# CANCER REHABILITATION

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Rehabilitation for cancer patients? What does this really mean? The word rehabilitation comes from the Latin prefix "*re*," meaning "*again"* and "*habitare,"* meaning "*make fit."* When something falls into disrepair and needs to be restored to a better condition, it needs rehabilitation. So how does this relate to cancer?

With the medical advances, through God's grace and favor, a lot of cancer patients nowadays get prompt treatments that make them cancer-free. But true with most treatment modalities available though, they are not without any flaws. In fact, these therapeutic treatments are usually double-edged. From tumor removal, followed by either chemotherapy and/or radiation, cancer survivors can be left with some residual dysfunction. After surgeries, they can develop deformities (e.g. breast removal), paralysis/weakness of muscles as a result of peripheral neuropathy due to radiation/chemotherapy, swallowing and speech difficulties if nerves get accidentally hit or cut during surgeries (e.g. neck or brain tumor removal). Deconditioning can ensue from prolonged bed rest especially if not allowed to move or get out of bed for an extended period (e.g. lower extremity cancer surgery/amputation). Bleeding tendencies/easy bruising can follow Vitamin K deficiency from prolonged treatment with antibiotics (e.g. gastrointestinal tumors).

Patients can also develop LFA, *"learned food aversion,"* to meats, vegetables, and caffeinated beverages during their cancer treatment. The exact mechanism for this is unknown. If not properly and immediately addressed, it can lead to weight loss, malnutrition, dehydration, and weakness. And these can cascade into immunosuppression (decreased or loss of ability to fight infection) making them more susceptible to opportunistic infections (from microorganisms that can be easily be defended against by normal bodies but not by severely ill patients), which can lead to pneumonia or sepsis (infection in the blood affecting the whole body systems) eventually causing death. Weakness can also make them more prone to injuries like falling which can lead to fractures, spinal cord injuries or head trauma. All these will definitely make their condition and prognosis worse and recovery much slower and longer.

Commonly ignored in cancer treatment plan is the potential for sexual alteration or dysfunction. Surgeries like mastectomy (breast removal), prostate cancer surgery, ovarian/uterine surgery, to mention a few, leave these men and women with a profound negative impact. They develop either self-pity, anger or depression if they are not able to satisfy their partners or if they lose their capability

to reproduce. Psychologically, if they are parents, they also eventually affect the whole family as they can project their negative feelings to the innocent children or even to the people at work, if they're still able. Same is true with tumors that affect the behavior of the patients, such as those with brain tumors.

Pain is the number one problem in the majority of patients with cancer. Pain can be undertreated or overtreated. Non-opiod analgesics like NSAID's (non-steroidal anti-inflammatory medications such as Ibuprofen/Naprosyn/Advil/Motrin) are associated with ceiling effects for pain relief. If the maximum dosage is exceeded, it can result to organ toxicity producing kidney failure. We do not want these patients to end up in dialysis to add up to the sufferings they already undergo with their cancer. But use of opioid analgesics also has its own risk, i.e. "addiction." Thankfully, this is an infrequent problem and is usually managed by changing the dosage or the agent. If not monitored though in some cases, overdosing with opiods can lead to respiratory depression (causing patient to cease breathing) and unexpected death.

So how do we manage all these complications related to cancer or cancer treatment? The rehabilitation team headed by a physiatrist (physical medicine and rehabilitation specialist) is usually consulted by different specialists taking care of cancer patients. The team consists of the nurse, physical therapist, occupational therapist, recreational therapist, social worker, psychologist/psychiatrist, pharmacist, dietitian, chaplain, speech-language pathologist, and prosthetist/orthotist. Each has a role unique to his profession, but the common goal and bottom line of the intervention is to give the patient the *quality of life* they deserve. Getting patients back on their feet, to be able to work again or do household chores, enjoy their favorite hobbies, reconnect with their friends, feel their capacity to be productive again are the ultimate outcome that the team and the patient aim for.

The registered dietitian or nutritionist computes the caloric intake depending on the type and extent of the tumor. Speech therapists address and manage the problem of swallowing and speech difficulties. Parenteral nutrition (feeding aside from the oral route, using IV or tubes) can be inevitable in some patients with gastrointestinal tumors and severe vomiting as late effects of chemotherapy. The physical therapist assesses the mobility issues such as the transfers and gait/ambulation and recommends use of appropriate gait aids such as walkers, crutches, canes, wheelchair, etc. They help restore the physical abilities through modalities and therapeutic exercises. The control of pain, in addition to medications, is facilitated by use of various physical and electrical means.

The occupational therapist assesses the patients' capacities to care for themselves. He or she retrains them with use of appropriate adaptive aids and also designs splints/upper extremity braces needed for activities of daily living such as feeding, dressing/grooming, hygiene, etc. Together with the psychologists and speech therapists, they provide functional, cognitive, and safety evaluation.

Psychologists help in patients and families/caregivers on how to adjust to the high-stress situation, how to avoid anger and other improper responses. The pharmacist provides input into the medication options and helps educate the patient and family on drug side effects.

The rehabilitation nurse helps assess patient care and facilitates the coordination of services, provides education regarding the disease and helps with discharge planning. She/he monitors health maintenance such as skin care, as most of the patients develop skin ulcerations/bedsores from prolonged bedrest. The chaplain is definitely included in the rehabilitation team as the emotional and religious supporter. He helps the team focus on the quality of life issues, euthanasia (mercy killing) and proper role of medical intervention in the terminally ill patient. The recreational therapist helps with community reintegration, avocational activities (usually musical), self esteem, and functional tasks. The social worker evaluates the psychosocial factors, including family support, financial resources, and patient and family expectations. He/she makes sure the patient gets discharged to the appropriate place with available community resources. Some patients after amputation may need an artificial limb or special braces to be able to move around and do self care, thus a prosthetist/orthotist is very essential to the team.

The physiatrist evaluates the medical rehabilitation issues and assists with diagnosis and management. Rehabilitation issues can include neurogenic bladder (unable to hold or initiate urination) and bowel management, pain control, prosthetic and orthotic fitting, and management of spasticity (increased muscle stiffness and tightness usually resulting from brain or spinal cord lesions) and weakness. Physiatrists are skilled interdisciplinary team leaders and can assist with the bridging between rehabilitation efforts and medical issues.

It is not unknown to many the hardships: physical, mental, emotional, and financial, being experienced by the cancer patients and their families. The help that can be extended to them will obviously take a heavy load off of their shoulders. The quality of life after surviving cancer or during cancer treatment is the ultimate goal that each and every rehabilitation team member has to focus on. Not to forget though is the importance of educating the people on how to avoid getting cancer, (thanks to the vast amount of information available in the social media), except when there is a very strong genetic predisposition. Early detection of beginning signs and symptoms is next to nothing. And definitely one valuable thing that we all should keep in mind is to ask our Creator for his divine intervention should all these medical/surgical treatments go in vain. And if everything else fails, we still can call to Him to be able to accept His will with open hearts and minds. People sometimes lose faith and hope when things go awry. Therefore, it is advisable to always turn to Him who has the answer to what seems to be inexplicable to the human level of understanding.

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