Medicolegal neglect? The case for physical activity promotion and Exercise Medicine

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INTRODUCTION

Whether measured subjectively or objectively, a large proportion of the population are living sedentary and physically inactive lives. This should be a major public health focus given the overwhelming evidence demonstrating that physical inactivity increases an individual’s risk for all-cause mortality and may be one of the leading causes of non-communicable chronic disease in the world, responsible for about 60% of worldwide deaths and probably more in developed countries.

Pandemic levels of physical inactivity result in a huge burden of unhealthy consequences within populations and for society, across all socioeconomic classes, all ethnicities and phenotypes.

However, attempts to explain the precise causes of chronic diseases and resultant deaths, for each individual, are very difficult. We are all exposed to multiple risk factors in variable quantities throughout our lives and, currently, these are virtually impossible to measure. Consequently, despite our remarkable growth in the medical field, explanations for precise causes of death remain speculative. To attribute causal status of risk factors for non-communicable disease is fraught with difficulty both clinically and medicolegally. For example, it is baffling that despite scientific progress since Richard Doll’s landmark findings 60 years ago, strongly linking smoking with lung cancer, the causation of smoking and lung cancer has still not been upheld in a court of law.

DUTY OF CARE

Duty of care is a legal obligation imposed on a doctor requiring, via the Bolam test, that their actions conform to those of a responsible body of professional opinion, even if others have a different opinion. More recently, the Bolitho v City and Hackney Health Authority case, entitled a judge to choose between two bodies of expert opinion and reject an opinion, which is ‘logically indefensible’.

In the UK, duty of care, in the form of National Institute for Health and Clinical Excellence and Royal College guidelines, currently represents an evidence-based responsible body of professional opinion relating to clinical care. Medical ethics, including patient autonomy, non-maleficence, beneficence and informed consent, guide our medical care, when guidelines are not always appropriately applied. Medical defence unions providing medical indemnity repeatedly recommend that our professional and clinical decisions be documented in medical records and note keeping, including those situations when guidelines are not suitable.

Numerous responsible bodies of professional opinion have recognised the extensive evidence base, cost-effectiveness and importance of physical activity promotion as a primary prevention and secondary treatment for various diseases. Physical activity promotion features in 39 national guidelines (table 1), even excluding physical activity-specific guidelines. On this basis, if a doctor managing a patient with any of these diseases has not followed these guidelines and advised or signposted appropriately on physical activity, then it is possible that medical negligence has ensued. Furthermore, would it be ‘logically indefensible’ for doctors not to promote physical activity for these patients, regardless of their personal opinions and learning needs?

Given the technology and functionality of primary care computerised medical records, it would be relatively cheap and simple to embed such recommendations within standard note keeping templates to help guide practitioners through the forgotten and fundamental basis of these guidelines, ensure medicolegal defensibility, should the need arise, and reduce the potential risk of medical-negligence proceedings.

Critics will argue that physical activity promotion is a lifestyle choice, however, so are smoking and alcohol consumption and yet these are medically accepted risk factors worthy of our clinical behaviour change efforts and consultation time. In many countries around the world, exercise and tailored physical activity are used by trained Sport and Exercise Medicine (SEM) specialists working within multidisciplinary teams, to both treat and prevent various chronic diseases. Unfortunately, in the UK, there are many patients with chronic diseases, risk factors and comorbidities, who are essentially excluded from physical activity. Their attending doctors invariably lack the knowledge to provide them with necessary physical activity and behaviour change advice (or exercise prescription), are fearful of perceived physical activity risks and resulting litigation, or cannot access specialist National Health Service (NHS) SEM services, despite the existence of an emerging trained specialist SEM workforce seeking NHS employment. Ironically, these patients stand to gain the most from intervention (as does the NHS), yet remain unlikely to receive this advice, being advised to rest, risking further health and well-being detriment.

The responsibility for delivering Exercise Medicine in the UK is left in the hands of doctors who do not understand the basic science behind physical activity, benefits, risks, doses or methods to change complex physical inactivity behaviours. Why can we rightly refer to a dietitian for assistance with disordered eating habits and still not refer to an SEM specialist on the NHS for specialist Exercise Medicine care, when appropriate?

AN INSTITUTIONAL AND EDUCATIONAL PROBLEM

General Medical Council (GMC) guidance on ‘Good Medical Practice’ suggests that doctors should ‘protect and promote the health of patients and the public’. Yet physical activity promotion remains un-rewarded in primary care. Exercise Medicine is not on the core curriculum of many medical schools and most doctors are not trained to deliver physical activity promotion and behaviour change.

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| Guideline | Physical activity recommendation |
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| **Gastrointestinal** | |
| 1. NICE (2010) | Constipation in children and young people: diagnosis and management of idiopathic childhood constipation. Advise daily physical activity tailored as a part of ongoing maintenance. |
| 2. NICE (2008) | Diagnosis and management of irritable bowel syndrome (IBS) in primary care. Give information explaining the importance of self-help of IBS, including physical activity. |
| 3. NICE (2004) | Dyspepsia: management of dyspepsia in adults in primary care. If no alarm signs and if not on drug with dyspeptic side effects, then offer simple lifestyle advice including weight reduction (ie, physical activity and diet). |
| 4. Primary Care Society for Gastroenterology (2006) | The management of adults with coeliac disease in primary care. For osteoporosis risk and prevention recommend regular physical activity at annual review. |
| 5. British Society of Gastroenterology (2007) | Guidelines for osteoporosis in inflammatory bowel disease and coeliac disease. All patients should be advised to undertake regular weight-bearing exercise (including walking, using stairs, housework and gardening). |
| **Cardiovascular** | |
| 6. NICE (2008, revised 2010) | Lipid modification: cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease (CVD). People at high risk of or with CVD should be advised to exercise 30 min a day, of at least moderate intensity, at least 5 days a week, in line with national guidance for the general population. People who are unable to perform moderate-intensity physical activity at least 5 days a week because of comorbidity, medical conditions or personal circumstances should be encouraged to exercise at their maximum safe capacity. Recommended types of physical activity include those that can be incorporated into everyday life, such as brisk walking, using stairs and cycling. People should be advised that bouts of physical activity of 10 min or more accumulated throughout the day are as effective as longer sessions. Advice about physical activity should take into account the person’s needs, preferences and circumstances. Goals should be agreed and the person should be provided with written information about the benefits of activity and local opportunities to be active. |
| 7. NICE (2008) | Identification and management of familial hypercholesterolaemia. People at high risk of or with CVD should be advised to exercise 30 min a day, of at least moderate intensity, at least 5 days a week, in line with national guidance for the general population. People who are unable to perform moderate-intensity physical activity at least 5 days a week because of comorbidity, medical conditions or personal circumstances should be encouraged to exercise at their maximum safe capacity. Recommended types of physical activity include those that can be incorporated into everyday life, such as brisk walking, using stairs and cycling. People should be advised that bouts of physical activity of 10 min or more accumulated throughout the day are as effective as longer sessions. Advice about physical activity should take into account the person’s needs, preferences and circumstances. Goals should be agreed and the person should be provided with written information about the benefits of activity and local opportunities to be active. |
| 8. NICE (2006) | Hypertension: management of hypertension in adults in primary care. Ascertain patients’ diet and exercise patterns because a healthy diet and regular exercise can reduce blood pressure. Offer appropriate guidance and written or audiovisual materials to promote lifestyle changes. |
| 9. NICE (2007) | Myocardial infarction (MI): secondary prevention in primary and secondary care for patients following an MI. Patients should be advised to undertake regular physical activity sufficient to increase exercise capacity. Patients should be advised to be physically active for 20–30 min a day to the point of slight breathlessness. Patients who are not achieving this should be advised to increase their activity in a gradual step-by-step way, aiming to increase their exercise capacity. They should start at a level that is comfortable, and increase the duration and intensity as they gain fitness. |
| 10. NICE (2006, revised 2010) | Obesity: guidance on prevention, identification, assessment and management of overweight and obesity in adults and children. Weight management programmes should include behaviour change strategies to increase physical activity and decrease inactivity. Interventions in children should address lifestyle within the family and social settings. If a child, family or adult are unwilling to change, give them information about the benefits of increased physical activity, losing weight and healthy eating. Ask about their related activity levels and beliefs. |
| 11. British Cardiac Society, British Hypertension Society, Diabetes UK, HEART UK, Primary Care Cardiovascular Society, The StROKE Association (2005) | Joint British Societies guidelines on the prevention of cardiovascular disease in clinical practice. Discuss lifestyle targets to increase aerobic exercise. |
| 12. Guidelines (2010) | Consensus guideline for the management of symptomatic stable angina in primary care. Before a patient is referred for assessment by secondary care, it is important to give lifestyle advice including physical activity. |
| 13. Guidelines (2010) | Consensus guideline on reducing cardiovascular events and pancreatitis through the effective management of triglycerides. The management of hypertriglyceridaemia is multifaceted, including a combination of lifestyle changes (including physical activity), risk factor modification and drug therapy. |
Table 1 Continued

| Guideline                                                                 | Physical activity recommendation                                                                 |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Respiratory                                                                |                                                                                                   |
| 14 NICE (2004, updated 2010)                                              | Pulmonary rehabilitation should be made available to all appropriate people with COPD including those who have had a recent hospitalisation for an acute exacerbation. Pulmonary rehabilitation should be offered to all patients who consider themselves functionally disabled by COPD (usually MRC grade 3 and above). Pulmonary rehabilitation is not suitable for patients who are unable to walk, have unstable angina or who have had a recent MI. The rehabilitation process should incorporate a programme of physical training, disease education, nutritional, psychological and behavioural intervention. Patients should be made aware of the benefits of pulmonary rehabilitation and the commitment required to gain these benefits. |
| The British Thoracic Society and Scottish Intercollegiate Guidelines Network (2008, revised 2009) Central nervous system | British guideline on the management of asthma: a national clinical guideline                           |
| 15 NICE (2007)                                                            | Physical training improves indices of cardiopulmonary efficiency and should be seen as part of a general approach to improve lifestyle and rehabilitation in asthma, with appropriate precautions advised about exercise-induced asthma. |
| 16 NICE (2006)                                                            | Chronic fatigue syndrome/myalgic encephalomyelitis (CFS/ME) or encephalopathy: diagnosis and management of CFS/ME in adults and children                                                                 |
| 17 NICE (2006)                                                            | For the secondary prevention of dementia, vascular and other modifiable risk factors (e.g., smoking, excessive alcohol consumption, obesity, diabetes, hypertension and raised cholesterol) should be reviewed in people with dementia, and if appropriate, treated (i.e., includes physical activity from obesity, hypertension, diabetes and cholesterol guidelines, when appropriate). |
| 18 NICE (2006)                                                            | Parkinson’s disease: diagnosis and management in primary and secondary care                        |
| 19 NICE (2009)                                                            | Schizophrenia: core interventions in the treatment and management of schizophrenia in adults and secondary care |
| 20 NICE (update 2009)                                                     | Depression: the treatment and management of depression in adults                                    |
| 21 NICE (2009)                                                            | Depression in adults with a chronic physical health problem: treatment and management                |
| 22 NICE (2006)                                                            | Bipolar disorder: the management of bipolar disorder in adults, children and adolescents, in primary and secondary care |
| 23 NICE (2009)                                                            | Type II diabetes: the management of type II diabetes (update)                                      |
| 24 Diabetes UK (2005)                                                     | Recommendations for the provision of services in primary care for people with diabetes               |

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| Urology | Physical activity recommendation |
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| 25 NICE (2010) | The management of lower urinary tract symptoms (LUTS) in men: Offer men with LUTS suggestive of overactive bladder supervised bladder training, advice on fluid intake and lifestyle advice (i.e., including physical activity) |
| 26 NICE (2006) | Urinary incontinence (UI): the management of UI in women: Women with UI or overactive bladder syndrome who have a BMI greater than 30 should be advised to lose weight (i.e., including physical activity) |
| 27 NICE (2008) | Chronic kidney disease (CKD): early identification and management of CKD in adults in primary and secondary care: Encourage people with CKD to take exercise, achieve a healthy weight and stop smoking |
| 28 British Society for Sexual Medicine (2009) | Guidelines of the management of erectile dysfunction (ED): Lifestyle modifications can greatly reduce the risk of ED, and should accompany any specific pharmacotherapy or psychological therapy. The potential advantages of lifestyle changes may be particularly pronounced in those with psychogenic ED, but patients with serious medical illnesses such as diabetes may also benefit from these changes, for example, weight loss (i.e., diet and physical activity) |
| 29 British Association of Urological Surgeons (2004) | Primary care management of male LUTS: Not all patients require treatment, and primary care management should include reassurance, watchful waiting, advice on lifestyle (i.e., including physical activity) and a review of their current medication |
| Obstetrics and gynaecology | |
| 30 PCOS UK (2006) | Diagnosis and management of polycystic ovary syndrome (PCOS): An increase in physical activity is essential, preferably as part of the daily routine. 30 min/day of brisk exercise is encouraged to maintain health, but to lose weight, or sustain weight loss, 60–90 min/day is recommended. Concurrent behavioural therapy improves the chances of success of any method of weight loss |
| 31 Royal College of Obstetricians and Gynaecologists (2007) | Long-term consequences of PCOS: Women diagnosed with PCOS should be advised regarding weight loss through diet and exercise |
| 32 Royal College of Obstetricians and Gynaecologists (2007) | Management of premenstrual syndrome: General advice about exercise, diet and stress reduction should be considered before starting treatment |
| 33 National Association for Premenstrual Syndrome (2003) | Treatment guidelines for premenstrual syndrome: All sufferers benefit from simple advice related to dietary changes, exercise, relaxation, stress avoidance and lifestyle modification |
| Musculoskeletal | |
| 34 NICE (2008) | Osteoarthritis: the care and management of osteoarthritis in adults: Exercise should be a core treatment for people with osteoarthritis, irrespective of age, comorbidity, pain severity or disability. Exercise should include local muscle strengthening and general aerobic fitness |
| 35 NICE (2009) | Low back pain: early management of persistent non-specific low back pain: Advise people to stay physically active and exercise |
| 36 SIGN (2003) | Management of osteoporosis: Everyone with osteoporosis will benefit from a good calcium intake and weight-bearing exercise. All healthcare professionals should encourage regular exercise, such as walking, to promote good bone and general health. High intensity strength training is recommended as part of a management strategy for osteoporosis. Low impact weight-bearing exercise is recommended as part of a management strategy for osteoporosis |
| Other | |
| 37 British Lymphology Society (2009) | Strategy for lymphoedema care: Maintenance therapy includes a programme of exercise and movement to maximise lymph drainage |
| 38 NICE (2004) | Falls: the assessment and prevention of falls in older people: Strength and balance training is recommended. Those most likely to benefit are older community-dwelling people with a history of recurrent falls and/or balance and gait deficit. A muscle-strengthening and balance programme should be offered. This should be individually prescribed and monitored by an appropriately trained professional |
Regulatory authorities, such as the GMC, are now responsible for standards of medical education, in a position to focus future medical practice and ensure that preventive medicine and wellness promotion feature as highly as treatment of illness in the future. The GMC regulates undergraduate medical education and, regrettably, physical activity does not feature as a curricula requirement (Tomorrow’s Doctors 2003 and 2009). In addition, it is not specifically covered in GMC medical school quality assurance reviews. The GMC, like doctors, may have a responsibility and duty of care to the public and their future members to review medical school curricula requirements relating to the promotion of health and prevention of disease with greater emphasis and guidance for physical activity education. Only then, will future doctors be optimally educated to deliver behaviour and lifestyle change for the prevention and treatment of illness, which are embedded within ever-increasing guidelines.

UK PUBLIC HEALTH STRATEGY

In the UK NHS, the introduction of the Responsibility Deal and GP commissioning, will probably place more health strategy decisions in the hands of corporate stakeholders and ‘willing providers’. Hidden agendas, such as profitability, may influence important public health rationing decisions and perceived unprofitable physical activity promotion and Exercise Medicine may well continue to suffer. Unfortunately, very few private stakeholders stand to benefit from better population health, which, worryingly, means that corporate agendas could direct national health strategies and leave Exercise Medicine largely aspirational and marginalised. In brief, for the current evidence base to be translated into commissioned NHS Exercise Medicine services in the UK, there is an urgent need for strong evidence to demonstrate cost-effectiveness, improved patient care pathways and outcomes for such services.

SUMMARY

Medical science has shown that low cardiorespiratory fitness (resulting from sedentary behaviour) is one of, if not, the most important risk factors for all-cause mortality,13 yet clinical practice, medical education and public health strategy continue to focus on all other risk factors except sedentary behaviour. Physical activity promotion is embedded within a large number of ever-increasing clinical guidelines with strong supporting evidence, both medical and cost-effective, delivering positive clinical messages and medicolegal responsibility to healthcare practitioners.

Is it possible that there may be a time when a lawyer cross examines a doctor in the witness stand, asking why they did not address their sick or dead patients’ physical inactivity, citing clinical guidelines, because it is known to be one of the highest modifiable risk factors for morbidity and mortality? Physical activity promotion is one of the first treatment recommendations in numerous clinical guidelines with a good reason and should no longer be medically neglected.

Physical activity failings are institutionally embedded within our environment, medical practice, education and culture. The public are being led down on physical activity promotion, treatment choices (eg, Exercise Medicine), preventive medicine, the sedentary environment, corporate influences, a lack of physically active medical role models and failed by a lack of funding for physical activity and inactivity research. All resulting in between approximately 27–59 million14 people in the UK alone, when measured subjectively and objectively, respectively,15 literally sitting in a pre-disease or dis ease state caused by physical inactivity – probably the biggest silent killer of our times.

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