RELEVANT EDUCATION IN MSK

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WHAT IS THE PROBLEM?

- MSK problems feature in 15-30% of primary care consultations worldwide
- Musculo-skeletal problems are the major cause of morbidity throughout the world and will be increasingly in the future. (WHO 2000)
- In the UK, 2-6% of curriculum time devoted to MSK at undergraduate level
- Many studies have shown that medical students and trainees lack the knowledge and confidence to care for MSK conditions
- Just talking to trainees and GPs it is obvious that for many it is a weak spot
- Poor knowledge of anatomy. Only 41% clinical students could identify scaphoid, capitate and trapezium. 16% could identify none of them! Hinders the teaching of joint examination

WHAT IS THE PROBLEM? CONTD

- Traditionally MSK has not been a priority in medical education
- Orthopaedics (hospital based) dominates the field
  - Emphasises too many particulars of orthopaedic surgical practice
  - Lack of enthusiasm for reform and complacency with status quo in orthopaedic surgeons
  - Has been suggested in USA that orthopaedic surgeons not unhappy with the ignorance – it increases their referrals!
- Good teaching is expensive – requires teacher time
- Subject perceived as uninteresting – rheumatology has low scores
- Complex subject – limited ability to generalise between different types of MSK problem
  - Seven different "systems" – Spine, shoulder, hip, knee, elbow, wrist/hand, ankle/foot

WHAT IS THE AIM?

- Every medical student/trainee should be equipped with sufficient knowledge to be able to deal with basic problems in the field of musculo-skeletal at the time of qualification. The conditions covered should therefore be the sort of problems seen most commonly either in primary care or in hospital.
- Students want simplicity (Coady et al 2003). Often get given complexity by experts
- Given the high morbidity from MSK problems throughout the world, it should take a higher priority in the undergraduate curriculum
- Patients should be able to feel confident that a GP has a sound understanding of MSK problems.
- Given the importance of sports and even more-so, exercise, GPs should have a sound knowledge of treating basic sports injuries and be able to advise on the essentials of exercise

WAYS OF IMPROVING MSK EDUCATION

- Make it relevant
  - Teach on common problems and low level treatments (exercises etc)
  - Include sports injuries – relates to younger people
- Avoid over-complexity
  - Experts like to demonstrate their expertise
  - Keep it simple
  - If it is complex, it cannot be remembered on the spot
- Give hands-on exposure to common problems
  - Primary care MSK clinics or Tier 2 are the ideal settings

"EASY ORTHOPAEDICS"

- A distillation of experience in primary care and Tier 2
- A VERY simple (possibly simplistic) approach
- Most regions (joints) can be taught in the lift (a very tall building!) Elevator teaching
- "Sports medicine is a combination of a knowledge or relevant anatomy and a few general principles"
- Covers the essentials of the
  - History
  - Anatomy
  - Examination
  - Differential diagnosis
  - Management

EXAMPLE: THE SHOULDER

- Some anatomical knowledge needed (the rotator cuff, the acromion etc)
- Starts with key prevalence data – SAP 70%, Frozen shoulder 15%, ACJ 5%, OA 5%, Neck
- Simplifies the diagnostic criteria – SAP = about 5 other titles which are confusing
- Distils the essential items needed in the history. Our minimum clinical data set
- Simplifies the examination
- Guides imaging options – reduces reliance on high tech imaging
- Allows simple rules for telling between the different diagnoses
- Summarises the evidence-based management options – physio (exercise), injection, surgery
- Covers the red flag rules for that condition (trauma, cancer etc)

INTENDED OUTCOME FROM THE POST

- Trainees should take the essentials of each body part and apply it to their GP patients
- Improve confidence in diagnosing with MSK problems
- Improve confidence in deciding on management of MSK problems
- Take some practical skills for injections and use them (also teach others)

THE CURRENT STRUCTURE OF THE INTEGRATED TRAINING POSTS SHFT

- 3-4 trainees per 6 months
- Each has 2 days GP, 1 day diabetes, 1 day respiratory and 1 day MSK/Pain
- 1-2 trainees in the MSK clinic for 3 months rotating with Pain. 12 days in each x 9 hours
- Mixture of sitting in and seeing patients from my list – reporting back and seeing patient together. Mixed clinics with all body parts
- A simple curriculum for them of the common conditions and injections
- After 3 months they are "up and running" – would be able to run a clinic alongside
- Also exposure to other clinicians – spinal clinics, hand clinics etc

FUTURE STRUCTURE?

- 18 trainees in Lymington for a year
- Rotate 4-monthly – Community, hospital, GP
- Only 2 months each of MSK and Pain
- More equitable but possibly less effective with MSK
- Some day-release teaching. Perhaps a whole day of the essentials of MSK
- Will change the dynamic and depth of exposure but may be more effective overall

TRAINEE 1 – JAMES BURGESS

- I gained an understanding of the assessment and management of common MSK conditions including osteoarthritis of multiple different joints and regional problems such as plantar fasciitis and frozen shoulder. Also improved my MSK specific clinical examination and procedural skills (such as certain joint injections). Continued to use this newly acquired knowledge and skills in my clinical practice working in general practice and has helped me effectively assess and manage patients with MSK problems. Finally gained a greater understanding of the role of other MDT members such as orthopaedic specialists, podiatrists and physiotherapists in the management of MSK conditions. This training has helped me with a solid foundation which I have used to almost successfully complete my SEM diploma and pass the FSEM(UK) Part 1 membership examination in SEM.

TRAINEE 2 – ZOSIA BELLAMY

- **What I gained from MSK community clinic training I undertook for 3 months?**
- I worked one day a week in MSK alongside Dr Warner for 3 months. It gave me the unprecedented experience of 9 hours a week undivided consultant teaching and supervision, something I have never experienced in medicine before. I was able to learn through one to one teaching, learning from experience to develop focussed data gathering and practical examination skills. I was able to develop a wealth of knowledge of how to deal confidently and competently with a wide range of common general practice ailments. Through this job I have gained practical experience of our Tier 2 MSK service. This has improved my practice in General Practice, providing better local care, and reduced my referral rate and burden on secondary care. This job has been the most valuable and relevant job I have done in my GP training and a fantastic learning opportunity.

TRAINEE 3 MARC THOMAS

- I was able to see a range of different patients and consult as I would in primary care. I had the opportunity to discuss each case with Dr Warner and this was great for my own learning and development (e.g. clinical reasoning and consideration of differentials).
  I sat in with Dr Warner during consultations and this was helpful in identifying key questions when taking a history, certainly things that might influence surgical referral/treatment. I was able to discuss local treatment /referral pathways and this has certainly changed the advice I give to patients and when I refer on to secondary care. I think I am now referring more appropriately e.g.: fewer referrals for ?arthroscopy.
  I was able to develop skills in joint injection and over the course of a few weeks I became more confident and competent. In the past I would refer on to secondary care or to other doctors in the surgery. By doing injections myself this saves time and is less demand on the system.
  In general practice we see a huge number of patients who present with MSK problems. I think many GPs would admit to having limited knowledge in this area. The opportunity to spend time in an MSK clinic has certainly improved my MSK medicine and I am certain it has benefitted my patients as a result.

TRAINEE 4 ALEX COOK

- I would recommend the rotation to every GP trainee because of the frequency of MSK presentations we are faced with in GP but also because of the increase in value that we can offer each of these patients as a result of the experience that we get in that setting.
  More specifically I think that the following outcomes are true for me and I would expect to be the case for all of your trainees:
  Increased confidence in ability to take a focused history, examine, eliminate red flags, safety net, then make an appropriate management plan with a reduction in unnecessary use of imaging and inappropriate referrals. I also think that for the patient there must be a significant reduction in time to treatment - particularly when trainees have the confidence to initiate basic treatment themselves without the need for referral or to explain the benefits of a conservative approach.
  In terms of training, the days I spent in Fordingbridge were probably the most efficient as a learning experience of all rotations I have done at any point in my medical training and I would recommend it as highly as A&E.

KEY ELEMENTS OF MSK TRAINING FOR THE FUTURE

- Integrated multi-professional approach with teachers drawn from
  - Tier 2 services – doctors, physiotherapists, podiatrists, occupational therapists
  - Rheumatology – doctors, nurse specialists
  - Orthopaedics – surgeons, ESPs, nurse specialists
  - Pain services – doctors, psychologists, physiotherapists, nurse specialists
  - Sports medicine
  - General practice – some specialists within practices and need more GPs in GPSI role
- Enthusiastic teachers able to teach with simplicity and consistency
- A simplified curriculum with emphasis on common conditions and simplified schema for diagnosis and management