

Table 1. Characteristics of Included Articles on Wireless Physical Activity Monitor Use to Describe Physical Activity among Adults Living with HIV (n=25 articles reporting on n=20 studies)

First Author (Year) Country where articles was conducted	Sample Size of Participants at Baseline	Target Population	Article Purpose	Duration of Study (if applicable)	Type of WPAM/ Where Worn	Authors Results and Conclusions Pertaining to WPAMs use among adults living with HIV
Jagers (2013)* United States	68 – estimated sample size	Underactive men and women 18 years of age or older living with HIV on ART. Sedentary lifestyle: not actively exercising ≥ 3 days a week for 20 minutes per session. Stable with viral load < 75 copies/mL. Capable of performing exercise regime. Access to a telephone.	To describe the methods for a randomized controlled trial of a telephone delivered home-based PA program designed to increase physical activity and reduce the risk of CVD in PLWH [study protocol]	9 months	SenseWear Armband Accelerometer / Left Upper Arm Pedometer/Not Stated	This study will allow authors to test methods and collect process evaluation for ways to increase physical activity and reduce CVD risk among PLWH.
Wirth (2015)*	Same sample from Jagers (2013)*	Local sample of PLWH in the Greater Columbia	To examine the combined association of	7-10 days	BodyMedia's SenseWear Physical	Participants performing at least 70 minutes of moderate to vigorous physical activity (MVPA) per day

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United States		and Charleston, South Carolina areas currently ART who had valid SenseWear armband data.	objectively measured physical activity and sleep with inflammatory levels among PLWH recruited for a randomized controlled trial (see Jaggers 2013).		Activity Armband Accelerometer/ Left Upper Arm	had lower CRP values compared to participant with <70 minutes of MVPA. Participants with a later sleep onset and lower MVPA minutes compared to participants with earlier sleep onsets and higher MVPA minutes showed statistically significant greater values of CRP. Participants with lower total sleep time and lower MVPA minutes compared to higher total sleep and higher MVPA minutes had higher CRP values. IL-6 was higher in participants with later bedtimes and lower MVPA minutes compared to earlier bedtimes and higher MVPA minutes; and participants with lower total sleep time and lower MVPA minutes compared to higher total sleep and higher MVPA minutes.

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Jaggers (2014)* United States	Same sample as Jaggers (2013)	Local sample of PLWH in the Greater Columbia and Charleston, South Carolina areas currently taking ART who had valid SenseWear armband data.	To examine the relationships between time spent in MVPA and sedentary behavior on components of metabolic syndrome in a sample of PLWH taking ART.	7-10 days	SenseWear Armband Accelerometer/ Left Upper Arm	Statistically significant differences were observed between groups showing lower values of waist circumference, weight, body mass index, and incidence of metabolic syndrome as levels of moderate physical activity (MPA) increased. As levels of MPA increased there was also a significantly higher VO ₂ peak indicating higher cardiorespiratory fitness. Results showed that greater amounts of MPA are significantly associated with a smaller waist circumference for PLWH taking ART.
Roos (2014)# South Africa	84	PLWH on HAART for ≥ 6 months, 20-65 years of age, ambulatory without an assistive device,	To investigate an education and home-based pedometer walking program that promotes the public health	12 Months	Yamax SW 200 Pedometer/ Right Hip	Pedometer step count of control and intervention groups improved significantly at 6 months but not significant at 12 months. In the intervention group, 8 participants did not use their pedometers during the 6-12 month period and

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		<p>willing to accept randomization, and presented with 1 or more of the following factors that elevated risk of IHD:</p> <p>pedometer step count <10,000 steps per day,</p> <p>BMI or ≥ 25,</p> <p>increased waist circumference (woman ≥ 8cm men ≥ 102cm,</p> <p>increased waist to hip ratio (women $\geq .85$, men $\geq .95$,</p> <p>blood pressure in high normal range (SBP=130-139mmHG) and DBP =85-89 or mild hypertension</p>	<p>recommendation of 30 minutes of walking that would influence activity and increase walking behavior in PLWH.</p>			<p>21 did. This study provided evidence that the combination of a walking program dependent upon self-monitoring and education may lead to beneficial outcomes among PLWH. Pedometers may be ideal to help promote and monitor walking among PLWH .</p>

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		(SBP 140-159 and DBP 90-99, and finally if participant had a known medical diagnoses of diabetes mellitus or HTN or dyslipidemia.				
Tudor-Locke (2009)^ United States	60 studies included in this systematic review; 58 PLWH included in the systematic review reported in one unique study	Special populations living with chronic illnesses and disabilities. PLWH that were included: 35 Hispanic males and 23 Hispanic females.	To assemble expected values for free-living values for free-living steps/day in special populations living with chronic illnesses and disabilities. [Systematic literature review]	N/A	Pedometer/ Waist	Authors retrieved information from 60 studies of free-living special populations published since the year 2000 that provided descriptive data regarding steps/day in these populations. For PLWH, the time frame wearing a pedometer and accelerometer was 7 days. The median expected value for waist mounted instruments for PLWH is 7545 steps/day.

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Webel (2015) United States	37	PLWH at high risk for developing CVD taking HIV medications, with suppressed viral load.	To describe cardiopulmonary fitness in PLWH and its association to lifestyle exercise and HIV characteristics	7 Days	Accelerometer/ Hip	Overall participants had low cardiopulmonary fitness, exercised on average twice a week (but mostly light activity). Fitness variables associated in a graded fashion with time spent exercising in light, moderate, and moderate-vigorous activity. CD4 count and lifestyle exercise were significantly and consistently associated with cardiopulmonary fitness.
Botros (2012)^ United States	Not Stated	Not Stated but article focuses on PLWH.	To search for intervention studies with exercise and nutrition related outcomes in PLWH [Systematic literature review]	N/A	Pedometer /Not Stated	Authors highlighted importance of PA in HIV. Increasing PA included: educational materials, school based PA sessions, hospital based sessions in children, multi component including PA and nutrition, and specialized equipment. Pedometer may be used as an intervention to increase PA engagement, increase

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						overall mobility; improved of functional measures.
Karsegard (2004) Switzerland	46	PLWH outpatients older than 18 year of age, involuntary weight loss of 5% to 15% of their usual weight since diagnosed with HIV, more than 150 CD4+ T lymphocytes/mm ³ at baseline, body fat mass > than 5% of body weight as measure by bioelectrical impedance, regular food intake, and ability to answer questions	To investigate the effects of L-ornithine alpha-ketoglutarate (OKG) on muscle force, body compositions, and immune function in PLWH outpatients and presenting weight loss	12 weeks. Pedometer used for only 48 hours after each visit.	Pedometer/Not Stated	The results show an improvement of nutritional status in the OKG and placebo groups, without a significant benefit for physical performance and immune parameters due to OKG supplementation. In addition, OKG supplementation was poorly tolerated by some patients and associated with significantly higher dropout rate than placebo. PLWH with moderate wasting increased their body mass index and triceps skinfold thickness as a result of diet counseling and oral OKG or isonitrogenous supplement. The OKG supplement did not significantly improve the nutritional, functional, and immune status of these patients when compared

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		routinely at the AIDS clinic.				with the isonitrogenous supplement.
Sandoval (2015) United States	1	67-year old white man who was diagnose with HIV in 2000. Medical record revealed hepatitis C virus (HCV) coinfection, history of chronic pain, HIV-related peripheral neuropathy, hypertension, hypothyroidism, and radiological findings of stenosis at the cervical and lumbar spinal segments without evidence of cord compression.	To share the authors experience in managing sleep and pain disturbance in a person living with HIV/HCV coinfection and chronic pain.	6 weeks	Fitbit Flex Accelerometer/ Wrist	The findings of this case report suggest that a comprehensive exercise program may improve sleep quality, pain, and cardiovascular fitness in individuals living with HIV/HCV coinfection. Waking episodes and activity at night (AAN) incrementally reduced throughout the intervention period. By end of circuit training phase, 64% decrease in number of waking episodes per night, 68% decrease in activity at night. Incorporating common consumer-based accelerometers as biofeedback and compliance tools may further assist in reaching desired therapeutic goals in challenging populations.

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Ramirez-Marrero (2014) United States	90	Lipodystrophy status was determined by at least 2 of: 1) waist to hip ratios >1.00 for males and >.85 for females, 2) physician's diagnosis, and 3) self-reported changes in body size. PLWH with Lipodystrophy (HIV-Lipo) participants were first recruited then age and sex matched with PLWH with no Lipodystrophy (HIV-no lipo) and HIV negative (non HIV) participants. Participants were	To compare MetSyn, VO2 peak, physical activity, and sedentary behavior between HIV+ Hispanics with and without lipodystrophy and non-HIV Hispanics.	7 days	Actigraphy GT1M accelerometer/ Waist	MVPA (min/week) was not met for all 3 groups. The step counts per day were 6602, 6759, and 8148 for HIV-Lipo, HIV no Lipo, and non-HIV, respectively. A higher proportion of HIV-Lipo met the criteria for MetSyn and had lower VO2 peak compared with HIV-no Lipo and Non-HIV participants. PA and sedentary time was not different between groups. MetSyn was inversely associated with VO2 peak but not associated with PA or sedentary behavior. In conclusion, the results from this study suggest that among HIV+ Hispanics: 1) Met-Syn is influenced by lipodystrophy status, 2) VO2peak (cardiorespiratory fitness) is an important factor that might protect against Met-Syn, and 3) cardiorespiratory fitness is

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		eligible if between the ages of 30-65 years of age.				influenced by PA but not sedentary behavior.
Roos (2015)# South Africa	See sample size from Roos (2014)	PLWH from an outpatient clinic in Johannesburg, South Africa.	To evaluate participants attendance and adherence to an education and home-based pedometer walking programme and to investigate the barriers and facilitators.	6 months	Pedometer/Not Stated	Barriers to physical activity included: physical complaints, psychological complaints, family responsibility, workplace, time of year, physical environment, and social environment. Facilitators to physical activity included: family and friends involvement, religion, and community environment, allocation of time for PA.
Forde (2016) Ireland	37	Participants currently living with HIV recruited from an outpatient clinic at St. James' Hospital. Age-matched controls	To investigate the association between indices of metabolic health and physical activity.	7 days	Actigraph GT3X+ Triaxial accelerometer/ Right Hip	PLWH engaged in more MVPA (time in minutes) compared to the age matched controls. Inverse correlations between moderate PA and both insulin resistance and triglycerides in those living with HIV. PLWH accumulated an average of 33 minutes of PA per

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		were recruited through staff at St. James' Hospital.				day. HIV negative participants engaged in 16 minutes of PA per day. PLWH were accumulating an average daily step count that was slightly below the recommended 10,000 steps. Participants with met-syn engaged In significantly less MVPA than those without the met-syn. The findings suggest that the quantity and pattern of objectively measured PA among those living with HIV were compared with those of an age- and gender-matched control group. Results of this study showed that those living with HIV are achieving public PA recommendations.
Olsen (2015) Ethiopia	243	Age 18 years of age and older, eligible for ART initiation, not pregnant or	1) To describe habitual physical activity and physical capacity in adult HIV	4 day monitoring with accelerometer.	Uniaxial accelerometer, and HR sensor (Actiheart,	This study showed a strong impact of HIV and severity on the functional status of patients at initiation of ART as all indicators of disease status, including CD4,

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		lactating, residing within 50km of Jimma or Agaro towns and written informed consent. Criteria for ART was CD4 <200 cells/uL irrespective of clinical symptoms, CD4 <350 cells/uL if clinical stage 3, or WHO clinical stage 4 irrespective of CD4.	patients at initiation of ART, 2) to assess the role of HIV severity and anaemia, and 3) assess the role of nutritional status, food security and energy intake on functional outcomes.		CamNtech, UK)/Chest	viral load and WHO stage, were strongly associated with low levels of PA and capacity. More accurate assessment of objectively measuring PA is needed. Median PA energy expenditure of women and men were 23.5 kJ/kg per day and 38.0 kJ/kg per day respectively. Men spent almost twice as much time as women in moderate/vigorous activity. Advanced HIV+ participants predicted decreased levels of PA and capacity. Lower body mass index predicted poor PA and capacity independent of HIV status. Accurate quantification of PA and capacity is a central part of the efforts to understand the impact of HIV on the daily lives of patients and their families, especially in low-income settings where lack of formal social

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						security makes maintenance of work capacity essential.
Bopp (2004) United States	66	PLWH 18 years of age or older, and able to read and understand English.	To determine what level of association exists between physical activity and CD4+ cell counts and HIV-RNA viral load in HIV-infected individuals.	3 days actigraph was worn.	Wrist Actigraph (mini-motion logger (ambulatory monitoring, Inc. Ardsley, NY)/Nondominant Wrist	Physical activity index as measure by wrist actigraph was inversely associated with HIV-RNA viral load. Mean PA level over the three collection days was negatively associated with viral load. Neither mean PA nor physical activity index scores correlated with CD4+ cell counts. Physical activity index was not associated with symptom severity, sleep quality, daytime sleepiness, fatigue, state anxiety trait anxiety, and perceived stress. This study demonstrates that PA, independent of intensity and stage of illness, is inversely associated with HIV-RNA viral load values.
Rehm (2016)	50	50 HIV+ women that were part of the Women's	To measure PA levels and benefits/barriers to PA in a group	7 days.	Fitbit Activity Monitor Accelerometer/ Not Stated	The average steps per day was 7234 among the 50 participants, 15% engaged in 10,000 steps per day 50% of the time, 32.5 minutes

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United States		Interagency HIV study.	of predominantly African-American HIV+ women in the deep south of the United States and determined differences associated with age and depression levels.			on average was spent in active minutes per week, and 2% met 150 minutes of activity/week. Physical exertion ranked as the greatest barrier while exercise milieu was the lowest barrier. Older women perceived significantly greater benefits of exercise compared to younger women. Physical performance and preventive health ranked significantly higher among the older women. PLWH should be encouraged to engage in exercise and PA. They should also be encouraged to maintain an exercise program.
Kruger (2016) South Africa	247	Black South African Urban women	To investigate lifestyle factors associated with sarcopenia in black South African urban women	Not Stated	ActiHeart accelerometer/ HR monitor/Not Stated	Age and activity energy expenditure are significantly associated with gait speed. Sarcopenia is prevalent among these women and was associated with low PA energy expenditure.

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Sandkovsky (2013) United States	41	Participants were between 20 and 40 years of age or older than 50 years of age in order to clearly differentiate the age groups. Participants were required to be able to provide written informed consent and to complete the questionnaires in English. HIV+ and is taking ART, on stable therapy for past 12 weeks and not anticipated to require a change in therapy, or if	The primary objective was to evaluate the feasibility of incorporating innovative and traditional measures of cognitive and motor function, overall activity by actigraphy and self-report, emotional well-being, sexual function, inflammatory biomarkers, and frailty. Secondary aims of the study were to determine the optimal test battery to	2 week accelerometer monitoring.	Actiwatch-2/Wrist	Activity is often measured by self-report, but the actigraphy results in this study correlated poorly with participants self-reported activity and suggest that participants may overestimate how active they are. There were no significant differences between the younger and older groups for mean or median activity counts. The authors did not observe differences in overall daily activity counts associated with participant age, gender, depression score, Loneliness Scale, or Fatigue Severity Score. Actigraphy counts did not correlate with subject self-reported activity measured by the FSS and POMS scales. The authors report that while actigraphy is a powerful tool to quantify activity level, is

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		not taking ART, not anticipated to initiate therapy in the next 6 weeks.	measure the areas of interest, to determine participant acceptance of the measures involved, and to collect preliminary data to inform future studies.			reproducible, and does not rely on self-perceived activity, the devices are expensive which limits their use. Actigraphy requires specialized equipment leading to personnel to interpret the findings, which limit their usefulness in clinical settings.
Henry (2016) United States	21	Inclusion criteria: ability to provide informed consent, HAND diagnosis of ANI or MND, ages 18 and older, physically capable of MPA by self-report and verification with the participant's primary care	The primary aims were: a) to determine if iSTEP could significantly increase physical activity quantified by objective measures, such as pedometer and accelerometer counts; and b) to	16 weeks	Actigraph GT3X accelerometer (Actigraph)/ Waist and Omron HJ-321 pedometer/Waist	Preliminary results from this study show that participants who are PLWH exhibited a high rate of response to iSTEP and remained engaged in the study. Preliminary participant feedback indicated that all individuals felt that the pedometer was in fact useful, but controls expressed a need for more motivational support. The results from this study indicate that the iSTEP is feasible to

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		provider, no significant PA in the previous 3 months, willingness to receive and respond to daily text messages.	evaluate the effect of iSTEP on a global indicator of neurocognitive performance and measures of everyday function.			administer to PLWH with HAND. Combining pedometer use with physical activity self-monitoring/goal-setting text messages may be a useful method to enhance physical activity in PLWH with (HAND).
Wadley (2016) South Africa	68	PLWH for at least one year and being over 18 years of age. PLWH needed to report having had pain on most days of the week for at least the past 3 months preceding recruitment.	To investigate whether resilience could account for the dissociation between chronic pain and functional impairment in South African PLWH.	Accelerometer monitoring for 2 weeks.	Unidirectional accelerometers (Actical Step, Mini-Mitter, Respironics)/Right Hip	Activity measured objectively in these participants did not correlate significantly with impairment measured on the Brief Pain Inventory (BPI) or Euroqol-5D-3L (EQ5D). The participants in pain who volunteered for actigraphy actually were as active as their pain-free counterparts, whether the authors assessed their PA in terms of duration of activity per day, intensity of activity or time spent in different intensity quartiles of activity. Resiliency correlated inversely with time spent active (but weak

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						association). Comparing duration of time spent active and intensity of activity between the chronic pain and no chronic pain groups there was no difference for either mean time spent active each week or median daily activity counts. The authors conclude that it was not individual resilience that accounted for the dissociation between pain and the ability to cope with daily living among PLWH in South Africa. Resilience was a significant determinant of quality of life.
Ramirez-Marrero (2008) Puerto Rico	58	Hispanic adults living with HIV (35 men and 23 women). No diagnosis of AIDS-defining illness at the present. Willingness to	To compare PA assessment using motion sensors and questionnaires among Hispanics living with HIV.	9 consecutive days	Actigraph Model GT7164/Waist and DigiWalker Model 200 Pedometer/Waist	The two most important findings were the over-estimation of self-report PA and the difference between self-report and objective measurement of PA in this population. Lower levels of PA as recorded by the Actigraph and higher overestimation of PA levels with the IPAQ. The

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		respond to a questionnaire and be contacted on a daily basis during the study protocol.				different recordings of the IPAQ and Actigraph suggest different types of questions or different cutoff points should be developed for future PA studies with chronic disease populations. The pedometer could help improve the evaluation of PA in people with chronic disease.
Rodrigues-Estrada (2016) Mexico	1	33 year old man with a recent diagnosis of HIV (CD4 cell count of 21 cells/mm ³ and viral load 41,264 of HIV RNA/mL), oral candidiasis, and pneumocystosis.	To compare the actimetry record longitudinally through four continuous periods of treatment in a person living with HIV who developed a SJS reaction	4 weeks	Actigraph monitor (Actical)/Non dominant Wrist	Sleep disturbances were not reported in clinimetric sleep measures but they were detected by actigraphy. There was an increase diurnal PA found during the Steven-Johnson syndrome SJS period, which was possible, related to a greater motor movement secondary to the distress caused by the dermatological lesions and associated itching. No significant differences between four periods when comparing sleep parameters

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						(total sleep time (TST), sleep efficiency, sleep latency, wake after sleep onset (WASO), fragmentation). PA showed significant differences between the group of four treatment periods for diurnal PA. The authors suggest it is necessary to perform longitudinal studies to better understand the activity and sleep changes experiences during ART initiation among PLWH particularly in PLWH receiving Efavirenz.
Jansen (2003) United States	62	The age was 20-65. Inclusion criteria included: participants were HIV seropositive, 18 years or age older, they were able to read and speak English at 9th grade level.	To examine the effect of exercise on pessimistic explanatory style in HIV positive men	8 weeks	Actigraph/Waist	Hypothesis 1 was partially supported- Although individuals in experimental group exercised more than those in treatment as usual (TAU), initial pessimistic explanatory style (ES) did not moderate this effect. When pessimism was examined as a continuous variable within the intervention group, there was a

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						significant negative correlation between pessimism at baseline and subsequent change in foot strikes. Hypothesis 2-ES did not appear to change significantly over time for participants in experimental group (EX), but when the general linear model was tested including the effects of exercise change on ES, a significant effect was found. More optimistic in individuals who successfully implemented their exercise programs. This study provides evidence that the 8 weeks of exercise showed to improve fitness and improve psychological well-being, as well as a potentially stronger immune system and increased longevity. Eight weeks of light to moderate exercise were associate with significant changes in activity level as well as small but

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						significant changes in attributional style questionnaire (ASQ) scores.
McDermott (2016) Ireland	11	Participants had to be between the ages of 18 and 65 years of age, self-reporting physical activity levels less than 150 minutes of moderate intensity exercise per week, able to provide informed consent and able to attend supervised exercise classes two days per week for 16 weeks. Exclusion criteria included: any musculoskeletal	To investigate the effects of a 16-week aerobic exercise programme on cognitive function, assessed objectively with commonly used clinical measures, among people living with HIV.	16 weeks- participants wore the accelerometer for 7 days prior to the start of the study and 7 days following the intervention .	Actigraph GT3X+ Tri-Axis Accelerometer/ Right Hip	The main finding of this study were despite observing a strong association between higher levels of exercise capacity and higher levels of cognitive function among PLWH; 16 weeks of aerobic exercise did not significantly improve cognitive function. At baseline, higher levels of moderate PA positively correlated with higher MOCA scores. The authors suggest longer intervention periods and/or higher adherence rates to exercise might be needed for an aerobic exercise programme to be effective in improving cognitive function in a cohort with no baseline cognitive impairments.

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		injury, rheumatic disorder or neurological condition affecting ability to exercise, history of heart disease, lung disease or metabolic disorder and one of the risk factors for heart disease.				
Fillipas (2010) Australia	30	A total of N=30 participants who were HIV+ participated in the study. Participants were recruited from an observational cohort study simultaneously being conducted.	To evaluate the criterion and absolute validity of the last-7-day, long form, self-administered version of the International Physical Activity Questionnaire (IPAQ) in PLWH,	7 days	Actigraph GT1 M activity monitor/Right Hip	The results of this study suggest that the IPAQ long form may be useful as an initial physical activity screening of PLWH, but it cannot be used to determine precise amounts of PA. Clinicians seeking precise measurements of PA should use an objective measurement instrument, such as an accelerometer. The IPAQ long form is useful in screening PA

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			using accelerometry as the objective criterion.			levels but should not be used as a precise measurement tool. It is recommended that clinicians seeking precise measurements of PA use an objective tool like an accelerometer.
Faurholt-Jepsen (2014) Tanzania	160	N=135 Tuberculosis (TB) patients and 25 non-TB controls. Of the controls 8% were HIV+, of the Sputum smear negative TB 75.6% were HIV+ and sputum smear-positive TB 37.2% were HIV+. 135 TB patients, 25 non-TB patients. 48.9% of TB patients and 8% of controls had HIV.	To present data on the role of TB disease and HIV infection and other predictors on the level of PA and indicators of physical fitness.	Not reported	Heart rate (HR) and movement (acceleration) sensor (Actiheart, CamNtech Ltd, UK)/Not Stated	Patients with TB spent 2–4 h (P<0.01) more in sedentary activities compared to controls, and similarly, HIV was associated with more sedentary activity (2.3, 95% CI 1.1–3.4) compared to controls. The average daily PAEE was less than half in the sputum smear-negative tuberculosis (PTB-) patients (eB 0.43, 95% CI 0.29–0.64) and less than two-thirds in sputum smear-positive tuberculosis (PTB+) patients (eB 0.67, 95% CI 0.47–0.94) compared to controls. The authors found that TB and

Table 1. Characteristics of Included Articles on Wireless Physical Activity Monitor Use to Describe Physical Activity among Adults Living with HIV (n=25 articles reporting on n=20 studies) (Continued)

First Author (Year) Country where articles was conducted	Sample Size of Participants at Baseline	Target Population	Article Purpose	Duration of Study (if applicable)	Type of WPAM/ Where Worn	Authors Results and Conclusions Pertaining to WPAMs use among adults living with HIV
						HIV were associated with substantially higher sleeping HR and a marked reduction in daily PAEE.

Abbreviations: PLWHA- People living with HIV-AIDS; PLWH- People living with HIV; PLHIV- People living with HIV; CRP- C-reactive protein; IL-6- Interleukin-6; HAART- Highly Active Anti-Retroviral Therapy; WASO- Wake after sleep time; TST- Total sleep time; MVPA- moderate to vigorous physical activity; MABT- Mindfulness Awareness in Body-oriented Therapy; HIV-Lipo- HIV+ with Lipodystrophy; HIV-non-Lipo- HIV+ without Lipodystrophy; Non-HIV- HIV negative; ART- anti-retroviral therapy; HAND- HIV-associated Neurocognitive Disorder; AAN- Activity at Night; HCV- Hepatitis C Virus; ANI- Asymptomatic Neurocognitive Disorder; MND- Mild Neurocognitive Disorder; BPI- Brief Pain Inventory; EQ5D- Euroqol-5D-3L; TAU- Treatment as Usual; ES- Pessimistic Explanatory Style; EX- Experimental Group; ASQ- Attributional Style Questionnaire; SJS- Steven-Johnson Syndrome; TB-Tuberculosis IPAQ- International Physical Activity Questionnaire; PTB- - Sputum Smear-Negative Tuberculosis; PTB+ - Sputum Smear-Positive Tuberculosis

Symbols: *- Jagers et al, 2013; Wirth et al, 2015; Jagers et al, 2014 are three articles reporting on one unique study. #- Roos et al, 2014; Roos et al, 2015 are two articles reporting on one unique study. ^- Tudor-locke et al, 2009; Botros et al, 2012 are the two included systematic literature reviews.

Table 1. Characteristics of Included Articles on Wireless Physical Activity Monitor Use to Describe Physical Activity among Adults Living with HIV (n=25 articles reporting on n=20 studies) (Continued)