

Breaking the Barrier on Physical Activity and Fatigue

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Katrina L. Fetter has nothing to disclose.
 Rita Musanti has nothing to disclose.



Objectives

1. Define at least one patient outcome positively impacted by physical activity
2. Identify and address at least two perceived barriers to recommending PA



Why is Physical Activity (PA) Important?

Importance in General Population:

- Control Weight
- Decrease risk for Type 2 Diabetes, some cancers, and cardiovascular conditions
- Strengthen bone and muscle
- Improve mental health and mood
- Increase chances of living longer
- Improve ability to do daily activities and prevent falls in the elderly



www.cdc.gov



Importance to Cancer Patients

- Prevention
- Decreases risk
- Improve QOL
- Potential to increase survival
- Increase aerobic fitness
- Improve Outcomes
- Decrease Side Effects
- Improve treatment adherence
- Increase muscular strength

Schmitz et al., 2010



PA Positively Impacts Many Patient Outcomes

ONS PEP® rates PA as Recommended for Practice or Likely to Be Effective for:

- Fatigue
- Anxiety
- Depression
- Lymphedema



Palliative Care and PA

- Cancer-related fatigue (CRF) is experienced by the majority of patients receiving palliative care
- CRF → Decreased physical activity → muscle weakness and wasting → loss of mobility and independence (Lowe, Watanbe & Courneya, 2009)
- Though more studies are needed, clinical trials of physical activity with patients receiving palliative care indicate that patients are receptive to participation, and that many of the physical and psychosocial benefits reported in the oncology literature can also be realized in this population (Oeschle et al., 2011; Oldervall et al., 2006)

Lowe et al., 2009; Oeschle et al., 2011; Oldervall et al., 2006



US DHHS Physical Activity Guidelines for All Americans

- Some physical activity is better than none.
- Most health benefits occur with at least 150 minutes (2 hours and 30 minutes) a week of moderate intensity physical activity, such as brisk walking.
- Additional benefits occur with more physical activity.



US DHHS Physical Activity Guidelines for All Americans

- Both aerobic (endurance) and muscle-strengthening (resistance) physical activity are beneficial.
- The health benefits of physical activity occur for people with disabilities.
- The benefits of physical activity far outweigh the possibility of adverse outcomes.

<http://www.health.gov/paguidelines/guidelines/summary.aspx>



Current State

- More than 12 million survivors with unique needs from diagnosis to EOL
- Exercise programs being added
- Research being conducted
- Patients not exercising
- ACSM, ACS, AHA, US DHHS Teamed up for Guidelines

Schmitz et al., 2010



Few Patients Exercise

- A study of 315 women diagnosed with breast CA found that mean PA levels decreased by 50% in the first year after dx, and did not recover to baseline levels even 30 months later (Littman, Tang & Rossing, 2010)
- 32% Breast CA survivors met PA guideline recommendations (Irwin et al, 2004)



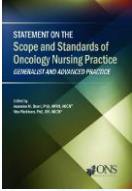
American College of Sports Medicine Exercise Recommendations for Cancer Survivors

- Stay as active as condition allows
- Avoid inactivity
- Some is better than none
- Appropriate for all patients (with some adaptations)
- Make individual exercise plans
- Consider diagnosis, physical condition, contraindications
- NCCN recommends during, after, and at EOL

Schmitz et al., 2010; NCCN, 2014



Scope for Nursing



- Within nursing scope
- Collaborate with other professions
- ONS Statement on Scope and Standards of Oncology Nursing Practice
- Health Promotion, Education
- Limitations

Schmitz et al., 2010. ONS Statement on Scope and Standards of Oncology Nursing Practice, 2004



Few Clinicians Recommend Physical Activity

- A recent study by ONS found that fewer than 10% of patients starting chemotherapy for breast CA received exercise recommendations (2012)
- About 1 in 3 patients in the general population received a recommendation to exercise from a clinician (NHIS, 2010)



National Health Interview Survey (2010); ONS Foundation News, 2012



Barriers to Recommending PA

- Taught to promote rest
- Lack of knowledge
- Patient resistance
- Fear of causing harm
- Lack of time
- Cost concerns
- Lack of resources
- Not role modeling behavior themselves
- <https://www.youtube.com/watch?v=FgIKJzLqk2E>

Schmitz et al., 2010



Assessment

- Assess prior to recommendation
- No testing needed prior to walking, flexibility, and resistance
- Need to tailor to individual and performance
- Contraindications and caution in: severe anemia or thrombocytopenia, surgical healing, arm or shoulder/musculoskeletal problems, bone mets, fever or infection, cardiac issues, fracture risk, neuropathies
- Obtain consultation prior to recommendation in these cases

Schmitz et al., 2010; NCCN, 2014



Prehabilitation

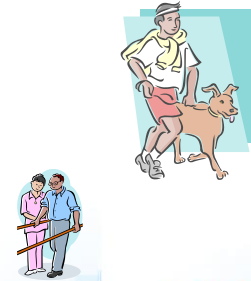
- Assessment at time of diagnosis and prior to treatment
- Looks at baseline function
- Targets interventions to decrease future impairments; psychological and physical
- Could potentially: decrease readmission, improve morbidity, improve health outcomes, increase treatment options or compliance to treatment improving overall survival, lower costs

Silver & Baima, 2013



PA Interventions

- Individualized goals
- At minimum resistance and flexibility accounting for lymphedema, fracture risk, and infection risk
- Return to daily activities ASAP
- Daily activity if able
- Consider rehab, PT/OT
- Avoid inactivity



Schmitz et al., 2010; NCCN, 2014



PA Interventions Cont...



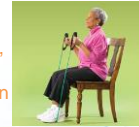
- 150 min./week of mod. or 75 min./week vigorous
- ACSM has some cancer site specific information but not much
- Most studied as been the breast CA population
- Multitude of choices for exercise examples

Schmitz et al., 2010; www.nma.nih.gov; www.cdc.gov



Everyone Can Move a Little!

- No matter the person can increase activity
- Bedridden can do passive ROM, stretching, leg lifts
- Chair-bound → resistance bands, hand weights (wrist curl, overhead press), leg raise
- Severe Fatigue → start slow, divide up, balance rest & activity, stretch & strengthen



www.LiveStrong.com; www.cdc.gov; www.nma.nih.gov



It is our responsibility to support and encourage this PA!

What Does the Future Hold?

- More research on specific cancer sites
- More research to show definitive effectiveness for other side effects
- Further research on prehabilitation
- ONS Get Up, Get Moving Campaign
- Use of Resources and their expansion (ex. LiveStrong at the YMCA, Cancer Support Community, ACSM-Certified Cancer Exercise Trainer ProFinder listing)

Schmitz et al., 2010; ONS PEP



Don't Forget...

- Importance to role model PA for patients
- Safe both during and after treatment
- Any activity is better than none; avoid inactivity
- Anyone can increase their PA
- Benefits far outweigh any risks of PA
- Big bang for the buck!
- We Make the Difference
- Every patient can move a little more, and every nurse can tell them so!

Schmitz et al., 2010; NCCN, 2014; <http://www.health.gov/paguidelines/guidelines/summary.aspx>



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