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### **Fit-IN-Rehab**



Erasmus+ Collaborative Partnerships in SPORT Sport as a tool for successful rehabilitation of seniors LEARNING MATERIALS FOR STUDENT VOLUNTEERS

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HOW TO EMPOWER THE ELDERLY (60+) TO PARTICIPATE IN SPORTS ACTIVITIES AFTER REHABILITATION AND TREATMENT TO FOSTER MOBILITY MAINTENANCE

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# Introduction

This guide is designed for student and non-healthcare volunteers and addresses the specific needs of older people after rehabilitation and treatment. Key learning objectives include understanding the role of physical activity in improving the quality of life and overall health of older people, learning about common health issues and common barriers and problems that older people may face, the ability to design personalised exercise programs, and psychological support to improve the well-being of older people. This guide also aims to enrich the lives of older people by focusing on volunteering and social support and to provide young volunteers with professional skills in this field.

- Develop a comprehensive understanding of the vital role physical activity plays in the lives of elderly individuals, particularly in improving their quality of life and overall health.
- Gain insights into various common health conditions and disabilities that seniors may encounter following rehabilitation and treatment.
- Acquire the knowledge and skills necessary to design personalised exercise routines that cater to older adults' specific needs and capabilities.
- Explore the significance of social support and volunteering in enhancing the well-being of elderly individuals, with a focus on combating loneliness, stress, and depression.
- Learn about the psychological aspects of empowerment and support for people with disabilities in the context of sports and physical activities.
- Discover recommended exercises tailored to the needs of the elderly, promoting their physical, mental, and emotional health.



Physical activity and an active lifestyle are of paramount importance to the quality of life for every individual. It contributes to mental emotional health, fosters and higher resilience, and reduces the risk of chronic and non-communicable diseases. According to Yen and Lin's research, by continuously or more frequently engaging in beneficial physical exercise, older people improve their perception of their health-related quality of life, especially while dealing with a stressful situation (2018). Also, Sala et al. (2018) found















that active participation in leisure activities can support older adults' mental, physical, and cognitive health. In this guide, we will deepen on various common conditions senior people face to design appropriate exercises to improve their health.

Since social support helps older individuals, whether or not they provide care, because it safeguards against issues like loneliness, stress, and depression (López-Cerdá et al., 2018), the importance of younger people's volunteer support cannot be ignored; this learning material has been designed for students and volunteers from non-medical backgrounds to acquire professional skills and appropriate knowledge for working with elderly individuals with disabilities following rehabilitation and treatment. It aims not only to help the target audience understand the significance of a personalised approach but also to support them in gaining relevant skills in health and sports for seniors.



These learning materials have emerged from cooperation among universities, social enterprises, non-governmental organisations, sports organisations, and clubs working with medical professionals. This extensive collaboration seeks to provide a solid foundation for young volunteers in this field that can meet the needs of elderly individuals effectively.

To that consideration, volunteers should dispose of specific knowledge, skills, and abilities. Beyond personal qualities, volunteers need to have relevant knowledge of health and sports to

provide adequate care and psychological support to older adults. Understanding the challenges the elderly face in regaining serenity and motivation for active engagement in daily life, especially after injury and treatment, aids volunteers in developing valuable skills to provide special attention and empower the target group involved.

In this guide, we will mainly address the topics of:

- 1) Volunteering as an empowering tool;
- 2) Volunteering with the elderly;
- 3) The importance of physical activity and healthy environments;
- 4) Common health conditions in the elderly;
- 5) The most common disabilities seniors can face;
- 6) Invisible disabilities in seniors and sport;
- 7) Psychological support and empowerment of people with disabilities in sports;
- 8) Recommended exercises for the elderly.









# Volunteering

This chapter is designed to understand the power of volunteering and assess its impact on society and individuals.

At the end of this chapter, you will know:



- Different types of volunteering: Ability to understand different kinds of volunteering.
- Social Impact and Power: The ability to increase the social impact of volunteering.
- Development of Human Capabilities: Awareness of the people skills and qualities that can be gained during the volunteering experience.
- Communication and Problem-Solving Skills: Opportunity to develop communication skills, problem-solving abilities and creativity during the volunteering experience.
- Contribution to Society: The ability of volunteering to build bridges between individuals and improve the well-being of society.
- Empathy and Human-Centered Thinking: The opportunity to gain empathy and develop a human-centred perspective through volunteering.
- Coping with Social Anxiety: Recognising how volunteering can help with social anxiety issues.
- Diversity and Inclusion: The ability of the volunteering experience to bridge the gap between individuals from different backgrounds and contribute to a more inclusive and compassionate society.













### Volunteering as an Empowering Tool

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Volunteering is a generous act of dedicating free time to others and community service. Nowadays, there many are types of volunteering: for instance, many servicelearning programs are created by schools and education facilities, skill-based volunteering, and environmental-related emergency volunteering, community work, or voluntary participation at sports events.



However, volunteering is not just about selfless giving; it's also a powerful tool for improving human well-being, both for the volunteer and the community or the people who are supported by their actions. According to the research (Cohen, 2009), social work interventions that try to change the sense of empowerment among welfare clients may find success using volunteer labour as a tool. This social practice has the power to transform both individual lives and the lives of the whole society, contributing to the development of happier, healthier, and more participative and inclusive communities and neighbourhoods.

The interesting part, more related to the development of skills and competencies, regards the capacity of volunteering as a social practice to improve and nurture essential skills and qualities, especially when it comes to target groups quite distant from the background of the volunteer. For this reason, it is crucial for the person involved to have a positive attitude and an open mind, be very attentive to special needs and extra caring. Additional findings indicated that (Gillath et al., 2005) volunteering helps people with social anxiety issues and has a more significant positive impact if it is done for altruistic motives.

Some of the skills that a volunteer can acquire during their volunteering journey are linked to the capability of listening to others' experiences and transversal communication skills. Also, creativity, problem-solving, proactivity, and social skills are assets a volunteer will acquire during their experiences.

In conclusion, volunteering serves as a bridge between individuals from diverse backgrounds, fostering personal growth while simultaneously enhancing community well-being. It is an act of selflessness that contributes not only to developing skills and competencies but also to creating more inclusive and compassionate societies.





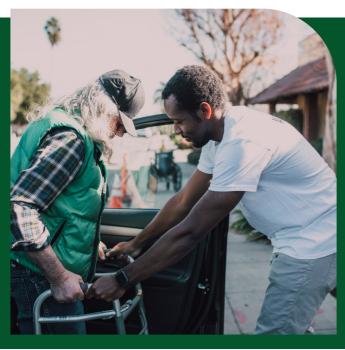




### Volunteering with Elderly People

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The community spirit plays a vital role in creating a happy and healthy environment. In this regard, quality time shared by volunteers with older adults with disabilities can significantly improve their well-being and motivate them to do sports and be more physically active. At the same time, competencies and a dedicated approach are required to prevent injuries, avoid adverse side effects and intervene in case of an emergency.



In particular, this guide is dedicated to those who volunteer with older people. We must never forget that we are dealing with people who are often fragile in many ways. In this regard, we must remember to be patient, but as with all categories of people we can care for, we must also try to understand their needs.

The elderly often suffer from pathological conditions related to their physique and others that may affect their psychological health. That is why it is essential not to force the person but to try to care for them, be patient and follow their pace. At the same time, show enthusiasm and listen authentically.

Often, helping an older person to practice some sport does not only mean accompanying them in the process of physical activity but also of mental movement. Older people often need contact and external stimuli; they need to feel close to the community and include. That is why it is necessary to treat the person correctly, follow their pace, and listen.

In conclusion, volunteering with elderly people is an act of kindness and a way to create a more inclusive and compassionate community. It requires patience, understanding, and a dedicated approach to ensure the well-being of older adults with disabilities while fostering their participation in physical activities and social engagement.







# FIRST AID SKILLS

By completing this section, you will understand the importance of basic first aid skills and improve your ability to react correctly in unexpected situations. The focus of these learning objectives are:



- Basic First Aid: What is basic first aid, and why is it important?
- Risk Assessment: When faced with unexpected situations, how should you carry out a risk assessment to protect yourself and others from danger?
- Assessing Vital Signs: How to assess a person's consciousness, pulse and breathing?
- First Aid Practices: How to perform basic first aid procedures when faced with an injury or medical emergency.

First aid is not just a specific algorithm of urgent measures but also an ensemble of actions aimed at helping someone who may find themselves depending only on our support during an unforeseen situation. Using basic human first aid allows minor accidents to be treated and held back from worsening. In a severe medical emergency, you may even save a life. That's why it's so essential to learn basic first aid skills.

#### What is required in first aid:

How to provide first aid? In order not to panic and correctly provide first emergency medical care, it is fundamental to correctly follow some basic rules for delivering first aid:

- Before helping the victim, ensure you are in a situation that is not risky for you or others.
- It is necessary to carry the injured person to another place only in dangerous situations (e.g., lying on the roadway, in mud, water, or near a fire). In all other cases, you must be very careful because the wrong moves could worsen the person's condition (for example, with injuries to internal organs, craniocerebral and fractures). Do not lay a roller from improvised means under the victim's head. In case it is better just to put on a towel or a scarf. However, again, ensure it is safe for the victim to touch or move them.



- Check for signs of life in the victim: feel the pulse by placing your fingers on his carotid artery; check their breath lean over his mouth and nose and try to feel the breath; Assess the victim's consciousness by shaking them slightly and asking questions.
- First aid is not just a specific algorithm of urgent measures but also an ensemble of actions aimed at helping someone who may find themselves depending only on our support during an unforeseen situation. Using basic human first aid allows minor accidents to be treated and prevented from worsening. In a severe medical emergency, you may even save a life. That's why it's so essential to learn basic first aid skills.
- Call the experts.
- Provide emergency first aid, which will be needed depending on the situation.
- Create a comfortable environment, both physical and psychological, for the victim.









# THE IMPORTANCE OF PHYSICAL ACTIVITY AND HEALTHY ENVIRONMENTS. . . .

By the end of this chapter, you will understand:

- Importance of Healthy Environments: You will understand how vital healthy environments are to improving the quality of life of older people.
- The Role of Volunteering: As volunteers, you will understand the importance of encouraging older people in physical activities and providing a safe environment.
- Chronic Disease Prevention: You will explore the role of physical activity in preventing chronic diseases in older people.
- Risk Factors and Safety: You will learn about the risks and safety precautions to consider when sharing physical activities with older people.



Volunteers can be proactive and contact local caring facilities and senior housing to share quality time. The health, safety, and general wellbeing of the elderly are significantly impacted by both the built and natural environments.



The significance of physical activity and wholesome environments is demonstrated by their positive effects on seniors' well-being. For older folks to be more physically active, volunteers are essential. They can encourage seniors to continue engaging in physical activity, which, as was already noted, lowers the chance of developing chronic illnesses and improves their mental and emotional well-being.

The quality of the air and water, sleep-wake cycles, balanced nutrition, thermal comfort, and support for health services can all be improved with a variety of readily available and scientifically supported solutions in care facilities. Seniors can benefit from a capable volunteer by staying socially and physically engaged.





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Paying close attention to the safety and control of risk factors (such as transmittable infections, falls, and accidents) is vital to explaining and assisting elders with physical activities. Further highlighting the significance of healthy settings in fostering active ageing, volunteers can provide a safe and encouraging environment that motivates seniors to participate in physical activities.

### World Health Organization

#### recommendations:

#### **Key facts:**

- benefits for the heart, body and mind;
- Physical activity contributes to preventing and managing non-communicable diseases such as cardiovascular diseases, cancer and diabetes:
- Physical activity reduces symptoms of depression and anxiety;
- enhances Physical exercise thinking, learning, and critical skills;
- The physical activity ensures healthy growth and development;
- Physical activity improves overall wellbeing at all ages;
- Globally, 1 in 4 adults do not meet the global recommended levels of physical activity:
- Insufficiently active people have a 20% to 30% increased risk of death compared to sufficiently active people;
- Over 80% of the world's adolescent population needs to be more physically active.

#### Adults aged 18-64 years:

• Should do at least 150-300 minutes of moderate-intensity aerobic physical activity or at least 75-150 minutes of vigorous-intensity aerobic physical



exercise or an equivalent combination of • Physical activity has significant health moderate and vigorous-intensity activity throughout the week;

- Should also do muscle-strengthening activities at a moderate or greater intensity that involve all major muscle groups on two or more days a week, as these provide additional health benefits;
- May increase moderate-intensity aerobic physical activity to more than 300 minutes or do more than 150 minutes of vigorous-intensity aerobic physical activity or an equivalent combination of moderate and vigorous-intensity activity throughout the week for additional health benefits:
- Limit the amount of time spent being sedentary.

#### Adults aged 65 years and above:

- varied multicomponent physical Do emphasises activity that functional balance and strength training at moderate or greater intensity three or more days a week to enhance operational capacity and prevent falls.
- Limit the amount of time spent being sedentary.







## COMMON HEALTH CONDITIONS IN ELDERLY . . . .



By the end of this chapter, you will understand:

- Ageing World Population: You will learn about the increase in the elderly population worldwide and the implications of this demographic change.
- Common Health Conditions: You will learn about common health problems in old age, especially hearing loss, cataracts, back and neck pain, and osteoarthritis.
- Geriatric Syndromes: You will identify and understand the complex health conditions in older people, namely geriatric syndromes.
- Special Health Needs: You will learn how to approach the specific health needs of older people.

People worldwide are living longer. Today, most people can expect to live into their sixties and beyond. For this reason, every country in the world is experiencing growth in both the size and the proportion of older persons in the population.

By 2030, 1 in 6 people in the world will be aged 60 years or over. The share of the population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion. By 2050, the world's population of people aged 60 years and older will double (2.1 billion). The number of persons aged 80 or older is expected to triple between 2020 and 2050 to reach 426 million.

Common conditions in older age include hearing loss, cataracts, refractive errors, back and neck pain, and osteoarthritis. These conditions often coexist and affect older individuals simultaneously. Additionally, chronic obstructive pulmonary disease, diabetes, depression, and dementia are prevalent among the elderly.

Older age is also characterised by the emergence of several complex health states commonly called geriatric syndromes. They often result from multiple underlying factors, including frailty, urinary incontinence, falls, delirium, and pressure ulcers. These health conditions can significantly impact the well-being of older individuals, making it essential to address their unique healthcare needs.





# **Communicable and Non-Communicable Diseases**

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Communicable diseases are health conditions that can be transmitted from one individual to another. They are typically caused by pathogens such as bacteria, viruses, fungi, and protozoa. These diseases can spread through various means, including person-toperson contact, respiratory droplets, sexual contact, and contaminated food or water. Some well-known examples of communicable diseases include Malaria and AIDS.



In contrast, non-communicable diseases, also known as NCDs, are health conditions that do not spread from one person to another. These diseases are often linked to genetic predisposition, environmental factors, lifestyle choices, and nutrient deficiencies.

Unlike communicable diseases, NCDs typically require ongoing management and treatment. Common **NCDs** include cardiovascular diseases like heart attacks and stroke, various forms of cancer, chronic respiratory diseases chronic obstructive such as pulmonary disease and asthma, and diabetes.

### **Communicable Diseases:**

*What Are They?* Communicable diseases are illnesses caused by infections or pathogenic organisms that can be transmitted from one person to another.

*How They Spread:* These diseases can be transmitted through various means, including direct contact, respiratory droplets, sexual contact, contact with contaminated surfaces, and consumption of contaminated water or food.

Prevention: Strategies for the and control of prevention communicable diseases include vaccination, personal hygiene practices, disease surveillance, health education, and measures to control disease transmission.











**Physical and Psychological** Effects: Communicable diseases can have significant physical effects, including symptoms like fatigue, fever, infectionrelated symptoms, and pain. The fact that these diseases can be contagious can also lead to psychological stress and affect interpersonal relationships.

Communicable diseases encompass a wide range of illnesses caused by various pathogens:

Viruses: These tiny infectious agents contain genetic material and rely on host cells to replicate. Examples of viral diseases include the common cold, HIV/AIDS, and COVID-19. COVID-19 is an infectious disease caused by the SARS-CoV-2 virus. It spreads easily among humans through respiratory droplets. Measures like wearing masks, maintaining physical distance, and vaccination are used to control its spread. HIV, the human immunodeficiency virus, can be transmitted through sexual contact, blood transfusions, or from mother to child during childbirth or breastfeeding. (Acauired Immunodeficiency AIDS Syndrome) is a condition where the immune system is severely damaged and can be fatal.

**Bacteria:** Bacteria are single-celled organisms found in many environments, including the human body. While some bacteria are beneficial, others can cause infections, leading to conditions like tuberculosis and strep throat.



•*Fungi*: Fungi, including yeasts, moulds, and mushrooms, can cause fungal infections, often affecting the skin and mucous membranes. Candidiasis and ringworm are examples of fungal diseases.

**Protozoa**: Protozoa are microscopic, single-celled organisms, some of which are parasitic. Diseases like malaria and giardiasis result from protozoan infections.











### Non-Communicable Diseases:

•Non-communicable diseases, also known as chronic diseases, tend to be longlasting conditions.

*What Are They?* Non-communicable diseases are chronic health conditions that often result from a combination of genetic, physiological, environmental, and behavioural factors.

*How They Affect:* These diseases include cardiovascular diseases (such as heart attacks and strokes), cancers, chronic respiratory diseases (like chronic obstructive pulmonary disease and asthma), and diabetes.

**Prevalence:** NCDs disproportionately affect people in low- and middle-income countries, accounting for many deaths in these regions, including premature deaths.

**Prevention:** Preventing and controlling non-communicable diseases involves adopting healthy lifestyle choices, regular screenings, early diagnosis, and appropriate treatment.

**Physical and Psychological Effects:** Noncommunicable diseases can significantly impact a person's physical health, leading to various health issues. They can also affect mental well-being and create psychological stress due to their chronic nature and potential complications.

## •How do non-communicable diseases start?

- They generally start with an unhealthy lifestyle.
- They are not transmitted from person to person.
- They grow slowly and stay on for very long.
- They affect many vital organs in the body, such as the brain, heart, arteries, blood vessels, lungs, stomach, intestines, liver, pancreas, spleen, kidneys, bladder, uterus, ovaries and prostate.
- They may not show any signs or symptoms initially.

## Can sports prevent non-communicable diseases?

It is proven that regular physical activity is proven to help prevent and manage non-communicable diseases such as heart disease, stroke, diabetes and several cancers. It also helps prevent hypertension, maintain healthy body weight, and improve mental health, quality of life and well-being.

 Wine
 Image: Contract of the second secon





Non-communicable diseases are characterised by their chronic nature and multiple contributing factors. Four main types of non-communicable conditions:

1.*Heart Diseases and Stroke (CVD: Cardio Vascular Diseases):* These include conditions like heart attacks and strokes, often associated with risk factors such as high blood pressure, high cholesterol, and smoking.

Signs/Symptoms	Explanations	Pictures
Heart attack	Disease of blood wessels supplying the heart muscles	
Stroke	Disease of blood vessels supplying the brain	Stroke
Heart Failure	Decrease of heart's pumping power	
Peripheral arterial disease	Disease of blood vessels supplying the arms and legs	
Congenital heart disease	existing heart defects at birth	













2.*Chronic Respiratory Diseases:* Chronic obstructive pulmonary disease (COPD) and asthma are examples of chronic respiratory conditions. Smoking and exposure to pollutants are significant risk factors.

Signs/Symptoms	Explanations	Pictures
Chronic cough	cough for a month or longer	
Shortness of Breath	shortness of breath (short wind ) or difficulty breathing	
Chronic mucus production	mucus,also called sputum production lasted a month or longer	
Wheezing	wheezing or noisy breathing	
Chronic chest pain	unexplained chest pain that lasts for a month or more, especially if it gets worse when breathing or coughing	













3.*Cancers:* Cancer is a group of diseases characterised by uncontrolled cell growth. Risk factors can vary depending on the type of cancer, including genetics, exposure to carcinogens, and lifestyle choices.

Signs/Sympt oms	Explanations	Pictures
Pain (or painless ) lump or boils	<ul> <li>Bone and testicular cancers are often painful from the beginning.</li> <li>Some brain tumours cause chronic headaches which do not respond to treatment.</li> <li>some tumours and lumps are painless.</li> </ul>	
Weight loss	<ul> <li>Weight loss is the most common sign of cancer.</li> <li>Most people with cancer lose their weight by the time they get diagnosed.</li> </ul>	LOSS
Fatigue(feeling weak and tired)	<ul> <li>It is a common symptom of Leukemia (cancer of blood).</li> <li>Colon or stomach cancer patients also experience blood loss.</li> </ul>	
Fever	• High fever is a sign that the body is fighting against something.	
Changes in skin	<ul> <li>Cancers usually presents as new moles, bumps or marks on the body.</li> <li>Change in colour (dark,red,yellow) with itchiness,sprouting of more hair and unusual rash may be signs of liver,ovarian or kidney cancer.</li> </ul>	

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4.*Diabetes:* Diabetes is a metabolic disorder characterised by high blood sugar levels. Type 2 diabetes is closely linked to obesity, physical inactivity, and poor dietary choices.

Types of diabetes	Explanations	Pictures
Type I Diabetes	<ul> <li>This is caused when the pancreas fails to produce insulin.</li> <li>This type develops most frequently in children and adolescents, but is being increasingly noted later in life.</li> </ul>	1752
Type II Diabetes	<ul> <li>This occurs when the body is unable to use insulin properly.</li> <li>This type is the most common globally and in the solomon islands.</li> <li>It is more frequent in adults but now increasing in adolescents.</li> </ul>	
Gestational Diabetes	<ul> <li>It occurs during pregnancy when the mother has higher than normal blood glucose levels.</li> <li>Diabetes in pregnancy may give rise to adverse outcomes: <ul> <li>congenital malformations</li> <li>increased birth weight</li> <li>an elevated risk of perinatal mortalility.</li> </ul> </li> <li>It is best to see a doctor or nurse when pregnant to check if you have gestational diabetes.</li> </ul>	





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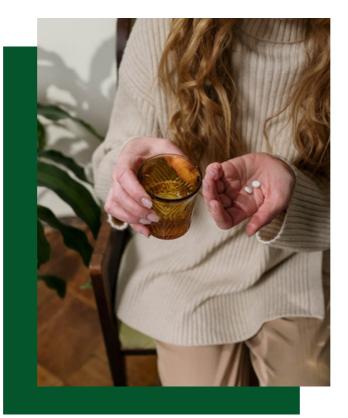


### The Most Common Disabilities Seniors Can Face

As people age, their vulnerability to various critical illnesses increases due to the slowing down of metabolism and weakening of immunity. This vulnerability underscores the importance of addressing common health conditions that seniors face.

Canadian research has identified five types of chronic illnesses that significantly contribute to disability in individuals aged over 65 years: foot problems, arthritis, cognitive impairment, heart problems, and vision issues. These conditions can substantially affect their quality of life and independence.

Various risk factors contribute to functional disability in elderly individuals, including a lack of formal education, living in rented housing, chronic diseases (such as arthritis and diabetes), visual impairment, obesity, poor self-perceived health, cognitive impairment, depression, slow gait, sedentary lifestyles, fatigue during daily activities, and limited social connections. Access to healthcare and its cost can influence these factors, as can prolonged periods of physical inactivity, which accelerate the loss of physical function.

















**Arthritis,** characterised by joint inflammation, is particularly prevalent among older adults, especially women. Managing arthritis symptoms involves regular physical activity, including a mix of aerobic, strength-building, and stretching exercises, to improve joint function and reduce pain. Lifestyle changes, such as maintaining a healthy weight and quitting smoking, are also recommended to alleviate arthritis-related issues.

**Ischemic heart disease,** resulting from reduced blood flow to the heart due to narrowed or blocked arteries, affects 29 per cent of older adults. It can lead to complications like blood clots, angina, or heart attacks. To mitigate the risk of heart disease, lifestyle adjustments such as limiting sugar and salt intake, ensuring quality sleep, engaging in regular cardiovascular exercises, and abstaining from smoking are essential.

*Heart failure,* a condition where the heart cannot adequately supply blood and oxygen to the body's organs, affects 14 per cent of older adults. Preventive measures include consulting a doctor to lower the risk of coronary heart disease and high blood pressure.

*Chronic obstructive pulmonary disease (COPD)*, encompassing conditions like emphysema and chronic bronchitis, affects 11 per cent of older adults and leads to breathing difficulties, coughing, and chest tightness. COPD management strategies include quitting smoking, avoiding lung irritating chemical fumes, and seeking medical advice for proper treatment.

Notably, seemingly minor incidents can trigger a significant decline in the physical and mental function of the elderly, leading to a cascade of adverse events—a phenomenon often referred to as the 'domino' effect.











### Comorbidities

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People aged 65 years and over often have one or more chronic conditions. Comorbidities may contribute to disability, for example:

- Stroke can lead to weakness, coordination problems, problems of communication and continence.
- Coronary heart disease may lead to heart failure.
- Diabetes and related complications, which can contribute to disability in a variety of ways, may be underestimated.



- Alzheimer's disease is the most common neurodegenerative disease.
- Urinary problems can be disabling, particularly if causing incontinence.
- Depression is often the result of disability, but it also makes disability worse. 10-15% of people aged over 65 years living at home are depressed.
- Visual loss is associated with an increased risk of falling.
- Hearing and visual impairment increase the risk of social isolation and resulting depression.
- Falls are associated with injury, pain and loss of function. The prevalence of osteoporosis in the elderly means that falls are more likely to result in fractures.









# Invisible Disabilities in Seniors and Sport

By the end of this chapter, you will understand:

- Definition of Invisible Disabilities: You will understand what invisible disabilities are and why they are sometimes not immediately recognisable.
- Examples of Invisible Barriers: Examples of invisible barriers will be explained, especially hearing or vision loss, some mental illnesses, chronic pain, etc.
- Empathy and Understanding: The importance of compassion and understanding towards people with invisible disabilities will be emphasised.
- Social Awareness: By completing this section, you will be more aware of how to help people with invisible disabilities in society and how to respect their needs.



Many elderly people have an invisible disability, but what do we mean when talking about invisible disabilities?

Invisible disabilities or hidden disabilities are defined as disabilities which are not immediately apparent; for instance, some people with visual or auditory disabilities do not wear glasses or hearing aids, and some other people who have vision loss may wear contacts. These are directly connected to the hidden part of the disability and can be challenging to recognise or acknowledge, especially if people cannot see the evidence.





There are as many disabilities as people with disabilities. They include most sensory disabilities (visual and hearing impairments), mental and psychological impairments, cognitive disabilities and many chronic diseases generating incapabilities.

The following situations may be included as part of invisible disabilities:

- Hearing impairment,
- Visual impairment,
- Specific forms of autism,
- Bipolar disorders,
- Alzheimer's disease,
- People with a heart condition,
- Dyslexia,
- People with post-traumatic disorders (war veterans or terrorist attack survivors), etc.

A sitting disability is another category of invisible impairments: chronic back pain usually causes sitting problems. Moreover, invisible disabilities can include chronic illnesses such as renal failure, diabetes, and sleep disorders if those diseases significantly impair normal activities of daily living.

Another example is <u>Fibromyalgia</u>, which is now understood to be the most common cause of chronic musculoskeletal pain.









Other types of invisible disabilities are the following:

- *Chronic pain* that is mostly caused by various conditions like back issues, bone disease, physical injuries, etc. Chronic pain may not be noticeable to people who do not understand the victim's medical condition.
- *Chronic fatigue* refers to an individual who constantly feels tired. This can be extremely debilitating and affect every aspect of a person's everyday life.
- Mental illnesses like depression, attention deficit disorder, schizophrenia, agoraphobia, and many others.
- These diseases can also be completely debilitating to the victim and can make performing everyday tasks challenging, if not impossible.
- <u>Chronic dizziness</u>, which is often associated with problems of the inner ear, and chronic dizziness can lead to impairment when walking, driving, working, sleeping, and other common tasks.



Many people with invisible disabilities prefer not to disclose their disabilities; some even feel ashamed. Sometimes, invisible disabilities can have an impact on our intimacy. For example, those with Crohn's disease often have to use the bathroom. Endometriosis also strongly impacts the everyday lives of women with it, and so on.

People with invisible disabilities are often suspected of lying or being lazy. They're more likely to be misunderstood or laughed at.









However, many of them are legitimately entitled to use a parking space for people with reduced mobility, to ask for a seat on public transportation or to have priority in a line.

These invisible disabilities can debilitate a person who might otherwise be in perfect physical health. According to data from the Substance Abuse and Mental Health Services Administration, in 2020, 6.2 million adults ages 50 and older experienced a major depressive episode.

Depression in the elderly has become a significant health issue. It has been known that depression triggers enormous socioeconomic costs by causing suicidal thoughts, lower work efficiency, and increased medical costs.

Many studies have reported that active physical activities can prevent geriatric depression. Before focusing on the relationship between the elderly and sports, it appears relevant to define a physical activity, i.e. the basic activity of all human beings that consumes energy through the contraction and relaxation of skeletal muscles. It is a concept encompassing all body movements in everyday life. It has been reported that continuous physical activity would decrease depression: the elderly who performed a physical activity (e.g., aerobic exercise, muscular strength exercise, muscular endurance exercise, and combined exercise) regularly experienced depression significantly less than those who did not exercise.

On the other hand, in a curious way, intervention studies on older adults have shown that subjective happiness increased after watching a professional baseball game and that depressive symptoms improved after two months of regularly watching baseball at a stadium. As a result, allowing older adults to attend a sports game on-site has also been found to increase their perceived emotional support from fans, leading to enhanced subjective well-being.

However, it's important to always keep in mind that the person you're talking to may have specific needs you may not have thought of at first. To manage every situation, remaining open-minded and listening to people without judging can allow seniors with invisible disabilities to express themselves and be more likely to satisfy their needs in society.













# PSYCHOLOGICAL SUPPORT AND EMPOWERMENT OF PEOPLE WITH DISABILITIES IN SPORTS

On completing this section, you will be able to know:

- Awareness of Psychological Challenges: You will gain the ability to understand the psychological challenges that older athletes may face.
- Creating a Positive and Inclusive Environment: You will understand the importance of a positive and inclusive environment where older people participate in sports activities.
- Setting Realistic Goals: By setting age-appropriate and realistic goals, you will gain the ability to ensure that sport is focused on enjoyment and personal development.
- The Importance of Psychological Support: You will understand the importance of psychologists or mental health professionals providing psychological support to individuals performing sports.

Psychological support for the elderly in sports is crucial for their overall wellbeing and performance. While sports can be an excellent adjuvant for the mental health of older people with disabilities, physical activity must be supported by constant psychological support.



In this respect, psychological assistance can be crucial for older people who approach sporting activity. The volunteer's role is to know not only what the target group's physical impairments are but also what psychological obstacles hinder or slow people down. These can only be overcome from a fundamental knowledge of the possible problems and difficulties elderly with disabilities can face while approaching the sport.

Providing psychological support and empowerment for individuals with disabilities in sports is based on the understanding that sports are more than just physical abilities. This could improve their performance by allowing them to stay emotionally and physically healthy. The following are some pertinent points:



- Self-Esteem and Self-Esteem Development: Individuals with disabilities may struggle with low self-esteem as a result of societal pressures or the prejudices of others. Psychological assistance and a sense of accomplishment can help them feel more confident in their own skills.
- Stress management
- *Goal Setting and Motivation*: Goal-setting can help them stay motivated. These objectives may cover various things, including growth as a person or just plain enjoyment of the sport.
- *Emotional Support*: To cope with their difficulties, understanding and management of their emotional needs is beneficial.
- *Community and Involvement*: For people with disabilities, sports may be a form of involvement and community. It can support more community integration and assist them in forming stronger social bonds. The elderly can motivate others by sharing their skills and knowledge, too.







# Benefits of Sports Participation for the Mental Well-Being of the Elderly

Participation in sports can have numerous mental health benefits for the elderly. Research shows that engaging in sports promotes mental, subjective, and overall psychological well-being in older adults.

- *Improved Mood*: Engaging in sports and exercise stimulates the release of endorphins, which are natural mood lifters. This can help reduce symptoms of depression and anxiety in older adults.
- *Stress Reduction*: Physical activity can serve as a stress reliever. It helps the body cope with stress by reducing the production of stress hormones like cortisol.
- *Enhanced Cognitive Function*: Regular physical activity has been linked to improved cognitive function and a reduced risk of cognitive decline in older adults. It can help maintain memory, problem-solving skills, and overall brain health.
- *Social Interaction*: Participating in group sports or activities provides opportunities for social interaction and reduces feelings of loneliness and isolation, which are common among the elderly.
- *Increased Self-Esteem*: Achieving fitness goals or improving physical abilities can boost self-esteem and self-confidence in older individuals.
- *Better Sleep*: Physical activity can contribute to better sleep patterns, which are essential for mental well-being. Quality sleep helps regulate mood and improve overall cognitive function.
- *Enhanced Stress Coping Skills*: Engaging in sports teaches valuable skills related to goal setting, discipline, and perseverance, which can translate into better stress management and resilience in daily life.
- *Sense of Purpose*: Being part of a sports team or engaging in regular physical activity can give seniors a sense of purpose and motivation to stay active and healthy.
- *Positive Outlook on Aging*: Participating in sports challenges stereotypes about ageing and can promote a more positive outlook on growing older.
- *Reduced Risk of Depression*: Studies have shown that physically active older adults are less likely to experience symptoms of depression or develop depressive disorders.
- *Emotional Well-Being*: Regular exercise can increase emotional well-being, helping older adults maintain a more positive attitude and more excellent emotional stability.





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• *Improved Quality of Life*: All of these benefits contribute to overall quality of life for seniors, allowing them to enjoy their later years with vitality and mental well-being.

addition In to these psychological advantages, sports participation helps maintain an active lifestyle, promotes mental alertness, and reduces stress, contributing to better mental health. It also offers opportunities for social interaction and a sense of belonging, especially when the elderly face physical impairments.















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### Common Psychological Challenges Faced by Elderly Individuals in Sports



Engaging in sports as an older adult can offer numerous physical and mental health benefits. Still, it's essential to recognise and address the psychological challenges that elderly individuals may encounter in sports. As people age, they often grapple with various psychological concerns, such as a decline in physical abilities, a sense of social isolation, and changes in body image.

Among the mental obstacles older adults might face when participating in sports, there are concerns about injury risk during physical activities. Fear of getting hurt can lead some older individuals to avoid certain sports or physical activities altogether. The natural ageing process also brings physical changes

and impairments that can diminish self-confidence and enthusiasm for sports participation.

Performance anxiety is another common psychological challenge among elderly athletes. It often stems from worries about not meeting personal goals or comparing oneself unfavourably to younger athletes. This social comparison can result in feelings of inadequacy or self-doubt.

Addressing these psychological challenges is crucial to ensure that older adults can enjoy the benefits of sports fully. To support elderly individuals in sports:

- *Create a Positive and Inclusive Environment*: Fostering a supportive and inclusive sports environment can boost older adults' confidence and motivation. Encouraging camaraderie, teamwork, and mutual support among athletes can help combat feelings of social isolation.
- *Set Realistic Goals*: Encourage older athletes to set achievable, age-appropriate goals. This can help shift the focus from competition with others to personal growth and enjoyment of the sport.
- *Provide Psychological Support*: Access to sports psychologists or mental health professionals can be invaluable. These experts can help elderly athletes manage anxiety, build self-esteem, and develop mental resilience.















• Offer Resources: Make information and resources on coping with psychological challenges readily available to older athletes. This might include educational materials, workshops, or peer support groups.

In summary, while sports can significantly enhance the well-being of elderly individuals, it's crucial to acknowledge and address the psychological hurdles they may encounter. By promoting a positive and inclusive sports culture, encouraging realistic goal setting, and providing psychological support and resources, we can help older adults overcome these challenges and enjoy the many benefits of sports participation.













# Effects of Volunteering on the Physical and mental health of People aged 65 years or older

Many public and private initiatives encourage older people to participate in productive activities such as volunteering. Volunteering has the double benefit of the activity for these adults who no longer work and the value of the services they provide as volunteers.

Social scientists have often explained the relationship between volunteering and health using the concept of role enhancement, which is contained within the framework of role theory. Role enhancement involves oneself in a productive role, such as volunteering. An older person will have more resources and more power, leading to better physical and mental health (Moen et al., 1992).

The assumption underlying much of the research on volunteering is that volunteering is beneficial to older people. Research so far has supported this notion that volunteering does help older people maintain their self-reported physical and mental health. (Moen et al., 1992).

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Moreover, it seems that retired and senior volunteers are more protected from the hazards of retirement, physical decline, and inactivity than people of the same age who do not perform volunteer work (<u>Fischer & Schaffer, 1993</u>; <u>Wilson & Musick, 1999</u>).

In conclusion, volunteering can significantly affect people's lives as they transition from work to retirement.

According to Smith and Gay (2005), retirement is a trigger for volunteering for some older people, as it offers a "structured" means of making a meaningful contribution to society once the opportunity to do so through work has been cut off. Some older people consider voluntary work as a way to replicate aspects of paid work lost upon retirement, such as organisational structure and time discipline (Smith & Gay, 2005).













# EMPOWERING SENIORS: RECOMMENDED EXERCISES FOR REHABILITATION AND SPORTS (60+)

When you complete this section, you will understand:



- *Definition of Physical Activity*: You will understand what physical activity means and how it can be practised in everyday life.
- *Intensity of Activity*: You will learn the intensity of activities and how they can vary according to a person's physical condition.
- *Moderate and Intense Intensity Activities*: Understand the characteristics and benefits of moderate and vigorous intensity activities.
- *Exercise Recommendations*: You will learn about the different exercises that older people can do after rehabilitation and how they can be carried out with helpful volunteers.
- *Psychological and Emotional Support*: You will understand how you can support older people's psychological and emotional needs alongside physical activities.
- *Activity Diversity:* You will discover how to help older people stay active through different activities.
- *Physical and Mental Health:* You will understand the positive effects of physical activity on older people's mental health.
- *Psychological Challenges:* You will learn about older people's psychological challenges when playing sports and how to overcome them.
- *Support and Resources:* You will learn how to support older people in sports and how to access resources.







Hospitalized elderly patients, grappling with a decline in daily tasks and independence, need comprehensive post-hospitalization support for effective rehabilitation. Predicting their recovery involves various factors, contingent on the complexity of their condition (Sanches-Rodrigues et al., 2015).

Critical to rehabilitation, physical therapy employs therapeutic exercises to restore movement control. Beyond the initial three months, integrating fitness activities shows lasting benefits, reducing disability and supporting independent living.

Physical activity training yields advantages such as enhanced cardiovascular fitness, reduced risk factors, and minimized health issues. Ensuring enduring participation in therapeutic exercises for elderly individuals with disabilities is paramount (Morris & Williams, 2009).

Exercise poses challenges for the elderly due to discomfort and physical limitations. Adapting by lowering intensity, exploring diverse exercises, and suggesting various activity levels makes exercise more accessible. A mix of activities not only reduces injury risks but also sustains interest.

Leading an active life is as beneficial as formal routines, with simplicity aiding recall. Bolstering confidence through achievable goals and support is indispensable. Educating family and friends about exercise benefits significantly influences older adults' commitment to staying active (Nied & Franklin, 2002).













## 1.Basic characteristics of exercise programmes in the elderly

- It should increase strength, flexibility, endurance, coordination, balance, and functional capacity.
- The objectives of the exercise should be well-defined, suitable for the individual's capacity, and customizable.
- For it to be effective, the intensity, duration, and frequency should be appropriate. However, if desired, the exercise level should be lowered.
- Progressions should be made in the level of improvement over time.
- It should also include warm-up, cooldown, and stretching exercises.
- It should be consistent and continuous.
- It should be safe and have a low risk of injury.
- The person's desires, living conditions, and psychological state should be taken into account.
- It should be enjoyable and easy to implement.
- Changes should be made to the lifestyle (Morio et al., 2000).

## 2.Main features of the exercises performed

- Due to limited heart-lung capacity and the accumulation of lactic acid in exercises surpassing oxygen (aerobic) capacity, the most suitable exercises are those below the highest level, as lactic acid buildup leads to fatigue.
- Exercises of constant intensity and pace should be chosen.
   Proportional exercises cause an increase in blood pressure, imposing an additional load on the cardiovascular system.
- Exercise and rest periods should be organized to prevent a rise in serum lactic acid levels.
- To enhance overall fitness levels, participation of all muscle groups in the activity should be ensured.
- For ease of learning, retention, and performance, complex exercises should be avoided (Karan, 2006).













## 3.Barriers to exercise in older people with disabilities

- Self-insecurity: Patients should start slowly with easy exercises, gradually making them more difficult and encouraging them frequently.
- Negative attitude towards exercise: The benefits of exercise should be emphasized, and patients should be directed to fun activities.
- Feelings of discomfort: The intensity and intervals of the exercises should be changed, go slowly, and should not be overloaded.
- Inadequacy: Special exercises; under the guidance of a physiotherapist
- Disturbed balance/stabilization: Assistive devices
- Fear of injury: Start with balance and strengthening exercises; observe; progress slowly.
- Habituation: It should be introduced into the daily lifestyle.
- Restricted income: Walking and other simple exercises; use of household materials
- Cognitive impairment: Exercises should be kept simple; they should be incorporated into daily life style.
- Illness/weakness: Exercises suitable for the energy level of the elderly should be given.

## 4.Suggestions Before Sports to Prevent Exercise Hindrances:

- Informing individuals about changes in daily routines to increase activity levels and costunising the training program.
- Educating older adults on monitoring heart rate and adjusting exercise intensity and explaining the difficulties.
- Providing guidelines for weight lifting and breathing during exercises.
- Encouraging attention to symptoms and suitable exercise environments.
- Considering temperature, humidity, lighting, and hydration.
- Recommending exercises in suitable locations to prevent injuries.
- Emphasizing the benefits of group exercises and social engagement.
- Highlighting the importance of regular, sustained, and integrated exercises.
- Ensuring an inclusive and safe environment.

## 5.Objectives of Exercise Programs for the Elderly:

- Increasing joint flexibility, muscle strength, endurance, and cardiovascular health.
- Enhancing bone mineralization and correcting body posture.
- Boosting energy for daily activities and accelerating recovery from illness.
- Improving stress coping, balance, and social integration.Promoting overall happiness in elderly individuals.













#### 6.Effects of Exercise in the Elderly:

- Reduction in reaction time and increase in muscle and bone mass.
- Enhanchment of mental fitness and immune functions.
- Assistance in pain reduction and lowering the risk of fractures.
- Positive impact on obesity, diabetes, high blood pressure, and headaches.

#### 7. Points to Consider in Exercise Programs:

- Explanation of precautions and potential adverse effects.
- Modification of exercises for individuals with joint limitations and arthritis.
- Assessment of medication impact on safe exercise.
- Caution in extreme weather conditions and attention to hydration.
- Recommendations for exercise on suitable surfaces and group participation.
- Emphasis on personalized adjustments for those with poor balance.
- Consideration of specific conditions like knee joint arthritis.
- Guidance on pre-exercise medications and impact on exercise capacity.

Here are some recommended exercises for the elderly people with disabilities after rehabilitation and treatment, where volunteers can assist:

#### Stretching exercises:

- Stretching is the cornerstone of the exercise program, ensuring joint flexibility and guarding against falls and injuries.
- Stretching exercises can be performed while standing, sitting, and lying down.
- Joint range of motion exercises should commence with small angles and should be done gently.
- Gentle movements to improve joint flexibility, including neck rotations, shoulder rolls, and ankle circles.

Stretching for seniors:

https://youtu.be/ZvfDryEt5bw?si=Y1uwLpTQ3hRAP\_-2

Gentle range of motion chair exercises for seniors: <u>https://youtu.be/E2YqFYFLSbE?si=Nt\_ArKFPj7TsORwU</u>









Here are some useful tips in order to prevent injuries caused by stretching cold muscles:

- Stretch for at least 10 minutes per day.
- Stretch only after you have done a 5-10 minute warm-up to prevent injuries. You can also stretch after your workout.
- Stretch slowly, holding each stretch for 30-60 seconds. Be sure to stretch all the major muscle groups in your body.
- Yoga and tai chi include a variety of stretching exercises.

### Balance exercises:

- Research indicates that balance exercises can reduce the risk of falls by 50% in elderly women and men.
- Adaptations of classic yoga poses, such as sitting upright with hands by the sides and heels together, can be recommended.
- Walking exercises on a single line are also recommended as balance exercises (Eskiyurt & Karan, 2004).

Balance exercise for older adults:

#### https://youtu.be/4YOBIEOobCE?si=b7eSnWE7SJUqfPHi











#### Strengthening exercises:

- Applied to large, important muscle groups (quadriceps, hamstrings, abdominal muscles) in the elderly.
- Machine, free weights, ball, elastic bandage can be used.
- Using resistance bands to perform exercises targeting major muscle groups, such as bicep curls, seated rows, and leg presses.
- Duration is 20-30 minutes, not exceeding 60 minutes.
- Aerobic exercise (such as walking) can be recommended for 5 minutes before strengthening and flexibility exercises.

Full body resistance training workout: Scan the QR code to watch the video



Resistance band exercises for seniors: https://youtu.be/ZP9FKXGoBg8?si=sVK5vlHm24qo1lg9

Resistance training requires some suggestions to prevent injuries:

- Do strength training exercises at least twice a week.
- Do various strength training exercises so you target all your major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).
- Do core strength exercises to strengthen the muscles in your stomach, back and around your pelvis. Pilates and yoga include many core strength exercises.

#### Aerobic (Oxygenated) exercises:

- The intensity should not exceed 50% of the person's maximum heart rate, and it should be increased by 5% every two weeks but should never exceed 70%.
- The total duration of exercises is about 20-30 minutes, 3 days a week.
- Aerobic activities also improve balance and coordination.













#### Tai Chi Chuan (TCC) exercises:

- Involve shifting weight in various directions, increasing awareness of body alignment, multidirectional coordination of movements, and consistent breathing.
- Shown to improve balance and flexibility in the elderly.
- Include 10 minutes of warm-up, 10 minutes of cool-down, and 40 minutes of TCC exercises.

Tai Chi for seniors: Scan the QR code to watch the video



#### Walking, Nordic or Chi Walking:

- The easiest, cheapest, and safest exercise for increasing fitness among the elderly.
- Should be done at least 3 days a week, with each walk lasting 20-40 minutes.
- Initially, start with two sessions of 10 minutes per week, gradually increasing the duration and frequency in weekly increments.
- For sedentary elderly individuals, walking and light-to-moderate exercises like light gardening can be more sustainable (Sabin, 2005).
- Encouraging elderly individuals to go for walks with the support of volunteers or using Nordic walking poles to provide stability and engage the upper body.
- Concerning Chi Walking is an approach incorporating mindfulness and body alignment principles for improved balance and posture.

Modified Nordic walking technique for older adults:

https://youtu.be/T\_SwH1Rhxm4?si=F3ZuVjiUDSmqyw40\_

















#### Pilates exercises:

- Consist of resistance and balance exercises, strengthening the arm and leg muscles, stretching, breathing, strengthening core muscles, and balance exercises.
- Strengthen core muscles, enhance musculoskeletal integrity, and ensure spinal mobility and joint stability (Oliveira et al., 2017).

#### Cycling:

• This can be done on a stationary bike or outdoors, promoting cardiovascular fitness and leg strength.

Cycling for seniors:

https://youtu.be/32CkjK1IpxM?si=ikNC9wFp4FpnlZmg\_



#### Chair Exercises:

• Seated exercises that target different muscle groups, such as arm curls, leg extensions, and seated marches.

Seated Exercises for Older Adults: Scan this QR code to watch the video











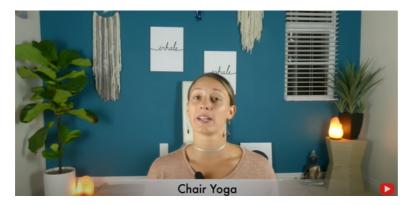
#### Modified Yoga or Chair Yoga:

- Engaging in yoga poses and stretches adapted for individuals with disabilities, focusing on gentle movements and modifications as necessary.
- Volunteers can offer guidance and support during the practice.

Chair Yoga for restricted mobility and seniors 65 and up:

https://youtu.be/e6QHRS7DR3k?si=3n4ahJH-VDqgNy1b

OR Scan the QR code to watch the video





#### Aqua Therapy:

- Assisted water-based exercises in a pool or aquatic therapy sessions that provide low-impact resistance and support for joint movements.
- Exercising in water reduces the impact on joints and offers resistance for muscle strengthening and cardiovascular conditioning.

Aquatic exercises for seniors:

https://youtu.be/\_qkcjthhu\_g?si=xRwU7EumBhny1PcA\_

#### Sit-to-Stand Exercises:

• Practicing transitions from sitting to standing with the assistance of a volunteer, gradually increasing repetitions and intensity.

Standing exercises for older adults: Scan QR code to watch the video















#### Dance:

• Participating in dance classes or gentle dance routines can improve coordination and flexibility and provide an enjoyable form of exercise.

Dance workout for seniors: Scan the QR code to watch the video



#### Bowling

• A social and recreational activity involving low-impact movements that can enhance balance and coordination.

Bowling training for senior bowlers: https://youtu.be/D6IyUi9RPgg?si=WA32cH6Ii9bylQis



#### Golf:

• Playing modified versions like mini-golf or adaptive equipment can improve balance, coordination, and upper body strength.

Simple, easy & repeatable golf swing lesson for seniors: Scan the QR code to watch the video





**Fit-IN-Rehab** 



#### Gardening:

• Light gardening activities such as planting, weeding, or watering plants can provide physical exercise, improve agility, and offer a sense of fulfilment.

Gardening tips for seniors: Scan the QR code to watch the video



#### Add a mindfulness element:

• Whether you're exercising in a chair or walking outside, you'll experience a more significant benefit if you pay attention to your body.

Mindfulness and meditation for older adults: <u>https://youtu.be/TLTwed97s8o?si=iVdvTNHu8bPoCbM3</u>









How to easily add mindfulness to your day: Scan the QR code to watch the video

By focusing on how your body feels as you exercise—the rhythm of your breathing, your feet striking the ground, your muscles tightening as you lift weights, for example —you'll improve your physical condition faster. Still, you may also experience greater benefits to your mood and sense of well-being.













### **Overcoming Mental and Emotional Barriers to Exercise**

In addition to the physical challenges, seniors may also experience mental or emotional barriers to exercising. Common concerns include self-consciousness about weight, disability, or illness, fear of falling or injury, lack of coordination or athleticism, and worries about working out in public places.

To address these barriers:

#### 1.Lack of Motivation:

- Set personal goals to increase motivation.
- Choose enjoyable activities.
- Seek support from friends, family, or an exercise coach.

#### 2.Time Management Issues:

- Break down activities into short, manageable sessions.
- Incorporate physical activity into daily routines.
- Schedule activities at times when energy levels are highest.

#### **3.Fear of Injury or Falls:**

- Choose low-impact activities.
- Use supportive equipment, like walking aids or balance bars.
- Start with exercises that can be done safely while sitting.

#### 4.Body Image Concerns:

- Focus on the benefits of exercise for overall health.
- Wear comfortable clothing.
- Choose activities that promote a positive body image.



#### 5.Lack of Social Interaction:

- Join group classes or exercise clubs.
- Invite friends or family to join in.
- Engage in activities that involve social interaction.

#### 6.Depression or Anxiety:

- Incorporate mindfulness or relaxation exercises.
- Seek professional support if needed.
- Choose activities that bring joy and satisfaction.

#### Feeling Overwhelmed:

- Start with simple, achievable exercises.
- Gradually increase intensity and duration.
- Seek guidance from healthcare professionals or fitness experts.









### **Promoting Long-Term Participation**

Ensuring long-term participation in therapeutic exercises and fitness activities among elderly individuals with disabilities involves addressing physical, mental, and logistical aspects. Here are some strategies:

#### **1.Personalization:**

- Tailor exercise programs to individual needs, preferences, and abilities.
- Offer a variety of exercises to prevent boredom and cater to diverse interests.

#### 2.Social Support:

- Facilitate group exercises or classes to encourage social interaction.
- Involve family members or caregivers in exercise routines.

#### 3.Education:

- Provide clear information on the benefits of regular exercise.
- Offer guidance on safety measures and precautions during exercise.

#### **4.Progress Tracking:**

- Establish baseline fitness levels and track progress over time.
- Celebrate achievements to boost motivation and commitment.

#### 5.Adaptability:

- Modify exercises as needed based on changing health conditions.
- Introduce new activities to keep the routine dynamic and engaging.

#### 6.Incorporate Fun and Enjoyment:

- Choose activities that individuals find enjoyable.
- Include recreational and leisure activities to make exercise a pleasant experience.













#### 7.Accessibility:

- Ensure that exercise facilities and equipment are accessible to individuals with disabilities.
- Provide information on adaptive equipment and assistive devices.

#### 8.Community Engagement:

- Connect individuals with local community resources for ongoing support.
- Explore partnerships with community organizations for inclusive programs.

#### 9.Long-Term Planning:

- Develop long-term exercise plans that adapt to changing needs.
- Consider integrating physical activity into daily routines for sustained engagement.

#### 10.Regular Check-Ins:

- Conduct regular assessments of individual progress and address any concerns.
- Use check-ins as an opportunity to discuss preferences and adjustments.

#### **11.Variety in Activities:**

- Offer a range of activities to cater to different interests and abilities.
- Rotate exercises to maintain novelty and prevent monotony.









# CONCLUSIONS

Encouraging and enabling elderly individuals with disabilities to engage in sports activities after rehabilitation involves a holistic approach. Physical exercise is not only crucial for maintaining and improving physical function but also for promoting mental well-being and social integration. The Fit-in Rehab project aims to create tailored exercise programs that consider individual needs, preferences, and capabilities.

The proposed exercises, ranging from chair exercises to outdoor activities like walking and gardening, are designed to be adaptable to varying levels of physical ability. In addition to the physical benefits, these activities promote a sense of accomplishment, joy, and social interaction.

Addressing mental and emotional barriers is equally important, and the inclusion of mindfulness elements in exercise routines can enhance overall well-being. Recognizing and overcoming obstacles related to motivation, time management, fear of injury, body image concerns, and social interaction contribute to a more inclusive and sustainable approach to long-term participation in fitness activities.

Moreover, the involvement of volunteers, family members, and healthcare professionals is crucial in providing support, guidance, and encouragement. By creating a supportive environment, the Fit-in Rehab project aims to empower elderly individuals to embrace an active lifestyle, contributing to their overall health and quality of life.

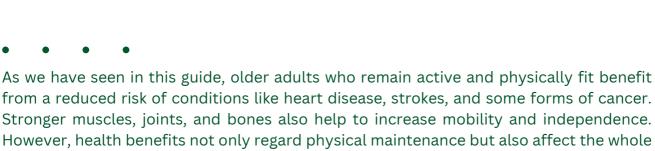












person's well-being. Those who are more active are far less prone to depression and loneliness. In this regard, physical activity can help foster a sense of belonging to a community and self-esteem, which are extremely important in the elderly living with illnesses or disabilities that limit their daily mobility.



Volunteers' role is paramount in ensuring that older adults continue to lead fulfilling lives. Volunteers serve as a bridge between medical professionals and family members. They offer effective and trustworthy support to those they care for and provide an external perspective in daily choices. Indeed, elderly individuals often require mediation between these two figures to feel safe and non-judged. In this sense, volunteers are crucial in accompanying elderly persons with disabilities in their journey towards rehabilitation and improved well-being.

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Furthermore, volunteering offers enriching experiences for those who engage in it, fostering meaningful connections and facilitating personal growth. The intergenerational exchange of knowledge and support through volunteering creates a more compassionate and inclusive community for everyone involved.

Elders benefit greatly from sports activities to maintain mobility and overall well-being, especially those undergoing rehabilitation and treatment. This learning material covers various topics relevant to volunteering and empowering elderly individuals in sports activities. However, here are some additional suggestions and summaries you might consider while volunteering with the elderly:





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- *Nutrition and Hydration*: Encouraging proper nutrition and hydration for seniors engaging in sports activities is essential. This can help them understand the importance of a balanced diet and staying hydrated to support their physical efforts.
- Safety Precautions: Emphasise the significance of safety during sports activities. This includes wearing appropriate gear, knowing one's limits, and understanding the importance of warming up and cooling down to prevent injuries.
- Social Engagement: Encourage social interaction as part of sports participation. Highlight the benefits of building friendships, fostering a sense of belonging, and how social support can motivate seniors to stay active.
- *Exercise Modifications*: Offer guidance on modifying exercises based on individual abilities and limitations. This can help seniors adapt sports activities to their specific needs and abilities.













- *Community Resources*: Provide information on local resources and facilities available for seniors interested in sports and physical activities. That can help them find suitable places to engage in sports.
- *Motivation Strategies*: Share strategies for maintaining motivation over the long term. They might include setting achievable goals, tracking progress, and celebrating small victories.
- *Case Studies and Success Stories*: Share real-life examples of seniors who have successfully embraced sports activities after rehabilitation. These stories can be inspiring and provide practical insights.
- *Regular Check-Ups*: Stress the importance of regular health check-ups to monitor progress and address emerging health concerns.
- *Inclusive Language*: Ensure using inclusive and respectful language when addressing elderly individuals, emphasising their capabilities and strengths.

The existing content aims to be a valuable resource for volunteers with elderly individuals looking to participate in sports activities after rehabilitation by providing comprehensive guidance for a successful and empowering experience in sports and physical fitness.









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