Postgraduate Certificate in Cancer Rehabilitation Physiotherapy

Exercise Prescription for Cancer Survivors

Exercise Prescription for Cancer Survivors:

Exercise prescription for cancer survivors refers to the specific recommendations and guidelines provided by healthcare professionals, such as physiotherapists, to help individuals who have undergone cancer treatment safely and effectively engage in physical activity. These prescriptions are tailored to the individual's needs, taking into account their medical history, current fitness level, type of cancer, and treatment side effects. The aim is to improve overall physical function, quality of life, and reduce the risk of cancer recurrence.

Components of Exercise Prescription:

1. Aerobic Exercise: Aerobic exercise, also known as cardiovascular exercise, involves activities that increase the heart rate and breathing for an extended period. Examples include walking, cycling, swimming, and jogging. Aerobic exercise helps improve cardiovascular fitness, endurance, and overall health.

2. Resistance Training: Resistance training involves using weights, resistance bands, or body weight to strengthen muscles. It helps improve muscle mass, strength, and bone density. Examples include weightlifting, squats, push-ups, and lunges.

3. Flexibility Exercises: Flexibility exercises aim to improve the range of motion of joints and muscles. Stretching exercises can help reduce stiffness, improve posture, and prevent injuries. Examples include yoga, Pilates, and stretching exercises.

4. Balance and Coordination Exercises: Balance and coordination exercises focus on improving stability and coordination to reduce the risk of falls. These exercises can include standing on one leg, walking heel to toe, and using balance equipment like a stability ball.

5. Functional Training: Functional training mimics everyday movements to improve the ability to perform daily activities. It focuses on strengthening muscles used in daily tasks, such as lifting, bending, and reaching. Examples include squats, lunges, and core exercises.

6. Progression: Gradually increasing the intensity, duration, or frequency of exercise over time to continue challenging the body and seeing improvements in fitness levels. Progression is essential to prevent plateaus and continue making gains.

7. Individualization: Tailoring the exercise prescription to the individual's specific needs, goals, and limitations. This personalized approach ensures that the exercise program is safe, effective, and enjoyable for the cancer survivor.

8. Monitoring and Evaluation: Regularly assessing the individual's progress, adjusting the exercise

prescription as needed, and monitoring any changes in health or side effects related to cancer treatment. This helps ensure that the exercise program remains safe and beneficial.

Benefits of Exercise for Cancer Survivors:

1. Improved Physical Function: Regular exercise can help increase strength, endurance, flexibility, and balance, making daily activities easier to perform.

2. Enhanced Quality of Life: Exercise can improve mood, reduce fatigue, and enhance overall well-being, leading to a better quality of life for cancer survivors.

3. Reduced Risk of Cancer Recurrence: Some studies suggest that regular exercise may reduce the risk of cancer recurrence and improve survival rates for certain types of cancer.

4. Management of Treatment Side Effects: Exercise can help alleviate common side effects of cancer treatment, such as fatigue, nausea, pain, and muscle weakness.

5. Improved Body Composition: Regular physical activity can help maintain a healthy weight, reduce body fat, and increase muscle mass, which is important for overall health and well-being.

6. Enhanced Psychological Well-being: Exercise has been shown to reduce anxiety, depression, and stress in cancer survivors, promoting a positive outlook and mental health.

7. Social Support: Participating in group exercise programs or classes can provide social support, encouragement, and motivation for cancer survivors, fostering a sense of community and belonging.

Challenges in Exercise Prescription for Cancer Survivors:

1. Medical Complexity: Cancer survivors may have complex medical histories, treatment regimens, and side effects that need to be considered when prescribing exercise.

2. Individual Variability: Each cancer survivor is unique in terms of physical abilities, limitations, preferences, and goals, requiring a personalized approach to exercise prescription.

3. Safety Concerns: Cancer survivors may be at a higher risk of injury or complications during exercise due to weakened immune systems, fatigue, or treatment-related side effects.

4. Psychological Barriers: Cancer survivors may experience anxiety, depression, or fear of recurrence that can impact their motivation and adherence to an exercise program.

5. Access to Resources: Not all cancer survivors may have access to exercise facilities, equipment, or trained healthcare professionals to help them safely engage in physical activity.

6. Compliance and Adherence: Encouraging cancer survivors to adhere to an exercise program long-term can be challenging due to fatigue, treatment schedules, and other priorities.

7. Monitoring and Follow-up: Regular monitoring of progress, follow-up appointments, and adjustments to

the exercise prescription are essential but may be difficult to maintain over time.

Examples of Exercise Prescription for Cancer Survivors:

1. A breast cancer survivor undergoing chemotherapy may be prescribed a combination of low-impact aerobic exercise, resistance training for upper body strength, and flexibility exercises to manage fatigue and maintain range of motion in the shoulder.

2. A prostate cancer survivor with bone metastases may be advised to engage in weight-bearing exercises, such as walking or light weightlifting, to improve bone density and reduce the risk of fractures.

3. A colorectal cancer survivor experiencing neuropathy from chemotherapy may benefit from balance and coordination exercises, such as Tai Chi, to improve stability and reduce the risk of falls.

4. An ovarian cancer survivor in remission may be recommended a combination of aerobic exercise, Pilates for core strength, and mindfulness practices to manage stress and promote overall well-being.

5. A lymphoma survivor with peripheral neuropathy may be prescribed gentle stretching exercises, aquatic therapy, and progressive relaxation techniques to improve flexibility, reduce pain, and enhance relaxation.

Practical Applications of Exercise Prescription for Cancer Survivors:

1. Conducting a thorough assessment of the cancer survivor's medical history, current fitness level, treatment side effects, and goals to create a personalized exercise prescription.

2. Educating cancer survivors about the benefits of exercise, safety precautions, and the importance of adhering to the prescribed program for long-term health and well-being.

3. Collaborating with a multidisciplinary team, including oncologists, nurses, and psychologists, to ensure a holistic approach to cancer rehabilitation and survivorship care.

4. Monitoring the cancer survivor's progress, adjusting the exercise prescription as needed, and providing ongoing support and motivation to maintain compliance and adherence.

5. Incorporating a variety of exercise modalities, such as aerobic, resistance, flexibility, and balance training, to address different aspects of physical function and promote overall health and wellness.

Conclusion:

Exercise prescription for cancer survivors is a vital component of cancer rehabilitation physiotherapy, aimed at improving physical function, quality of life, and overall well-being. By tailoring exercise recommendations to the individual's needs, considering their medical history, treatment side effects, and goals, healthcare professionals can help cancer survivors safely and effectively engage in physical activity to enhance their recovery and survivorship journey. Regular monitoring, evaluation, and adjustment of the exercise prescription are essential to ensure that the program remains safe, beneficial, and sustainable for long-term health and well-being.