

# Cancer 'prehabilitation' can reduce complications and improve treatment outcomes

July 18 2013

---

For patients with cancer, "prehabilitation"—interventions given between the time of diagnosis and the start of treatment—has the potential to reduce complications from treatments and improve physical and mental health outcomes, according to a report in the August *American Journal of Physical Medicine & Rehabilitation (AJPM&R)*. *AJPM&R*, the official journal of the Association of Academic

"A growing body of evidence supports preparing newly diagnosed [cancer](#) patients for and optimizing their health before starting acute treatments," write Drs. Julie K. Silver and Jennifer Baima of Harvard Medical School. Their article, titled *Cancer Prehabilitation: An Opportunity to Decrease Treatment-Related Morbidity, Increase Cancer Treatment Options, and Improve Physical and Psychological Health Outcomes*, is the first comprehensive review of the topic.

"There is a rather long and impressive history of using prehabilitation to improve orthopedic surgical outcomes," Dr. Silver comments. "Our new review shows that there is a unique opportunity to help many people who have been newly diagnosed with cancer to improve their physical and emotional outcomes."

## Cancer Prehabilitation—Getting Patients in Best Possible Shape for Treatment

The goal of cancer prehabilitation is to prevent or lessen the severity of anticipated treatment-related problems that could lead to later disability. Immediately after [diagnosis](#), patients undergo physical and psychological assessments to establish their baseline level of function and identify any current impairment, and provide targeted interventions to reduce the risk and severity of future impairments.

Traditionally, pretreatment interventions focused on aerobic conditioning to build patients' general strength and stamina. But recent studies have shown that more directed interventions can improve outcomes in patients with specific cancers: for example, swallowing exercises before surgery for head or neck cancer, smoking cessation to improve breathing function before lung cancer surgery, or pelvic floor exercises to reduce problems with urinary incontinence after surgery for prostate cancer.

Some studies have shown that prehabilitation interventions, individually or in combination, can increase the range of treatment options, lower complication rates, and improve physical and mental health outcomes. Benefits include a reduced risk of hospital readmission and lower health care costs.

Cancer prehabilitation seems more effective when it includes both physical and psychological interventions. Providing psychosocial support immediately after diagnosis has improved treatment outcomes for patients with prostate, breast, and ovarian cancer. Future studies may show that prehabilitation can increase patients' ability to complete their recommended treatment—thus improving their chances of survival.

Drs. Silver and Baima emphasize that cancer prehabilitation should follow an individualized approach, "identifying current and anticipating future impairments as a critical first step in improving healthcare outcomes and decreasing costs." They liken cancer prehabilitation to a

puzzle, with individual approaches put together in combinations that best meet the needs of the individual patient.

While patients may fear that delaying cancer treatment may reduce their risk of survival, there's typically some waiting period before treatment begins. This time—whether it's a few days or a few weeks—may provide a "window of opportunity" for prehabilitation interventions to address physical and psychological issues. Drs. Silver and Baima write, "Newly diagnosed cancer patients are often seeking ways to become immediately involved in their care that may go beyond decision making about upcoming treatments."

Studies have begun to show that physical and psychological prehabilitation interventions can reduce treatment-related complications, decrease length of hospital stay and/or readmissions, increase available treatment options for patients who would not otherwise be candidates, and quickly facilitate return of patients to the highest level of function possible. Drs. Silver and Baima highlight the need for further studies to identify the most effective prehabilitation interventions: "those that improve patient [health outcomes](#) and reduce direct and indirect healthcare costs."

"This review provides an exciting 'jumping-off point' for cancer researchers to look more closely at how to improve outcomes from the moment of diagnosis onward," Dr. Silver adds. "We hope it will serve to highlight this exciting area of research and to show clinicians that there are key opportunities right now to improve cancer care."

Provided by Wolters Kluwer Health

Citation: Cancer 'prehabilitation' can reduce complications and improve treatment outcomes (2013, July 18) retrieved 3 May 2024 from <https://medicalxpress.com/news/2013-07-cancer->

[prehabilitation-complications-treatment-outcomes.html](http://prehabilitation-complications-treatment-outcomes.html)

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.