Arthritis and Musculoskeletal Alliance

ARMA

Policy Paper

Prevention of Musculoskeletal Conditions

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Contents

ARMA is the umbrella organisation for the UK musculoskeletal community. Our member organisations are:

Acupuncture Association of Chartered Physiotherapists (AACP)
Arthritis Action
Arthritis Care
Arthritis Research UK (AR UK)
BackCare
British Acupuncture Council (BAC)
British Association of Sport & Exercise Medicine (BASEM)
British Chiropractic Association (BCA)
British Medical Acupuncture Society (BMAS)
British Orthopaedic Association (BOA)
British Society for Rheumatology (BSR)
British Society of Rehabilitation Medicine (BSRM)
Chartered Society of Physiotherapy (CSP)
College of Occupational Therapists (CoT)
College of Podiatry (COP)
Ehlers-Danlos Support UK (EDS UK)
Faculty of Sport & Exercise Medicine (FSEM)
Fibromyalgia Action UK (FMA UK)
Hypermobility Syndromes Association (HMSA) UK
Institute of Osteopathy (iO)
Lupus UK
Musculoskeletal Association of Chartered Physiotherapists (MACP)
Myositis UK
National Ankylosing Spondylitis Society (NASS)
National Osteoporosis Society (NOS)
National Rheumatoid Arthritis Society (NRAS)
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Primary Care Rheumatology Society (PCRS)
Repetitive Strain Injury (RSI) Action
Royal College of Chiropractors (RCC)
Royal College of Nursing (RCN) Rheumatology Forum
Scleroderma & Raynaud's UK (SRUK)
The Society of Musculoskeletal Medicine (SOMM)
UK Gout Society

The contents of this document and further resources including contact details for our member organisations and further information about our work are available on the ARMA website at www.arma.uk.net.

Prevention of Musculoskeletal Conditions

In brief:

- Musculoskeletal conditions now account for the largest cause of disability globally and in the United Kingdom. A transformation is needed so that the health, care and public health systems go beyond tackling musculoskeletal conditions when they arise, to promoting lifelong good musculoskeletal health. At every age people should be supported to maintain and improve the health of their joints, bones and muscles. Prompt information, education, programmes and physical activity are key to enabling people to live well with a musculoskeletal condition.

- For some musculoskeletal conditions, earlier diagnosis and early treatment is paramount as this can prevent further, needless disability, reduce pain intensity and improve quality of life.

- Prevention is defined in this paper as taking action to reduce the incidence of disease and health problems within the population, optimising physical health and systematically detecting the early stages of disease and intervening before symptoms worsen or recur.

- For effective prevention, it is essential for there to be a workforce – including clinical workforce, sport and leisure professionals (e.g. life-guards, fitness instructors) and others - trained in musculoskeletal conditions, together with well-informed, supported patients.

International public health context: recommendations on prevention from the World Health Organisation

- *The WHO Action Plan for the Prevention and Control of Noncommunicable Diseases (NCDs) 2016-2026*, recognises the burden of musculoskeletal conditions and the importance of musculoskeletal health as a prerequisite for mobility, economic independence and active healthy ageing. The Action Plan calls on all countries to:

  - promote musculoskeletal health at all ages to improve physical function by increasing physical activity, reducing obesity and avoiding injuries;

  - improve musculoskeletal health across the life-course by

    ❶ supporting children and adolescents through their families and peer groups and promoting musculoskeletal health through preschool and school health programmes;
    ❷ integrating musculoskeletal health with health promotion and occupational health in the workplace;
    ❸ introducing systematic musculoskeletal health programmes for older people, including those living in residential care;

  - build musculoskeletal health systems that allow timely access to person-centred care of musculoskeletal conditions, focusing on early intervention to restore and maintain function, and that enable people to self-manage their musculoskeletal conditions; and increase awareness of what can be achieved; and

  - strengthen surveillance; and develop a skilled and diverse workforce relevant to musculoskeletal health.

Primary prevention

Primary prevention is concerned with preventing the onset of disease; it aims to reduce the incidence of disease. It involves interventions that are applied before there is any evidence of disease or injury.

- Lifelong good musculoskeletal health should be emphasised, reducing risks to musculoskeletal health by increased physical activity, ideal body weight, healthy diets, injury prevention and smoking cessation. Public health messaging should both raise awareness of the link between healthy lifestyles and healthy joints, bones and muscles and that being physically active and maintaining a healthy weight are a key part of reducing the risk of development of painful MSK conditions.

- More systematic, evidence based, primary prevention programmes are critical to reduce the overall burden of musculoskeletal disease in the population and maintain the financial sustainability of the NHS. In its report, Musculoskeletal Health, a Public Health Approach, Arthritis Research UK brings together a summary of current evidence and thinking about musculoskeletal conditions considered through a life course approach.

- Physical activity must be at the core of any public health approach to musculoskeletal health. People at all ages should achieve and maintain the optimum level of physical activity and fitness within their own personal limitations. Remaining active is one of the best things anyone can do for their musculoskeletal health, to help strengthen muscles, keep bones healthy, reduce pain and prolong the life of joints.[i]

- To achieve the needed change for good, lifelong musculoskeletal health at scale, public health programmes that promote exercise, healthy diets (including meeting the recommended daily allowance for calcium and Vitamin D) and that work to reduce obesity should be prioritised.

- In addition to the above measures for physical activity, maintaining an ideal weight and diet, other measures include[ii] :

  - The promotion of accident prevention programmes for the avoidance of musculoskeletal injuries.
  - Health promotion at the workplace and related to sports activities for the avoidance of abnormal and overuse of the musculoskeletal system
  - Greater public and individual awareness of the problems that relate to the musculoskeletal system.
  - Good quality information on what can be done to prevent or effectively manage the conditions and the need for early assessment

Secondary prevention

Secondary prevention aims to reduce the impact of a disease or injury that has already occurred.

- Successful secondary prevention is important for all people with an existing long-term condition, many of which cannot be completely prevented but all of which can be prevented from causing undue harm or having an unnecessarily large impact on a person's quality of life and ability to remain independent.

- Those with musculoskeletal conditions at greatest risk should be identified and encouraged to take measures to reduce their risk. This should be against a background of being encouraged to follow a healthy lifestyle and to avoid the specific risks related to musculoskeletal diseases. This requires a case finding approach for the different musculoskeletal conditions to identify those individuals most at risk who will benefit most from evidence-based interventions. Case finding strategies and interventions are detailed in A Guide to the Prevention and Treatment of Musculoskeletal Conditions for the Healthcare Practitioner and Policy Maker, European Action Toward Better Musculoskeletal Health, 2005, p17.

- An analysis of Joint Strategic Needs Assessments show that only about a third consider musculoskeletal conditions. Given that musculoskeletal conditions already account for the biggest cause of disability and pain across the UK, leading to 30.6 million working days lost each year and 1 in 5 GP visits, a first step in the active prevention is one of understanding the need in the local population and their inclusion in in local Joint Strategic Needs Assessment. Rather than waiting until the burden grows further, such a proactive preventative approach will help to stem the rise long term.

Early diagnosis and intervention

Early diagnosis and access to appropriate interventions are essential for effective secondary prevention. A quicker, earlier diagnosis can lead to prevention of worsening health and disability, lower incidences of relapse[iii].

- Evidence shows that patients with musculoskeletal conditions can take years for diagnosis. For example, diagnosis of fibromyalgia takes an average of 7.5 years and ankylosing spondylitis an average of 8.5 years[iv].

- The first stage in early diagnosis requires people to seek medical help. People rarely associate symptoms such as joint pain, stiffness or swelling with a condition requiring prompt medical attention. Between half and three quarters of people with rheumatoid arthritis delay seeking medical help from their GP for three months or more following symptom onset and around a fifth delay for a year or more.

- This requires interventions such as the Rheumatoid Arthritis (RA) campaign run in 2005 by Public Health England, NHS England and Department of Health[v]. The campaign identified the key three symptoms of RA: stiffness, swollen joints and pain and encouraged those who regularly experience these symptoms to visit their GP – with the message that, the earlier the condition is identified, the more treatable it is. RA was chosen for the campaign because there was considerable scope to improve outcomes with earlier diagnosis and because there is a lack of awareness around the seriousness of the condition, how it needs to be treated quickly to prevent long-term joint damage and how it differs from non-inflammatory musculoskeletal conditions such as osteoarthritis.

Early access to rehabilitation and treatment

- Once a person seeks medical help they need early access to clinicians who are trained and equipped to manage musculoskeletal conditions. Prompt access can help prevent short term conditions from becoming long-term conditions. It also supports people with long-term conditions to manage their conditions and have confidence to, for example, exercise safely. It prevents patients from being needlessly disabled, reducing sickness absence from work and cuts costs from both NHS and social care budgets. Early access to vocational rehabilitation, for example, will enable more people with MSK conditions to remain or return to work.

Physical activity as secondary prevention

- Everyone can benefit from some form of physical activity, including people with a musculoskeletal condition. Initiatives aimed at increasing physical activity should always explicitly refer to the musculoskeletal health benefits.

- For people who have already developed a painful musculoskeletal condition, engaging in safe, appropriate physical activity reduces pain intensity, improves quality of life and prevents further disability. Engaging in physical activity generally reduces overall pain. Specific types of strengthening exercises are also beneficial, for example, exercises to strengthen quadriceps muscles may be particularly helpful for people with knee pain due to osteoarthritis. For people with inflammatory joint conditions such as rheumatoid arthritis, appropriate physical activity can assist in improving flexibility in the joint and the range of

movement, and reduce stiffness. Multiple studies have now shown the benefits of high-intensity aerobic and resistance exercise to people with rheumatoid arthritis[vi].

- Barriers exist to people with MSK conditions undertaking physical activity. There are myths around physical activity, such as it will only make the pain and discomfort worse, and these 'internal barriers' directly relate to the symptoms people experience such a pain, mobility/dexterity, fatigue, motivation. In addition, there are 'external' barriers such as time, accessibility, practicality and cost. Therefore, when developing health promotion messages, the benefits of physical activity to people with musculoskeletal conditions should be emphasised. Common misunderstandings should be challenged, including that northing can be done if you have arthritis or back pain, that rest is beneficial for painful musculoskeletal conditions, or that physical activity is inherently harmful for people living with these conditions. Further information will be available in Providing physical activity for people with musculoskeletal conditions from Arthritis Research UK, Public Health England, Department of Health in England and NHS England, to be published in 2017.

Weight loss as secondary prevention

- Obesity is widely acknowledged as a risk factor for both the incidence and progression of musculoskeletal conditions such osteoarthritis. Weight control is important to people who have problems with their musculoskeletal system because extra weight puts extra pressure on some joints and can lead to aggravated pain and discomfort. Being over-weight or obese is associated with the development and progression of osteoarthritis of the knee.

- A modest weight loss of 4-7kgs is likely to relieve symptoms and delay disease progression of knee osteoarthritis.

- Pain in rheumatoid arthritis can be reduced by weight reduction.

- Severe obesity may play a part in aggravating a simple low back problem, and contribute to a long-lasting or recurring

Patient education

- Primary care providers should actively provide education for patients about their condition and what can affect their condition.

- Patient organisations have considerable high quality resources and evidence-based programmes to enable self-management and prevention and these play an important role in improving the wellbeing of patients and they also have resources for health professionals.

- Primary Care providers should understand what voluntary and patient support groups and information are available nationally and locally and signpost people to the information produced by approved patient support groups.

A skilled workforce

- A recommendation from the World Health Organisation is for countries to develop a skilled and diverse workforce relevant to musculoskeletal health. Health professionals can then in turn support their patients with self-management.

- ARUK's report, *Musculoskeletal Health, A Public Health Approach*[vii] , says that clinicians, nursing and Allied Health Professionals, as well as sports, fitness and leisure professionals can contribute to public health improvement by consistently supporting the message that physical activity is safe and beneficial for both reducing risk of – and reducing impact due to – musculoskeletal conditions. Trained professionals can provide information and reassurance that minimal investigation, increased physical activity and weight management are the best approach for most conditions of musculoskeletal pain. People becoming physically active for the first time can also benefit from behavioural interventions and individualised advice to support initiation, build-up and maintenance of physical activity. This includes opportunistic brief advice or interventions to promote update of physical activity.

Falls prevention

- Falls and fall-related injuries are a common and serious problem for older people. The human cost of falling includes distress, pain, injury, loss of confidence, loss of independence and mortality. Falling also affects the family members and carers of people who fall. Falls are estimated to cost the NHS more than £2 billion per year and also have knock on effects on effect on productivity costs in terms of carer time and absence from work[viii]. Therefore falling has an impact on quality of life, health and healthcare costs.

- Cost-effective ways of identifying risks early are required to provide the necessary interventions before problems arise or become compounded.

- In relation to fragility fractures Fracture Liaison Services represent a very effective model. Fracture Liaison Services case-find patients with fragility fractures who are at risk of osteoporosis and ensure they are assessed and offered secondary prevention. There is strong evidence to demonstrate that investment in fracture liaison services results in improved quality of care and financial savings for commissioners of health and social care [ix]. Fracture Liaison Services should be commissioned by all CCGs and made available in every locality in England.

Recommendations for policy makers

1. Early diagnosis, intervention, rehabilitation and treatment should be a priority issue, and should include public health messaging and education for primary care providers.

2. Health promotion programmes should recognise the importance of lifelong musculoskeletal health when developing health promotion messages.

3. Public health messaging should raise awareness of both the link between healthy lifestyles and healthy joints, bones and muscles and that being physically active and maintaining a healthy weight are a key part of reducing the risk of development of painful musculoskeletal conditions.

4. Prompt information, education, and physical activity programmes should be provided to enable people to live well with a musculoskeletal condition

5. Primary care providers should provide more education for patients about their condition and potential triggers they need to look out for. This should involve signposting to relevant patient advocacy groups.

6. Joint Strategic Needs Assessments should include musculoskeletal health in their assessment of local population health.

7. Education is required to ensure sufficient workforce trained in musculoskeletal conditions and early intervention, able to identify, treat and/or refer MSK conditions promptly and accurately. This needs to be accompanied by a culture change and changed methods of working between healthcare professions, to ensure that they can collectively deliver a joined-up, person-centred service.

8. High quality data on musculoskeletal conditions is essential to guide improvements in prevention. Data areas include assessing the needs of the local population, activity of local health services and outcomes delivered by health care. In addition, understanding patient-reported ratings of symptoms and impacts on health is important, and we support the use of the Musculoskeletal-Health Questionnaire (MSK-HQ) as an essential measure of musculoskeletal health that can be used throughout health systems for the benefit of people with musculoskeletal conditions

9. Fracture Liaison Services should be commissioned by all CCGs and made available in every locality in England.

References

[i] See ARMA Policy Position paper: Physical Activity and Musculoskeletal Health and Musculoskeletal Health: A Public health Approach

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