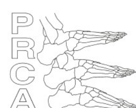
Policy Position Paper

Musculoskeletal and Mental Health



November 2018

Table of Contents

Overview 1

The relationship between mental health and musculoskeletal conditions 1

Why musculoskeletal health and mental health are important 3

Policy context 3

Key issues 4

Instilling hope 9

Recommendations for policy-makers 9-10

Examples and case studies 11-12

References 13

ARMA is an alliance of charities, health professions and research organisations for the musculoskeletal community. Our member organisations are:

Arthritis Action
Arthritis Care
Arthritis Research UK (AR UK)
BackCare
British Acupuncture Council (BAC)
British Chiropractic Association (BCA)
British Dietetic Association
British Medical Acupuncture Society (BMAS)
British Orthopaedic Association (BOA)
British Society of Rehabilitation Medicine (BSRM)
Chartered Society of Physiotherapy (CSP)
College of Occupational Therapists (CoT)
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)
Podiatry Rheumatic Care Association (PRCA)
Polymyalgia Rheumatica & Giant Cell Arteritis UK (PMRGCA UK)
Primary Care Rheumatology Society (PCRS)
Royal College of Chiropractors (RCC)
Royal College of Nursing (RCN) Rheumatology Forum
Scleroderma & Raynaud's UK (SRUK)
The Society of Musculoskeletal Medicine (SOMM)
The Society of Sports Therapists
UK Gout Society
Versus Arthritis

© July 2018 Arthritis and Musculoskeletal Alliance (ARMA)

While we try to make every attempt to ensure that the information in this report is correct, we do not give any express or implied warranty as to its accuracy. We do not accept liability for any error or omission.

Any part of this publication may be freely reproduced for non-commercial purposes and with the appropriate acknowledgement.

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.

Musculoskeletal and Mental Health

Overview:

At least a quarter, 26%, of adults report having been diagnosed with at least one mental illness over their lifetime[1]. In the UK, musculoskeletal conditions are the leading cause of disability accounting for 30.5% of all years lived with disability[2]. The prevalence of both conditions is huge and the impact leads to years of living with disability and lower quality of life. Musculoskeletal conditions include a broad range of health conditions affecting bones, joints and muscles, pain syndromes and rarer conditions of the immune system.

They can be characterised by pain, fatigue, loss of mobility, and co-morbidities including mental health conditions such as anxiety and depression. For the working age population in the UK, musculoskeletal and mental health conditions are the most common health conditions. 35.2% of all working aged disabled people in the UK experience musculoskeletal conditions only, 20.2% experience mental health conditions only and 17.2% experience both[3]. A 2012 paper estimated that in England, approximately 4.6 million people had both a long-term physical health condition and mental health problems[4].

In policy directives and in practice, these conditions are often dealt with separately, although we are beginning to see some change now. The reality for people is there is a relationship between their mental health and musculoskeletal conditions[5]. However, the delivery of care for people is still often built around the individual conditions, rather than the way the person experiences them collectively. As a result, care is often fragmented with lower outcomes and may not consider the combined impact of the conditions and their treatments on a person's quality of life.

The relationship between mental health and musculoskeletal conditions

There is often co-existence and a complex interaction between mental health and musculoskeletal conditions. Living with a musculoskeletal condition can lead to depression and anxiety and conversely, poor mental health can exacerbate or potentially lead to musculoskeletal condition.

Many people with long-term conditions are affected psychologically – for example, when learning of their diagnosis, living with symptoms and with the effect on their work or social role, or managing side effects. People with long-term physical health conditions are two to three times more likely to experience mental health problems, with chronic pain increasing the risk of depression.

Social isolation is also a factor. People with musculoskeletal conditions can suffer with chronic fatigue, often leading them to cancel social engagements and eventually seeing their social circle dwindle. Some conditions will also cause changes in physical appearance such as posture, deformity and severe weight loss. Patient organisations report that they often hear how people may catch a glimpse of themselves in shop window, for example, and not even recognise themselves. Despite this, the detection of co-morbid mental health problems and musculoskeletal conditions and the provision of support on the psychological aspects of physical illness often do not meet people's needs.

There is a lack of appreciation that mental disorders can present as somatisation (medically unexplained symptoms, or chronic pain), or conversely, people who have an undiagnosed musculoskeletal condition who are told that it is 'all in their head'. This may not be appreciated in primary care and so inappropriate referrals are made into physical health services or psychological services. Worse still, in the case of undiagnosed musculoskeletal conditions, the person may be dismissed from the system completely, and this is of particular concern as some musculoskeletal conditions typically take years until they are diagnosed correctly.

There is a gap in knowledge amongst primary healthcare teams that a dual approach is necessary. This is then perpetuated in supporting the patient to believe that they have a purely physical problem or mental health issue and not doing the necessary groundwork at referral to allow the patient to begin to think of a mental health or physical issue as well[6].

Co-morbid mental health and musculoskeletal disorders have serious implications, resulting in affecting people's motivation and ability to self manage and adapt healthy behaviours, such as exercising. For example, depression makes pain feel worse and people are less able to self-manage to lessen symptoms. There is reduced ability and motivation for people to self-manage, poorer health behaviours, for example, implementing physical activity exercises they that may have been recommended. Some medications for mental health conditions can have impact on, for example, weight gain and the development of musculoskeletal conditions.

Why musculoskeletal health and mental health are important

When people are free of musculoskeletal and mental health problems, they are more able to live the lives they want to live to the fullest, achieving their goals, work productively and have positive social relationships. The benefits of positive mental and musculoskeletal health are wide ranging and significant for individuals and society. They are associated with improved quality of life, increased life expectancy and increased economic participation.

The cost of musculoskeletal conditions and mental ill health to the society and the wider economy is huge. In 2007, the total annual costs to the UK economy of working–age joint-related ill health, including direct health costs and indirect (lost productivity, sickness absence, informal care) costs were estimated to be £103–129 billion and mental health conditions alone is estimated to cost the economy between £70-100 billion. Co-morbid mental health problems increase the cost of providing care to people with long term conditions. Co-morbid mental health problems have a wider economic cost too. International research shows that co-morbid mental health problems are typically associated with a 45–75 per cent increase in service costs for long-term physical health conditions.

Policy context

The *Five Year Forward View for Mental Health*, published by Independent Mental Health Taskforce in February 2016, made a number of recommendations for the NHS and Government to improve outcomes in mental health by 2020/21.

NHS England published *Implementing the Five Year Forward View for Mental Health* in July 2016, accepting the Taskforce recommendations. The publication included details of the additional funding that will be provided with a commitment from the Government for an extra £1 billion by 2020/21 to support the implementation of the Taskforce's recommendations.

On 31 July 2017, Health Education England published the *Stepping forward to 2020/21: the mental health workforce plan for England* to support the delivery of the *Five Year Forward View for Mental Health*, which sets out plans for an expansion of 21,000 mental health posts across England to enable improved access for over one million more patients by April 2021. The Government had previously pledged to an increase of 10,000 posts by this date. The plan has been developed by Health Education England together with NHS Improvement, NHS England, and the Royal College of Psychiatrists.

The *Five Year Forward View for Mental Health* cites an integrated mental and physical health approach as a priority action for the NHS by 2020/21. It speaks of parity between mental health and physical healthy, "Making physical and mental health care equally important means that someone with a disability or health problem won't just have that treated, they will also be offered advice and help to ensure their recovery is as smooth as possible, or in the case of physical illness a person cannot recover from, more should be done for their mental wellbeing as this is a huge part of learning to cope or manage a physical illness."

The *Five Year Forward View for Mental Health* speaks of commissioning for prevention and quality care. It says the commissioning of services is fragmented between Clinical Commissioning Groups, local authorities and the NHS. It says, "There is a long way to go to achieve integrated, population-based commissioning."

Implementing the Five Year Forward View for mental health speaks of increasing access to psychological therapies, many integrated in to primary and community care with two thirds of the people accessing these new integrated services as having co-morbid mental and physical conditions or persistent medically unexplained symptoms.

Key issues

This paper identifies a number of areas where patient, professional and research organisations and experts in mental and musculoskeletal conditions felt that there is particular scope for improvement. Commissioners, clinicians, providers, professional and training bodies can use these areas to identify where there are significant opportunities for positive change.

This paper was produced by drawing on an expert panel of professional bodies and research organisations, patient charities, policy professionals and clinicians who focus on mental and musculoskeletal health. The expert panel helped to identify issues of focus, contributed to draft versions and were involved in discussions of key themes.

Integration of mental health and musculoskeletal health and social care – taking a person-centred, holistic approach.

All too often, when people experience care, they experience 'silo' care that is not integrated across conditions or specialisms and that does not account for the wider needs of the person. Often, MSK care focusses on the physical aspects alone. People with MSK conditions have difficulty getting mental health conditions diagnosed. Holistic assessments that take into account psychological aspects and physical health can be difficult to do in primary care due to time pressures. However, if training was given and the assessments properly resourced, many onward referrals to MSK services could be prevented.

Psychological distress also makes self-management more of a challenge. Many patients with long-term musculoskeletal conditions get no access to

psychological support on diagnosis. Those who live with severe chronic pain will often have to wait over a year before getting access to specialist pain services. These delays make treatment more difficult then if people had support to manage their pain earlier. All patients with a long-term MSK condition should be offered access to Improving Access to Psychological Therapies (IAPT) on diagnosis. All patients with long-term chronic pain that is having a significant impact on their lives should be able to access an integrated pain service providing biopsychosocial support.

The clinician's own specialism can become a barrier, limiting person-centred care, for example, focussing on what a blood test shows, or on medication, but not addressing the impact of the MSK condition on the person's life or their mental health needs. This leads to missed opportunities for early intervention and to improve outcomes.

Adherence to treatment

In practice, not adhering to treatments such as medication or exercise regimes is commonly considered as a failure by patients to follow advice. A patient may be asked about their failure to take medication or exercise as directed. However, what may not be accounted for is the patient's mental health and the impact on their ability to process or retain information and motivation to carry out the exercises, medication regime or other intervention. For example, there may be behavioural reasons for not taking advice for physical health, or that a person with a long-term condition has not had their depression addressed. This leads to missed opportunities for early intervention and better outcomes. Not adhering to treatments such as medication or exercise programmes are associated with increased costs, avoidable morbidity, higher hospital and nursing home admissions, and prolonged hospital stays[10].

Reasons for people not engaging with an exercise or medication regime often go unrecorded and unexplored. The person may not be routinely asked about it. Health professionals need to identify and understand the psychological and behavioural barriers to compliance in order to address these. People will continue to not adhere to treatment if we don't address these.

Health professionals need to understand the impact of the conditions on the person overall and on their adherence to treatment if they are to provide supportive care and increase the effectiveness of intervention.

Health professionals need to understand the wider context of the consultation, as recommended in GP's curriculum[11], perceiving that this is a person and not the belief that the sick patient is a broken machine; and that 'health' and 'illness' comprise more than the presence or absence of signs and symptoms. There needs to be a constant willingness to see issues of health and illness from a patient's perspective, considering social, educational and cultural differences.

Reablement

Huge numbers of people will use reablement. Reablement is one of the main tools used locally for people who have just been discharged from hospital or are entering the care system following a crisis. Reablement provides assessment and interventions such as personal care, help with daily living activities and other practical tasks, usually for a few weeks, to encourage people to develop the confidence and skills to carry out daily living activities themselves and maximise independence. Reablement is delivered by a multidisciplinary team but most commonly by social care practitioners. They can be there when people, for example, cook, to make people feel safe and confident. The NICE guidelines for Intermediate care including reablement[12] stipulate that training for intermediate care staff should include ability to respond to mental health conditions. In practice, reablement is, however, currently focussed on physical activity. However, there may be mental health implications, for example, people may struggle psychologically when trying to do things that they previously found easy. For an integrated approach with health and social care, re-enablement workers should be trained in mental health implications for a joined-up, holistic approach, as per NICE guidelines[13].

Conversations: Language and communication

Clinician-patient conversation is the fundamental foundation upon which integrated care is built. General principles such as what matters to the patient, what the patient wants to achieve is an important starting point. During conversations, clinicians may focus on the physical health needs of the patient, and mental health needs are not considered[14]. Having conversations with patients about mental health, in addition to physical health, means that the clinician needs to think that mental health is something that needs to be addressed. This is not the norm and achieving this requires culture change. Clinicians need to feel comfortable and confident having these types of conversations with patients. Sometimes, the shortness of the appointment can be a barrier in the conversation, however, there are examples of conversation strategies that can be implemented even in limited time.

Choice of language in a conversation about mental health is powerful and can influence the outcomes of the conversation and recovery. The use of language is critical to ensuring a recovery-orientated and person-centred approach rather than an illness-centred approach where it is all too easy to focus on reducing the symptoms of the illness. For example, asking someone how they are can be important and the impact of the condition on them. Taking an asset based approach can empower people and be recovery focussed, assessing: what strengths, skills and support the person has got in place, what are they managing day to day? Then identifying need. This then leads to conversations about how the person can use existing assets to address the needs.

Work and health

Musculoskeletal conditions and stress, depression and anxiety are a leading cause of work limitations and working days lost in the UK, accounting for 45.8m[15] working days lost in 2016. Health and Work champions tend to be hospital based, however, this model could benefit from extension into primary care settings.

Allied Health Professions Fit Notes

The Government Command paper Improving Lives: The Future of Work, Health and Disability committed to investigating the feasibility of the AHP Fitness for Work Advisory Report for the purposes of Statutory Sick Pay . The Joint Department for Health and Social Care and Department for Work and Pensions Health Unit has acknowledged that the report is suitable medical evidence for Statutory Sick Pay (SSP).

The Allied Health Professions Advisory Fitness for Work Report (AHP Fitness Report) provides an employee, their employer and GP with information which may be used to help keep that employee in work if possible or be signed off, usually for a specified length of time while recovering from injury, illness or a procedure.

The AHP Fitness Report is appropriate for a physical or mental health work-related issue to help employers and GPs to understand practical modifications that may help an individual remain engaged with or return to work. It is designed to be clearly recognisable and easily read, with contact details for employers to follow up recommendations with practitioners if necessary.

Work as a Health Outcome

Employment can help our physical and mental health and promote recovery. But the importance of employment for health is not fully reflected in commissioning decisions and clinical practice within health services, and opportunities to support people in their employment aspirations are regularly lost. Once people are on benefits, their chances of returning to work steadily worsen[16].

Integrated Commissioning

Commissioning is a key and fundamental issue. If there is separate commissioning for mental health and musculoskeletal conditions, then it is difficult to deliver integrated services. For example, lack of mental health support at the early stages of a long-term condition, with the focus on physical health, and then, when patients aren't compliant with the exercise regime, can lead to non-compliance becoming ingrained, and more in-depth intervention for mental health is needed. Mental health needs to be considered earlier for people with long-term conditions.

There is also lack of commissioning of integrated services for mental health and musculoskeletal health in primary care.

Chronic pain is often associated with musculoskeletal conditions and depression, anxiety, and other mental health conditions, sleep disturbance and interference with normal physical and social functioning. Chronic pain is therefore hugely detrimental to individuals' health-related quality of life. Commissioning should address early access to integrated pain management services, as chronic pain can be harder to address later. Chronic pain and mental health could be considered as part of the same spectrum. The journey should start in Primary Care with adequate time and training to make a full physical and mental health assessment; this will stop many cases of chronic pain developing. Pain clinics often intervene far too late in the patient journey.

There is a need to demonstrate value to commissioners, however, with integrated approaches, it is sometimes difficult to measure and gather the actual evidence for integrated services adding value, and this can hamper commissioning. There is a question about what outcomes are measured, for example, it might be more appropriate to ask, 'Is the patient more able to do what they want to do?' as a measure rather than just focussing on lessening pain. This measure is already used by some health professions, such as occupational therapists, who use occupational performance measures to show the difference in people's abilities before and after treatment. A personal outcomes based approach rather than a symptoms based approach helps support holistic management of these patients. Some health professions already have core skills of activity analysis and use therapeutic activity in promoting health and their biopsychosocial understanding of the complex interplay of factors which inhibit occupational performance and functioning. Using these health professions earlier in the pathway can benefit patients.

Evidence and data

A barrier for integrated care is the fragmentation of data sets that are collected. Data for physical conditions are collected by certain teams and data for mental health is collected by different teams, and this makes it difficult to see how the two relate. Furthermore, people with mental health conditions are often precluded from taking part in research; they may lack capacity to consent to take part in research. There is also a lack of evidence gathering on non-compliance with medicine or exercise regimes.

Supported self-management

Supported self management is when health professionals, teams and services (both within and beyond the NHS) work in ways that ensure that people with long-term conditions have the knowledge, skills, confidence and support they need to manage their condition(s) effectively in the context of their everyday life. Supported self-management is not limited to a medical approach, and can include social prescribing, referral to local, non-clinical services, recognising that people's health is determined by a

range of social, economic and environmental factors and addressing these needs in a holistic way.

People can learn to manage pain, increase physical activity and social interaction – which are all benefits to wellbeing.

Mental health is core to supported self-management. The supported self-management most useful to patients should be tailored to them always - physically, mentally and emotionally - and follow their actual disease and treatment pathways, with all their biopsychosocial aspects addressed. Supported self-management requires a whole system approach, with improved access to support.

Instilling hope

Musculoskeletal and mental health conditions can be distressing for everyone that it affects, but things can get better. For enduring and severe conditions, recovery is about enabling the person to live the life they want to live, perhaps despite the pain, fatigue and limited mobility. Instilling hope can be an important part of recovery. Hope and optimism can have behavioural consequences including greater sociability and creativity leading to benefits for the person, enhancing a person's quality of life, productivity, health and social connections.

Recommendations for policy-makers:

1. Commissioners for musculoskeletal and mental health services should work together to integrate services, following the patient's actual disease and treatment pathway with all biopsychosocial aspects addressed.

2. Commissioners should ensure MSK services are able to address the mental health needs of people with long-term conditions, and that these are available earlier in the treatment pathway, including in primary care.

3. There should be training for Primary Health Care teams around medically unexplained symptoms, and diagnosis and management and also musculoskeletal conditions that on average take many years to diagnose.

4. Integrated pain services should be commissioned that allow early access to support.

5. All people with MSK conditions should be offered access to IAPT on diagnosis.

Continued overleaf

Recommendations for policy-makers continued:

6. All people with long-term chronic pain that is having a significant impact on their lives should be able to access an integrated pain service providing biopsychosocial support.

7. Reablement workers should be trained in mental health implications for a joined- up approach to the support they provide.

8. Training, skills and information of clinicians should be considered by educators and professional associations. MSK teams need people who are trained and skilled in mental health and Mental Health clinicians need an understanding of how pain and lack of mobility will impact on mental health. Training should include conversations, language and knowledge so that clinicians are enabled and confident to take an integrated approach for co-morbid musculoskeletal and mental health conditions in practice. Clinicians need better information about social care and signposting. This training should foster a culture that takes a whole-person approach, working across traditional boundaries with cross-collaboration and public education too.

9. How we measure and collect data for co-morbid conditions of musculoskeletal and mental health conditions should be integrated, in order to build an accurate picture of the reality of the effect of these co-morbid conditions on people.

10. Government, NHS, clinicians, professional bodies and educators and society should work to remove the stigma and shame of mental health and musculoskeletal conditions, instilling hope and enabling people to lead the lives they want to lead.

11. Primary care teams should ask about employment and offer advice or signpost to services if required.

12. Long term condition and MSK services should include work outcomes as a key performance indicator(KPI) in delivery a quality service in view of the significant evidence that people's health is better if they are working.

Examples and case studies:

Integrated Pain Management:

- Commissioned service under the umbrella of Musculoskeletal Integrated Clinical Assessment and Treatment Service (MICATS).
- Receives approximately 320 new referrals per year, plus internal referrals from MICATS.
- Community based Pain Management Service for adults with chronic MSK pain.
- Multidisciplinary team (MDT) includes occupational therapist, physiotherapist, psychologist and pharmacist, with input from a dietitian on the group courses. The service is run from local health centres.
- People are referred either by their GP or internally from MICATS clinicians.
- Following 1.5 hour assessment with an occupational therapist and physiotherapist, people have the option to attend an Introductory course (4 hours) followed by a Pain Management Programme (7 x 3.5 hours) or individual review for those who cannot commit to, or do not need, a full programme. 1:1 sessions are offered to progress areas of difficulty or need, and the occupational therapists and physiotherapist run small courses of relaxation, mindfulness, exercise and Tai Chi. Referrals are made to the team psychologist and pharmacist as necessary
- Reviews are completed after two months or for programme attenders, six months. Outcome measures used include:

- Hospital Anxiety and Depression Scale
- Tampa Scale of Kinesiophobia
- Oswestry Disability Index
- Pain Self-efficacy Questionnaire
- Brief Pain Inventory (short form)

Impact:

- Reduced GP and return MSK physiotherapy appointments.
- Enabling people to remain in or return to work.
- Reduction in pain medication.
- Reduced reliance on other services, e.g. Mental Health

Gemma's Story:

Gemma is a young mother with fibromyalgia; spending most of her day in bed, only rising to take her children to/from school. Gemma needed help from her mother with all activities of daily living and childcare. She had given up university and was no longer able to work.

She completed an introductory and full pain management course. Within two months, Gemma had returned to swimming three times a week and was increasingly independent at home.

Self Management Approach in Primary Care; Healthy Prestatyn/Rhuddlan Iach (HPI/RI), Wales:

The service at Healthy Prestatyn/Rhuddlan Iach offers people support to self-manage their condition and to develop skills, habits and routines that optimise daily living and improve health and wellbeing.

Referrals are made directly by the person or via the multidisciplinary team under several broad criteria:

- Chronic conditions such as COPD, fibromyalgia, arthritis and chronic pain.
- Mental health difficulties such as reactive anxiety and depression, often secondary to another primary physical condition.
- Frailty - reduced function and mobility related to aging process.

The team identifies 'what matters' to the person and uses an assets based approach. Through setting goals, the person builds up his or her own support network as well as having the opportunity to learn and practice tools for self-management and apply these where appropriate to their own lives. The self-management courses offered include:

- 'Skills for Better Living': People with anxiety and depression issues.
- Back skills course for lower back pain:
- Balance and strengthening class (OTAGO) to aid activities of daily living (ADL)
- Fit note/employment
- 'Communities 4 work' monthly satellite. The satellite provides support for those who are aiming to return to employment.

Impact:

In January and February 2017, 87 people's case were evaluated.

51% did not present again at the surgery, for the issue initially referred, in the six months post occupational therapy intervention.

A further **21% showed a reduction in the number of appointments at the GP practice of up to 66%.**

Further information about the service can be found : http://healthyprestatyniach.co.uk/

Chronic Pain case study:

The Best multi-centre randomised controlled trial, involving 56 general practices across seven English regions, compared active management (AM) of patients with sub-acute or chronic lower back pain (LBP) against AM plus CBT. Outcomes measured included physical and mental Quality of Life, fear avoidance beliefs and pain self-efficacy. Cost utility was evaluated using NHS costs. AM plus CBT had higher per-person costs (£178) and higher Quality of Life. AM is highly cost-effective at currently accepted thresholds: Cost per quality-adjusted life years (QALY) is about half that of competing LBP interventions. For more information, see http://www.csp.org.uk/sites/files/csp/

Arthritis and Musculoskeletal Alliance
Policy Position

References

[1] http://healthsurvey.hscic.gov.uk/support-guidance/public-health/health-survey-for-england-2014/mental-health-problems.aspx

[2] Murray C et al (2013). UK Health Performance: Findings of the Global Burden of Disease Study 2010, *The Lancet* 381, 9871, 997 - 1020

[3] https://www.arthritisresearchuk.org/arthritis-information/data-and-statistics/state-of-musculoskeletal-health.aspx, p9

[4] Naylor, C., Parsonage, M., McDaid, D., Knapp, M., Fossey, M., & Galea, A. (2012). Long term conditions and mental health. The cost of co-morbidities London: The King's Fund- Centre for Mental Health.

[5] Duffield, Ellis, Goodson, Walker-Bone, Conaghan, Margham, Loftis, *Best Practice & Research Clinical Rheumatology*, The contribution of musculoskeletal disorders in multimorbidity: Implications for practice and policy; Volume 31, Issue 2, April 2017, Pages 129-144 http://www.bprclinrheum.com/article/S1521-6942(17)30021-9/fulltext

[6] **http://www.jcpmh.info/good-services/medically-unexplained-symptoms/**

[7] https://www.arthritisresearchuk.org/arthritis-information/data-and-statistics/state-of-musculoskeletal-health.aspx, p14

[8] Wang, Y.C., McPherson, K., Marsh, T., Gortmaker, S.L. & Brown, M. (2011). Health and economic burden of the projected obesity trends in the USA and the UK. The Lancet, 378(9793), 815-825.

[9] Naylor, Parsonage, McDaid, Knapp, Fossey, Galea, the Kings Fund, Long-term conditions and mental health The cost of co-morbidities, 2012 https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/long-term-conditions-mental-health-cost-comorbidities-naylor-feb12.pdf

[10] Campbell, Evans, Tucker, Quilty, Dieppe, Donovan; Why don't patients do their exercises? Understanding non-compliance with physiotherapy in patients with osteoarthritis of the knee, *The Journal of Epidemiology and Community Health*, date Volume 55, Issue 2; http://jech.bmj.com/content/55/2/132#ref-3

[11] http://www.rcgp.org.uk/training-exams/training/gp-curriculum-overview/online-curriculum/knowing-yourself-and-relating-to-others/2-01-the-gp-consultation-in-practice/2-01-introduction.aspx

[12] https://www.nice.org.uk/guidance/ng74/chapter/Recommendations#terms-used-in-this-guideline

[13] https://www.nice.org.uk/guidance/ng74/chapter/Recommendations#terms-used-in-this-guideline

[14] Coventry P, Hays R, Dickens C, Bundy C, Garrett C, Cherrington A, Chew-Graham CA (2011). 'Talking about depression: barriers to managing depression in people with long term conditions in primary care'. BMC Family Practice, vol 12, no 10. Available at: www. biomedcentral.com/1471-2296/12/10

[15] ONS Sickness Absence Report 2016

[16] https://www.gov.uk/government/consultations/work-health-and-disability-improving-lives/work-health-and-disability-green-paper-improving-lives

Arthritis and Musculoskeletal Alliance

Tel: +44 (0) 203 856 1978
projects@arma.uk.net
www.arma.uk.net
@WeAreArma

Registered Charity No: 1108851
Registered Company No: 5380237