paperwork

Informed consent and 4 questionnaires (demographics, HRFS, MOS-HIV, lists of activities) administered in the gym at Bethel

Informed consent and 4 questionnaires (demographics, HRFS, MOS-HIV, lists of activities) administered in CIOC treatment room



## 6-Minute Walk Test

Participants walked around the gymnasium at Bethel Church

Participants walked up and down a long corridor in Hotel Dieu Hospital

# Demographics

Number of Participants	15
Age (years) (mean±SD, range)	44±8 (30, 56)
Duration of HIV infection (years) (mean±SD, range)	12±5 (5, 23)
Number of Participants using ARVs	14
Duration of therapy use (years) (mean±SD, range)	9±3 (4, 15)

CO-MORBIDITIES	# of participants
Musculoskeletal (muscle, bone)	5
Cardiorespiratory (heart, lung, blood vessels)	10
Mental Health	8
Neural	3
Other	7

<b>MEDICATIONS (# of participants)</b>	
Vitamins and Supplements	10
Psychogenic	6
Cardiorespiratory	7
Gastrointestinal	2
Anti-inflammatory	2
Pain	5
Other	3
<b>EMPLOYMENT (# of participants)</b>	
Working full-time	4
Working part-time	3
On Disability	7
Other	1
<b>HIGHEST EDUCATION COMPLETED (# of participants)</b>	
Elementary School	1
Secondary School	7
Post-secondary School	7

# HIV-Related Fatigue Scale

## ⚡ Standardized Questionnaire

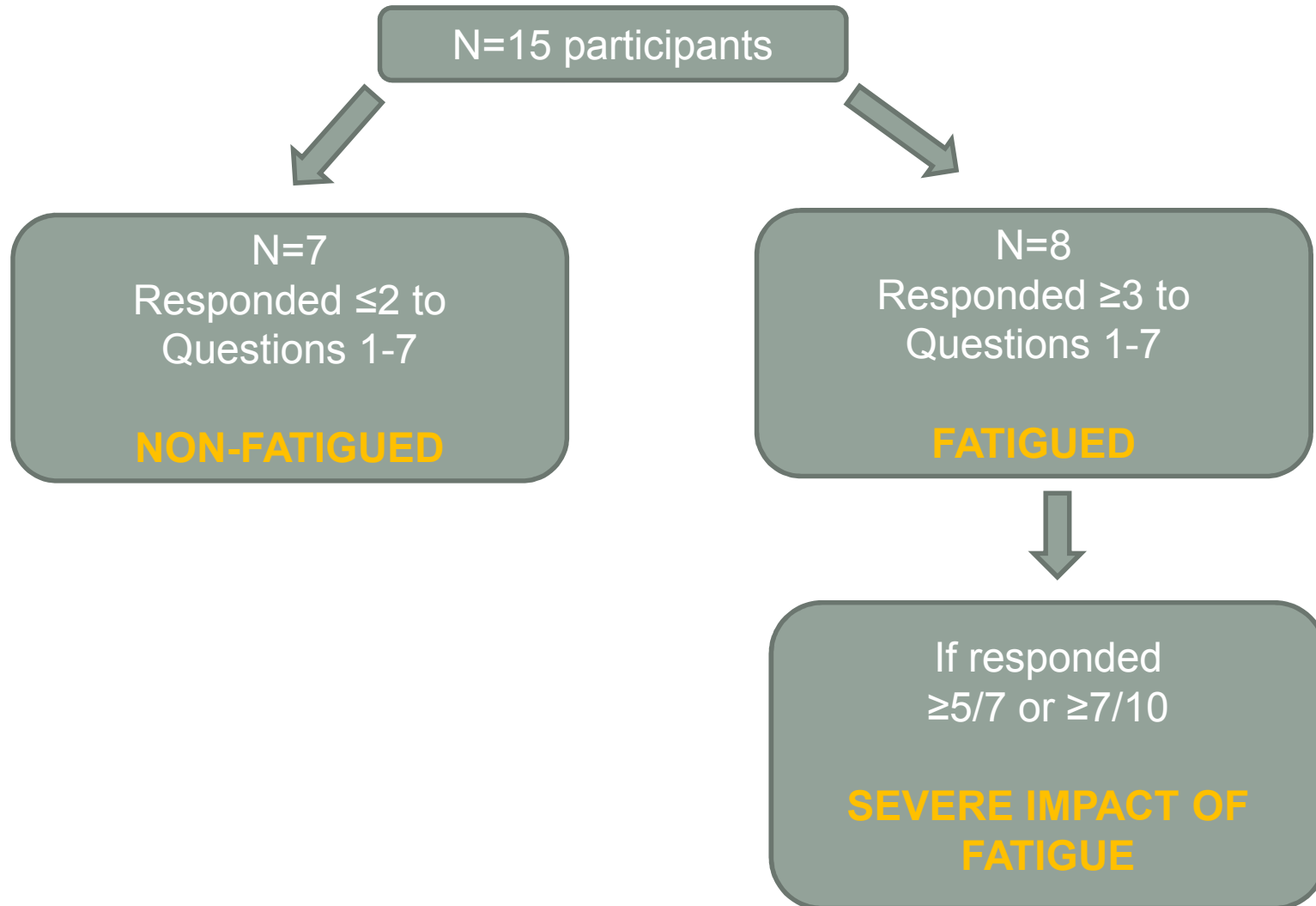
### ⚡ First section, 7 questions

- Questions #1-5 → scale of 1 to 10
- Questions #6&7 → scale of 1-4
- If answer,  $\leq 2$  all questions, then no fatigue and person does not complete the rest of the form
- If answer,  $\geq 3$ , then complete the rest of the questionnaire

### ⚡ Second Section, Questions 8 – 56

- Indicate response on a scale of 1-10 or 1-7

# HIV-Related Fatigue Scale





# HIV-Related Fatigue Scale

## *Examples of Severity Rating*

*In the past week, to what degree has fatigue interfered with your ability to do household chores?*

1 2 3 4 5 6 **7 8 9 10**

Not at all

a great deal

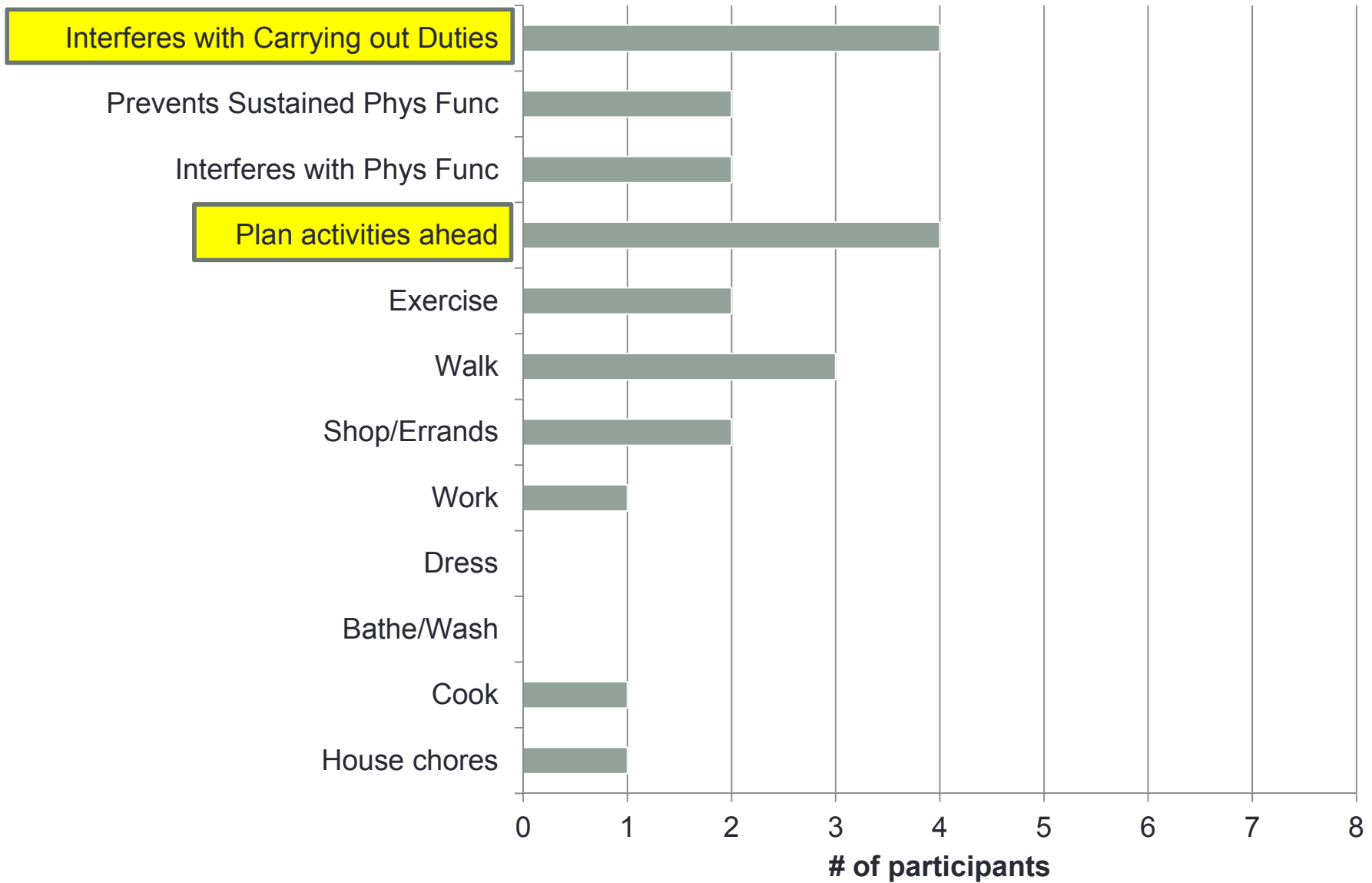
*My motivation is lower when I am fatigued.*

1 2 3 4 **5 6 7**

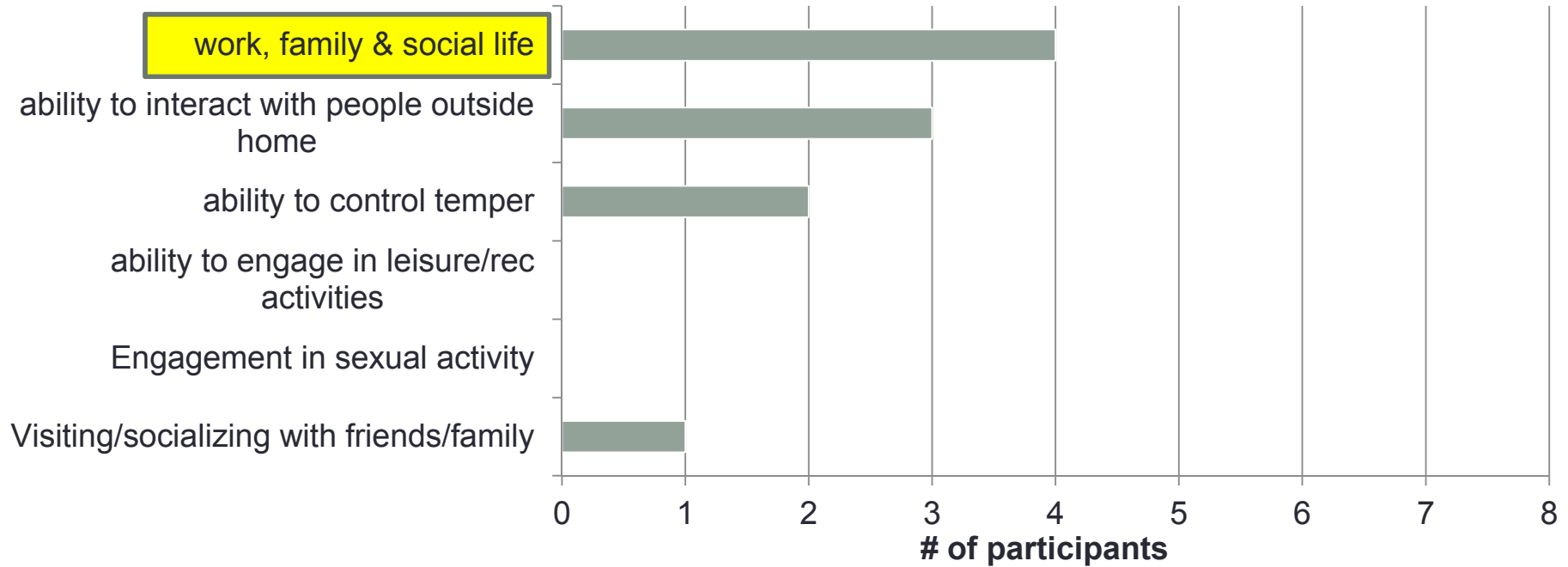
Completely disagree

Completely agree

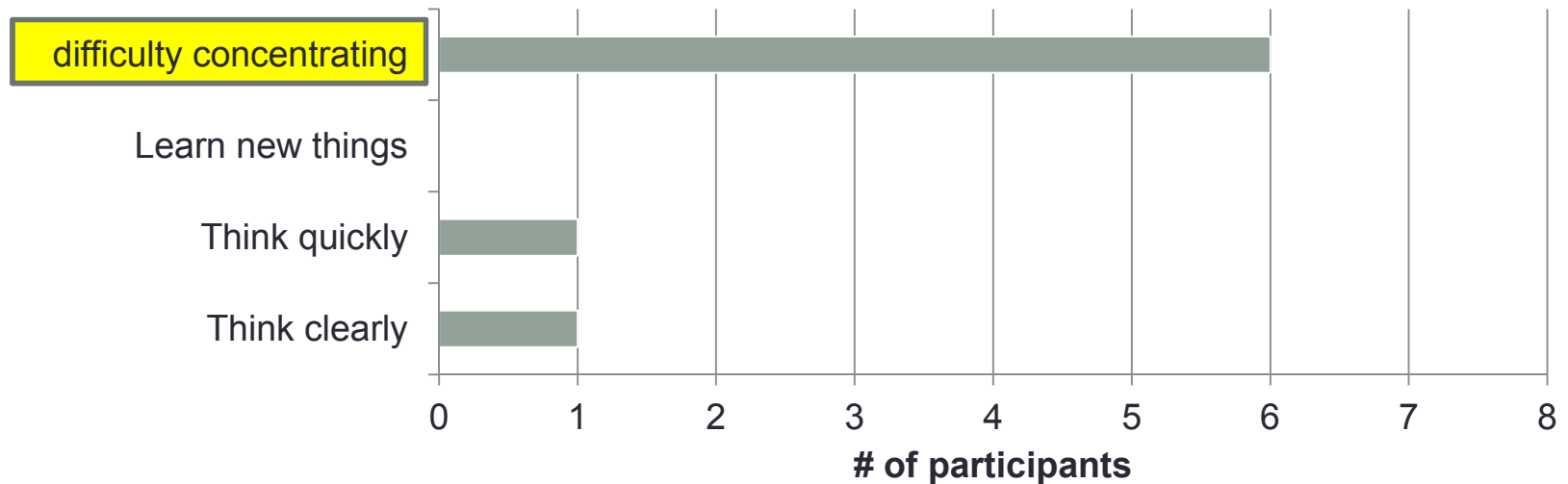
## Severe Impact of Fatigue on ADLs



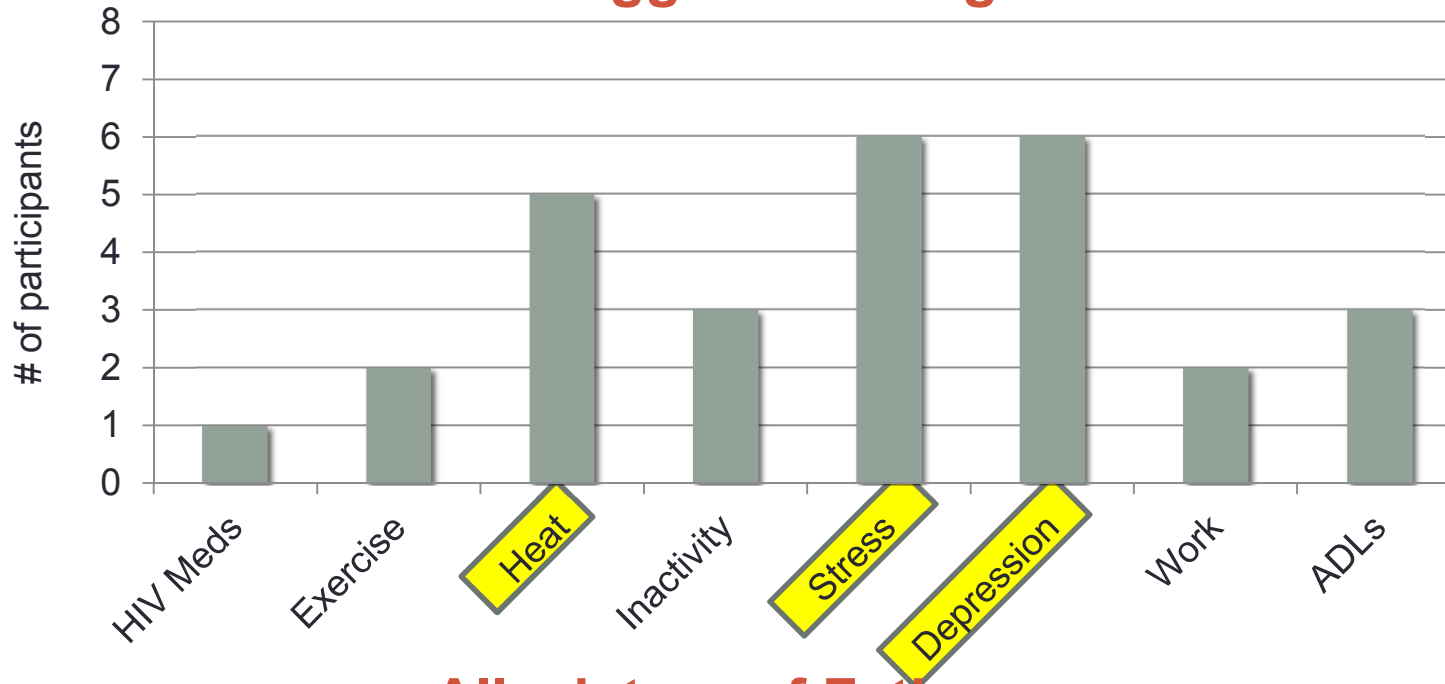
## Fatigue: Severe Interference with Socialization



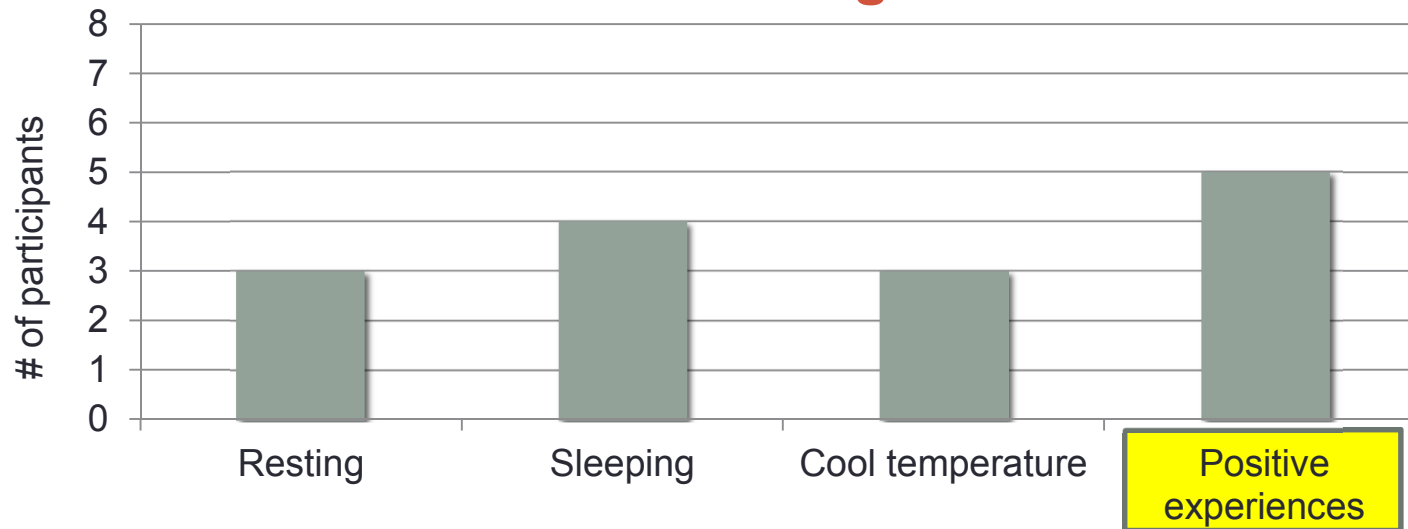
## Fatigue: Severe Impact on Mental Health



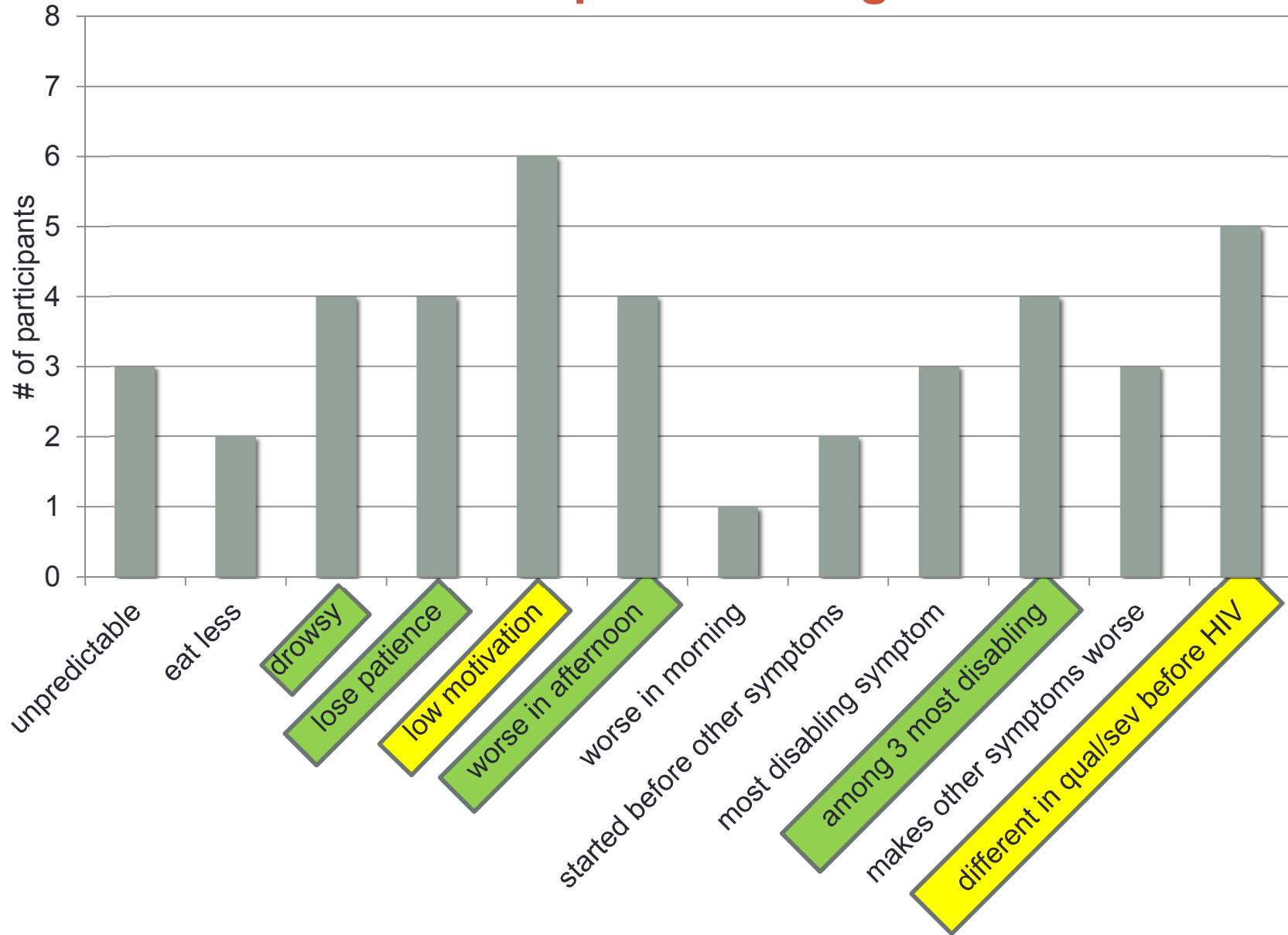
## Triggers of Fatigue



## Alleviators of Fatigue



# Descriptors of Fatigue



# Quality of Life (MOS-HIV)

## CONTENT

- Standardized questionnaire
- 35 questions
  - Check off response to question
  - 1-6; all of the time→none of the time
  - yes/no

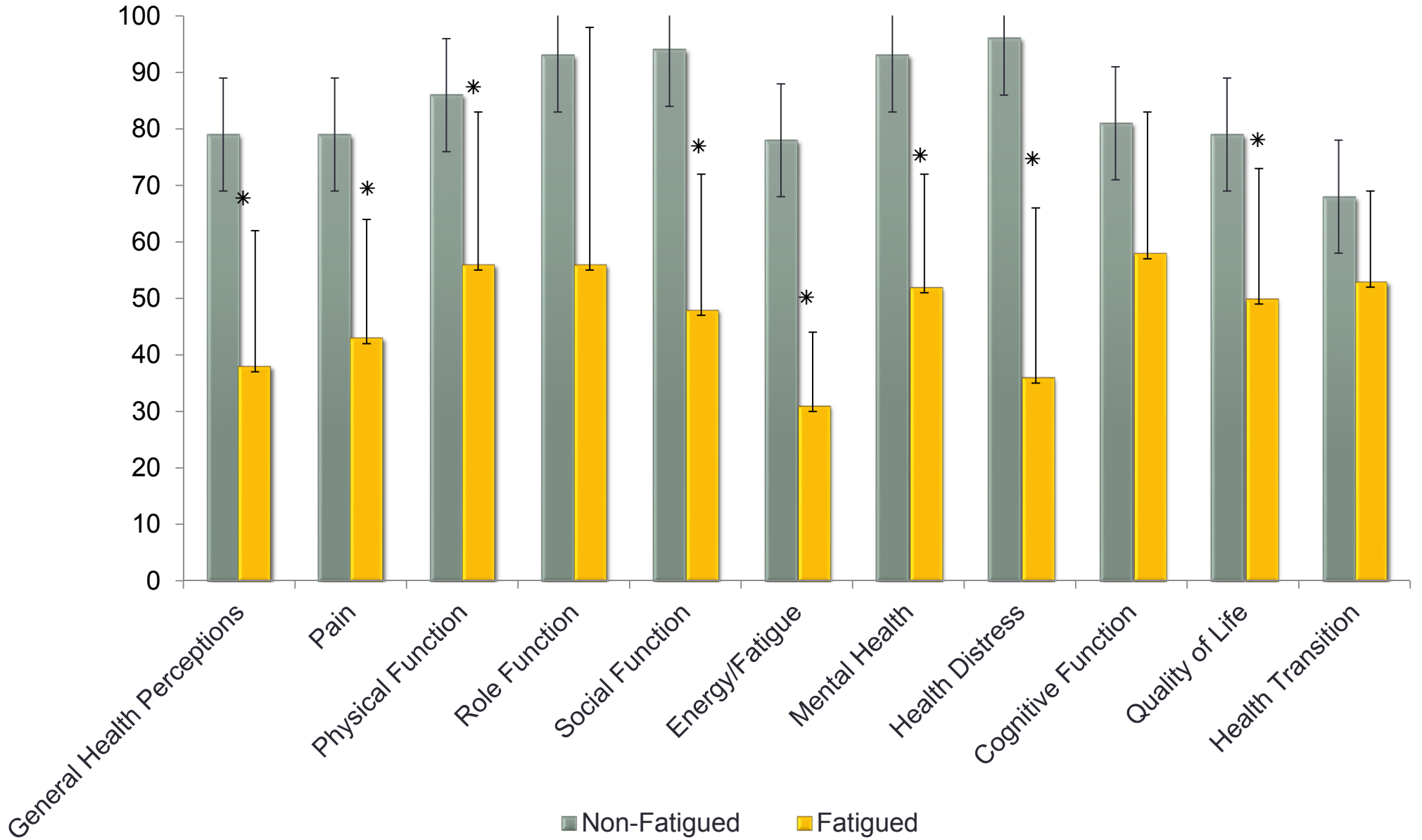
**Example:** *How much bodily pain have you generally had during the past 4 weeks?*

- |               |   |
|---------------|---|
| • None        | 1 |
| • Very mild   | 2 |
| • Mild        | 3 |
| • Moderate    | 4 |
| • Severe      | 5 |
| • Very Severe | 6 |

## SCORING

- transformation scoring system:
  - 11 sub-scales
    - General health perceptions
    - Pain
    - Physical Function
    - Role Function
    - Social Function
    - Energy/fatigue
    - Mental Health
    - Cognitive function
    - Quality of life
    - Health Transition
  - 2 summary scores
    - Physical Health Summary
    - Mental Health Summary

# Quality of Life (MOS-HIV)

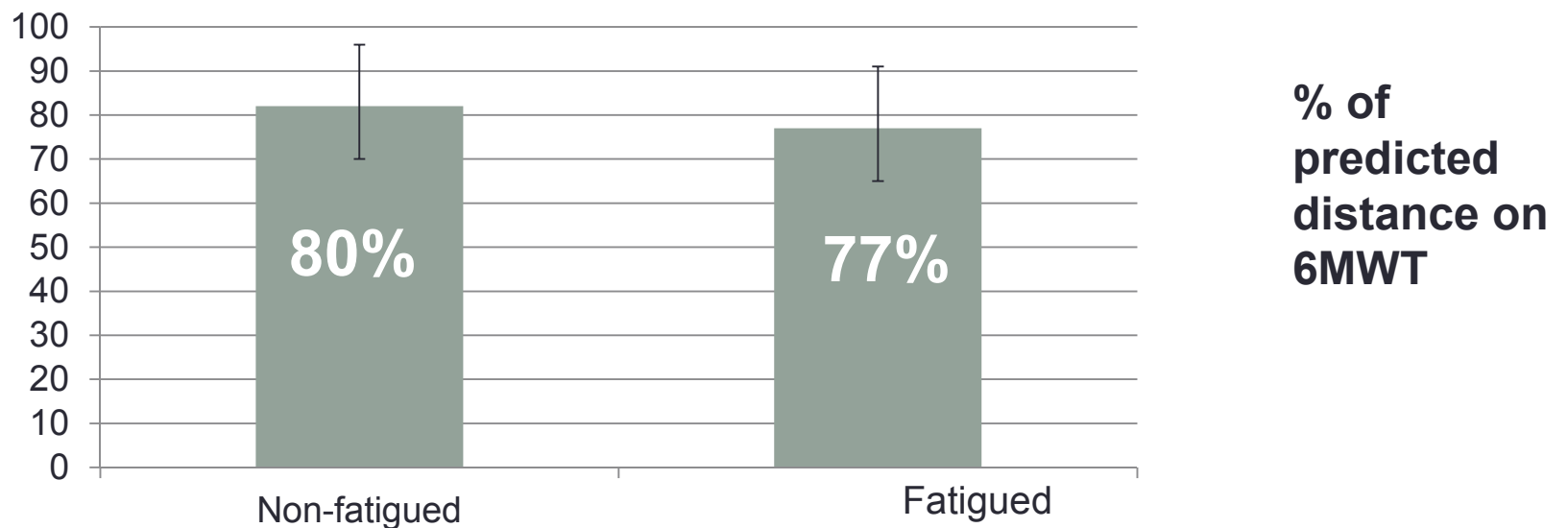
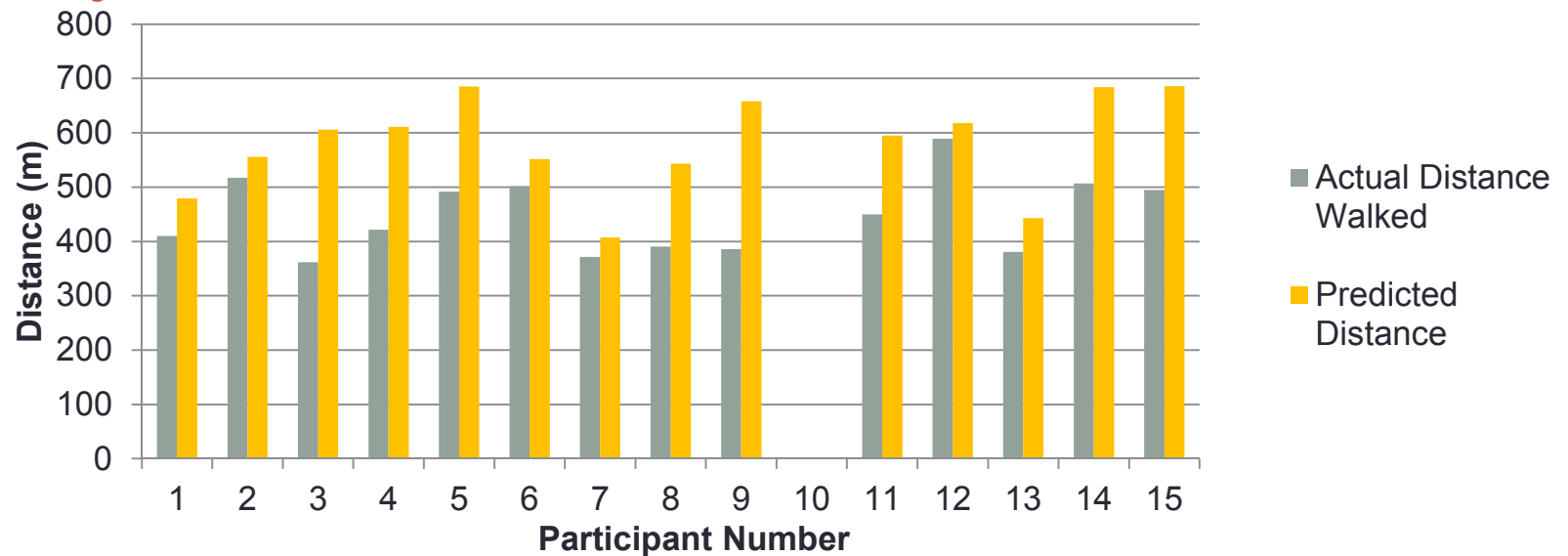


# Lists of Activities

ACTIVITY	# OF PARTICIPANTS	ABLE TO DO/NOT TIRED	LIMITED/TIRED
<b>Social</b>			
Socializing with friends	8	5	3
<b>Recreational</b>			
Going for a walk	11	6	5
<b>Activities of Daily Living</b>			
Grocery shopping	10	4	6
Cleaning	9	5	4



# Physical Function – 6-Minute Walk Test



# Primary Findings & Clinical Relevance

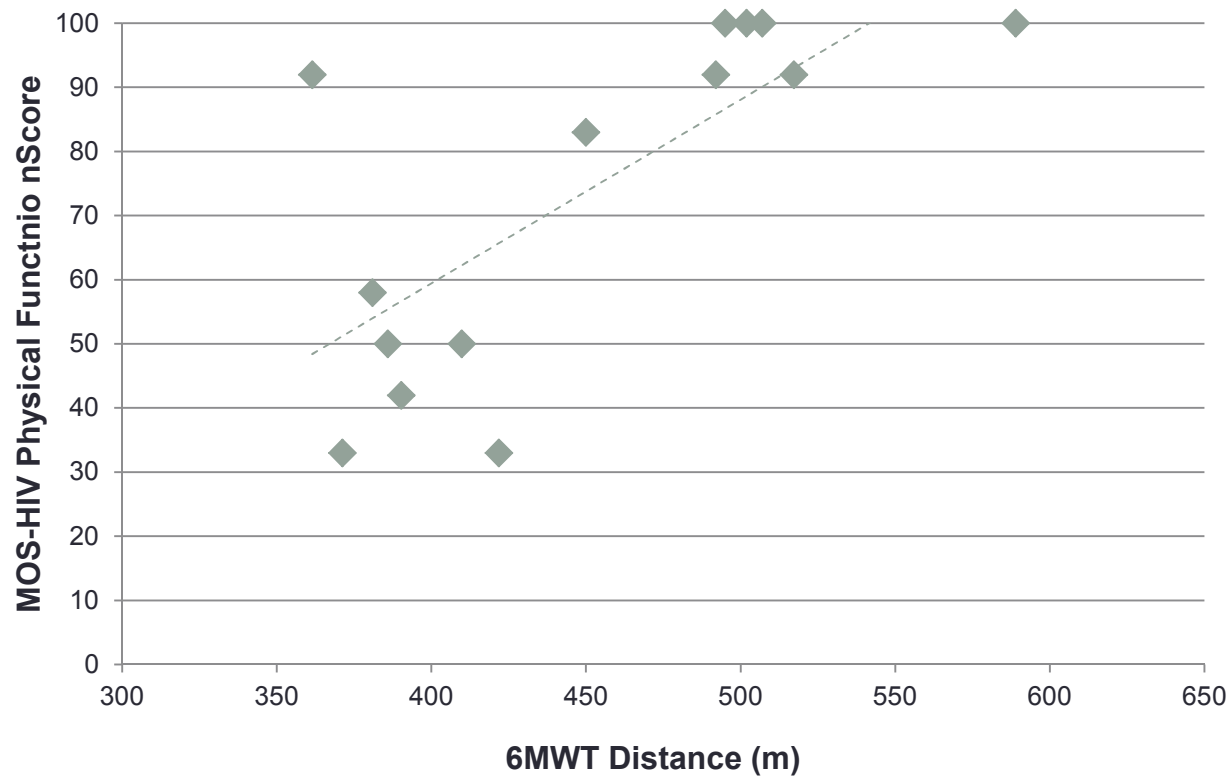
- ½ of the women with HIV/AIDS in our study encountered some level of fatigue
- Individuals with fatigue
  - reported lower quality of life
  - Had greater limitations in activities
- Since the demographics of our sample were similar to that in the OHTN Cohort Study,
  - our data suggest that interventions should be developed to address fatigue in women with HIV to enhance their quality of life and improve their participation in daily activities

# Acknowledgments

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- Dr. Julie Barroso from Duke University for her assistance with the HRFS

# Relationship between Measured versus Reported Physical Function



$r=0.69$ ,  $p=0.006$

Where,  
 $r=0$ , no relationship  
 $r=1.0$ , strong relationship