

Pain management of older persons: physiotherapy is a hope

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Pain in older people is highly prevalent and regarded as 'normal' in later life. Hence, sufferings associated with persistent pain in older people often left without the appropriate assessment and treatment. The impact is significant and of great concern. Pain in older people is an increasingly important health issue, and one that requires urgent attention.

Chronic musculoskeletal pain is the most common, non-malignant disabling condition that affects at least one in four older people. The most musculoskeletal pain in the joints of the upper and lower extremities, especially hips, knees, and hands, is associated with the degenerative changes of osteoarthritis. Older adults may also develop tendonitis and bursitis, as well as inflammatory joint and muscle disease. The most common painful musculoskeletal conditions among older adults are osteoarthritis (OA), low back pain, fibromyalgia, chronic shoulder pain, knee pain, myofascial pain syndrome and previous fracture sites.

Physiotherapy interventions reduce stress and correct malalignments of joint



structures, correct muscle imbalances, and enhance the shock absorption capacity of tissue structures.

Manual therapy

There are evidences on the use of joint mobilisation, stretching, neural mobilisation and manipulation specifically for older adults, research has addressed the use of these treatments for knee and hip OA, conditions common in older adults. The benefit of manual therapy on pain and function for knee or hip OA is higher.

Electrotherapy

Superficial heating agents (e.g.

hot packs, warm hydrotherapy, paraffin, fluidotherapy and infrared) or deep heating agents (e.g. short-wave and microwave diathermy, and ultrasound) can be used to increase blood flow, membrane permeability, tissue extensibility and joint range of motion in ways that can contribute to decreasing pain.

Protective and supportive devices

Protective and supportive devices assist a decrease in pain and increase in function for patients with joint instability or malalignment. Therapeutic taping for patellar realignment

is effective in reducing pain and improving function in patients with OA of the knee.

Transcutaneous electrical nerve stimulation

High-frequency Transcutaneous electrical nerve stimulation (TENS) appears to be the most effective TENS application for post-surgical pain and can be used with modulating frequencies to control neurologic accommodation.

Cognitive behavioural therapy

The American Psychological Association recognises cognitive behavioural therapy (CBT) as an empirically supported

intervention in management of chronic musculoskeletal pain; including rheumatoid arthritis, osteoarthritis, fibromyalgia, and low back pain.

Exercise

In recent years, exercise is getting the most important component of chronic pain management. Regular exercise, interventions to increase physical activity, strengthening the muscles, accompanied with weight loss are effective methods in the management of OA, low back pain etc. in older adults.

Regular exercise as an important adjunct to other interventions (e.g. thermal agents, patient education etc.) is the most frequently preferred pain management strategies after medication in some older adult populations. Some common types of exercises include flexibility, strengthening, aerobic and aquatic exercises.

A professional physiotherapist is the right person to decide a comprehensive exercise programme for any individual. Exercises are not general to all. Every individual is unique and for that reason, exercise should be very much individual.

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HEALTHbulletin



Three-in-one inhaler therapy can improve lung function and reduce asthma attacks

Patients with severe asthma which is not controlled with standard treatment – leaving them at risk of severe asthma attacks – could benefit from using a single inhaler combining three, instead of two therapies, according to some randomised controlled trials with over 2,500 patients across 17 countries, published in The Lancet.

Using multiple inhalers leaves patients trying to prevent symptoms using devices of different design, with different instructions, and with different dosing regimens. This can reduce patients' ability to use them regularly as prescribed, so a single inhaler that combines therapies could help ensure effective treatment delivery and improve treatment adherence.

"Since the preventive treatment we trialed delivers three drugs via one inhaler, and given the reduction we saw in the annual rate of severe asthma attacks, we expect it will provide an attractive option helping to fulfill an unmet need for both individuals and health systems," says co-author Sandrine Corre from Chiesi Farmaceutici in Italy.

AI may be as effective as health professionals at improving health care

STAR HEALTH REPORT

Artificial intelligence (AI) appears to detect diseases from medical imaging with similar levels of accuracy as health-care professionals, according to the first systematic review and meta-analysis, synthesising all the available evidence from the scientific literature published in The Lancet Digital Health journal.

With deep learning, computers can examine thousands of medical images to identify patterns of disease. This offers enormous potential for improving the accuracy and speed of diagnosis. Reports of deep learning models outperforming humans in diagnostic testing has generated much excitement and debate, and more than 30 AI algorithms for healthcare have already been approved by the US Food and Drug Administration.

Despite strong public interest and market forces driving the rapid development of these technologies, concerns have been raised about whether study designs are biased in favour of machine learning, and the degree to which the findings are applicable to real-world clinical practice. The ability to accurately exclude patients who do not have disease was also similar for deep learning algorithms (93% specificity) compared to health-care professionals (91%).

Many international health care



companies and pharmaceuticals are already trying to introduce AI to transform their services for better health care. Novartis recently announced an important step in reimagining medicine by founding the Novartis AI innovation lab and by selecting Microsoft as its strategic AI and data-science partner for this effort. The new lab aims to bolster Novartis AI capabilities from research through commercialisation and help accelerate the discovery and development of transformative medicine for patients worldwide.

As a part of the strategic collaboration announced, Novartis and Microsoft have committed

to a multi-year research and development effort. This strategic alliance will focus on two core objectives: AI empowerment and AI exploration.

Microsoft CEO, Satya Nadella said, "Our strategic alliance will combine Novartis' life sciences expertise with the power of Azure and Microsoft AI. Together, we aim to address some of the biggest challenges facing the life sciences industry today and bring AI capabilities to every Novartis employee so they can unlock new insights as they work to discover new medicines and reduce patient costs."

NUTRITION



Regular nut consumption tied to less weight gain

Eating more nuts is associated with less weight gain over time, according to an observational study in the BMJ Nutrition, Prevention & Health.

Researchers used food frequency questionnaire results from nearly 150,000 participants in the Nurses' Health Study (I and II) and the Health Professionals Follow-Up Study. Participants gained an average of 0.32 kg annually.

Over 4 years, an increase of half a serving of nuts per day was associated with 0.19 kg less weight gain after multivariable adjustment. Greater consumption of nuts was also linked to a 3% lower risk for becoming obese. Results were fairly consistent across different types of nuts.

Intimate partner violence is linked to suboptimal breastfeeding practices in poorer countries

Mothers exposed to intimate partner violence in low- and middle-income countries are less likely to initiate breastfeeding early and breastfeed exclusively in the first six months, according to a study published in the open-access journal PLOS Medicine.

As noted by the authors, health professionals working with pregnant women in low- and middle-income countries may need to identify those who have experienced intimate partner violence and offer tailored support for breastfeeding practices.

Physical, sexual and emotional violence were each independently associated with decreased likelihood of early breastfeeding initiation, but only exposure to physical violence was independently associated with a decreased likelihood of exclusive breastfeeding in the first six months.

According to the authors, these findings may inform the argument for antenatal screening of intimate partner violence in low- and middle-income countries and the provision of services to not only improve mothers' safety and wellbeing, but also support them in adopting recommended breastfeeding practices.



Sheikh Fazilatunnessa Mujib Memorial KPJ Specialised Hospital and Nursing College celebrated the World Heart Day at their premises recently.

The event was inaugurated by Mohd Taufik Bin Ismail, CEO, while Dr Razeed Hassan, Medical Director, Ruzita Mohd Dan, CNO, Dr Md Arifur Rahman, Consultant Cardiologist, and other staffs of the hospital were present on the occasion.

The awareness activities included rally, aerobic exercise, discussion, poster presentation, and a day-long health camp with 10% discount on the cardiac investigations.



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World Mental Health Day 2019

10 October



Mental Health is just as
Important as Physical Health



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