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IMPACT OF PHYSICAL EXERCISES PROGRAMME FOR OLDER ADULTS

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Abstract:

Regular physical activity is one of the most important things people can do to improve their health. Moving more and sitting less have tremendous benefits for everyone, regardless of age, sex, race, ethnicity, or current fitness level. The benefits of regular physical activity in older adults are extensive. As noted in the adult recommendation, regular physical activity reduces risk of cardiovascular disease, thromboembolic stroke, hypertension, type 2 diabetes mellitus, osteoporosis, obesity, colon cancer, breast cancer, anxiety, and depression. Particular importance to older adults, there is substantial evidence that physical activity reduces risk of falls and injuries from falls, prevents or mitigates functional limitations, and is effective therapy for many chronic diseases. Clinical practice guidelines identify a substantial therapeutic role for physical activity in coronary heart disease. Physical activity in the management of depression and anxiety disorders, dementia, pain, congestive heart failure, syncope, stroke, prophylaxis of venous thromboembolism, back pain, and constipation. Chronic conditions increase risk of activity-related adverse events, e.g., heart disease increases risk of sudden death and osteoporosis increases risk of activity-related fractures. Activity-related musculoskeletal injuries act as a major barrier to regular physical activity. Physical activity reduce high risk injury. Individuals with a chronic disease or a disability benefit from regular physical activity. The scientific evidence continues to build physical activity is linked with even more positive health outcomes. And, even better, benefits can start accumulating with small amounts of, and immediately after doing, physical activity.

Introduction:

Exercise and nutrition are essential parts of a healthy lifestyle throughout one's life, and as we age, our requirements are ever changing. A growing body of research illustrates how regular exercise is especially important for seniors, and how more seniors are opting for an active lifestyle instead of a sedentary one. This study will show you the benefits of exercise for older adults, the best forms of exercise for seniors. Physical activity (PA) in older people is critically important in the prevention of disease, maintenance of independence and improvement of quality of life. An older adult, regular physical activity is one of the most important things you can do for your health. It can prevent or delay many of the health problems that seem to come with age. It also helps your muscles grow stronger so you can keep doing your day-to-day activities without dependent on others. Keep in mind, some physical activity is better than none at all. Health benefits will also increase with the more physical activity that you do. Exercise is important in all phases of life, but for seniors, it's critical to maintaining independence, among other benefits. When it comes to determining the best exercises for seniors, variety is key. Adults of all ages but especially people older than 65 should focus on a combination of strength and mobility exercises, as well as balance exercises and aerobic activity. However, the best exercises for seniors are the ones they want to do and will do consistently. being active benefits older adults preventing falls, remaining independent, reducing isolation, maintaining social links to improve psychosocial health. Regular physical activity (PA) can bring significant health benefits to people of all ages independent living, reduce disability and improve the quality of life for older people.

Health Issues for Older Adults:

Lack of physical activity is a major risk factor for the epidemic of chronic disease and disability facing an aging population. Muscle loss can be devastating and debilitating for older adults. Muscle loss, its lead to hormone problems, a decrease in the ability to metabolize protein, and other problems. The body changes like reduced muscle and bone mass are inevitable the older adults. Falls become more common, leading to fractures, head injuries and other problems that affect both mental and physical health. Multiple systems work together to help us maintain our balance, which are integrated into the brain and then translated into motor output through our musculoskeletal systems. As we age, these systems can function less well, but working to maintain them can help prevent the rate of decline. Women and men become less active as they get older age. Aging biologically changes occur molecular and cellular damage which leads to a decrease in physiological reserve and increased risk of many diseases. Even in healthy and active people; strength, endurance, bone density and flexibility all decline at a rate of approximately 10% per decade. Muscle power is lost faster, at a rate of about 30% per decade. This can lead to a decrease in a person's level of function. Older people decrease in muscle strength (both hip

abductors and knee extensors) walking capacity, speed, mobility, sit-to-stand performance, upper extremity function, and balance performance. Above 65 years people average 10.7 hours per day sitting, with 40% of this age group living a sedentary lifestyle. Older age people major facing issues Arthritis, migraine, cardiovascular disease, vision impairment, medication side effects.

Health Benefits of Exercise in Older Adults:

Exercise is important for older adults (age 65+) because being physically active makes it easier to perform activities of daily living (ADLs), including eating, bathing, toileting, dressing, getting into or out of a bed or chair and moving around the house or a neighborhood. Exercise improves muscle strength and bone density as well, which is especially important for women since they lose bone density at a faster rate after menopause than men. Meanwhile, the benefits of exercise for the heart and lungs help promote overall health and offset some risks for chronic illnesses and disease. Our biology changes as we get older, causing seniors to have different reasons for staying in shape than younger generations. Though physical fitness provides benefits at any age, the health perks physically fit seniors enjoy are more notable. Physicians and researchers say seniors should remain as active as possible, without overexerting one's self. In older adults, exercise helps you live a longer, healthier, and more joyous life.

Seniors that exercise regularly are less likely to depend on others. Regular exercise promotes an older adults ability to walk, bathe, cook, eat, dress, and use the restroom. If self-reliance is a priority, exercise is one of the best ways to maintain independence for older adults.

Falling down is a much bigger deal for older adults than younger ones. Every 11 seconds, an older adult is admitted to an emergency room for a fall-related injury, and every 19 minutes, a senior dies from a fall, though no two falls are alike, and preventing falls is very complex, regular exercise reduces the likelihood of falling by 23%.

Though it seems counter-intuitive, being inactive makes you tired and being active gives you more energy. Any amount of exercise promotes the release of endorphins, which are essential neurotransmitters linked to pain mitigation and a sense of well-being. Endorphins combat stress hormones, promote healthy sleep, and make you feel more lively and energetic overall.

Heart disease, osteoporosis, depression and diabetes are common diseases among older adults and are often deadly. Fortunately, adopting a more active lifestyle can contribute to the prevention of these diseases, or reduce the unpleasant symptoms of these diseases if you already have them. If you are at-risk for disease, exercise may be the key to warding off an unpleasant condition.

One of the most remarkable developments in health science is the revelation that the mind and the body are much more closely linked. A healthy body likely means a healthy mind, and seniors that exercise on a regular basis have improved cognitive health. The regular exercise has been shown to reduce your risk of developing Alzheimer's disease or dementia by nearly 50%.

Exercise is crucial for older adults, but it can be hard to know where to begin. If you haven't worked out for a while, re-entry into the active world can be daunting. There's also a good chance the exercises you were once accustomed to aren't ideal for older adults. Resistance training will improve strength and can reverse or delay the decline of muscle mass and strength that occurs with ageing. Aerobic exercise can help to improve endurance by increasing the capillary density, mitochondrial and enzyme levels in the skeletal muscles. Exercise can also help to reduce the risk of many non-communicable diseases.

- Reduce the risk of coronary heart disease, stroke, certain types of cancers and diabetes.
- Prevent post-menopausal osteoporosis and therefore reduce the risk of osteoporotic fractures.
- Reduce the complications of immobility
- Reduce the risk of accidental falls
- Improve mental/cognitive function, reduces stress/anxiety and improve self- confidence.

S.No	Form of Exercises	List of Exercises	Benefits of Exercises
1.	Water Aerobics	• Aqua jogging • Flutter kicking • Leg lifts • Standing water push-ups • Arm curls	• The exercises improve your strength, flexibility, and balance with minimal stress on your body. • Buoyancy of the water puts less stress on your joints. • Additionally, water brings natural resistance, which eliminates the need for weights in strength training.
2.	Chair Yoga	• Overhead stretch • Seated cow stretch • Seated cat stretch • Seated mountain pose • Seated twist	• These exercises low-impact form of exercise that improves muscle strength, mobility, balance and flexibility, this exercises crucial health aspects for seniors. • It improve mental health in older adults. • Regular chair yoga participants have better quality sleep, lower instances of depression, and report a general sense of well-being.

3.	Resistance Band Workouts	• Leg press • Triceps press • Lateral raise • Bicep curl • Band pull apart	• This workouts with reduced stress on your body. • These exercises are ideal for strengthening your core, which improves posture, mobility, and balance.
4.	Pilates	• Mermaid movement • Side circles • Food slides • Step ups • Leg circle	• This exercises also low-impact form of exercise. • These exercises improves breathing, alignment, concentration and core strength • Its helps to build strength without the stress of higher-impact exercises. • It has been shown to improve balance, develop core strength and increase flexibility in older adults.
5.	Walking	• Find a moderate walk through a park • Find an audio book or a playlist for stimulation during your walk	• One of the least stressful and accessible forms of exercise is walking. • 10,000 steps per day is advised for a healthy lifestyle, but those with difficulty walking or joint pain may settle for a smaller number as a goal. • Walking promotes a healthy lifestyle, while strengthening muscles, lowering your risk of heart disease, stroke, diabetes, and colon cancer.
6.	Body Weight Workouts	• Squats to chair • Step-up • Bird dog • Lying hip bridges • Side lying circles	• This workouts are one of the best ways to counteract the effects of muscle atrophy in older adults. • It improves strengthening muscle and maintain good body posture.
7.	Dumbbell Strength Training	• Bent-over row • Triceps extension • Bicep curl • Overhead press • Front raise	• Strength training has been alleviate the symptoms of diabetes, osteoporosis, back pain, and depression, also helping manage your weight. • It contributes to a higher metabolism and enhanced glucose control. • These exercises allow seniors adults to isolate muscle groups to strengthen, while improving balance and flexibility.
8.	Balance Exercises	• Walking heel-to-toe • Back leg raises • Tree pose • Single foot balance • Heel-toe raises	• Exercises can help build strength and improve posture, stability, and coordination. • It's also helps to improve coordination, leg strength, and ankle mobility. • The effectiveness of balance and coordination exercises in improving the overall quality of life in older adults. • It recommended for older adults at reduced risk of falls.
9.	Cycling	• Outdoor bicycle or a stationary bike	• Cycling requires larger muscles group, like lower body muscles its leads to increased blood flow and demand on the heart and lungs. • Making the exercise beneficial for the heart and the lungs. Cycling is also a non-impact activity. • This can be beneficial for anyone who needs to reduce ground reaction forces during exercise to help with joint or muscle pain or dysfunction.
10.	Dancing	• Zumba or Line Dancing or Tango	• It improves heart rate. • Dancing not only elevates cardio it's also improves balance, strengthens multiple large muscle groups and lifts your spirits.

Conclusion:

- Physical exercises improves your strength. This helps you stay independent.

- It improves your balance. This prevents falls.
- It gives you more energy. So it could be more active.
- It prevents or delays diseases, such as heart disease, diabetes, or osteoporosis all other health problem.
- It can improve your mood and fight off depression.
- It may improve cognitive function (how your brain works).
- It is safe for most adults over 65 years old to exercise. Even most patients who have chronic illnesses can exercise safely.
- These include heart disease, high blood pressure, diabetes, and arthritis. Many of these conditions are improved with exercise.

Recommendation:

- Make your move- sit less- be active for life.
- Growing stronger- strength training for older adults.
- Being movable, strong, and steady on your feet can help you stay independent, which can boost your confidence and well-being as you get older.
- Physical activity levels amongst older people is needed to inform public health strategies which could extend the health and quality of life of people into old age.
- Physical exercises improve your quality of life. Therefore, older people should be encouraged to perform or maintain regular physical activities throughout their ageing process.

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