In ‘westernised’ cultures lifestyle related illnesses continue to be the major source of morbidity and mortality. Patterns of obesity, inactivity, drug use and mental health are far from encouraging and the long term impact of these determinants of health may be far greater than expected.

Initiatives instigated by health promotion organisations make a significant contribution to reversing this trend, but for these initiatives to be effective they need to be targeted at, and reinforced by, a number of sectors in the health care community from policy makers to individual therapists and consumer groups. The adequate training and education of general practitioners and other primary health care professionals is an obvious prerequisite for such initiatives to be effective.

For lifestyle interventions to be optimally effective a structured and systematic approach to dealing with a range of relevant variables needs to be used. This helps the planning, implementation and monitoring of lifestyle and health care plans.

The ESSENCE model

The ESSENCE model (Figure 1) forms a useful structure upon which educational, preventive and therapeutic approaches can be built, and embraces and gives further structure to the bio-psycho-social and environmental models. It can be adapted for any patient as well as population based interventions. Each factor is related to the others and builds synergistically. In this article, cardiovascular disease and multiple sclerosis are used as examples.

Education

Education, in its broadest sense, is at the very core of what it means to be a doctor. No condition can be adequately treated without educating the patient or their carers about relevant aspects of their condition and its management. Education includes:

- knowledge about the condition and its management. Knowledge improves cost effectiveness, adjustment to the illness, perceived self competence and compliance, and decreases the use of medical services;
- information on the effects of lifestyle factors on health including reducing or ceasing harmful behaviours (eg. smoking, alcohol) and promoting behaviours that can positively impact upon illness progression and coping.

However, behaviour change and self mastery strategies are vital to activate health information. Goal setting strategies such as the SAME model (Specific, Achievable, Measurable and Enjoyable goals) need to be incorporated into the education process.
Clinical practice: The ESSENCE of health care

For example, rather than, ‘I should exercise more’, the patient would be more likely to benefit from a goal such as, ‘I will aim to walk 20 minutes a day with a friend four times a week’. The person can gauge their progress with the doctor in future consultations. Simple information about the ill effects of various cardiac risk factors has little effect on reducing cardiac risk. When information is supported by strategies that improve ‘autonomy’ such as mindfulness based stress management and motivational strategies, information can be acted upon and health benefits follow.2

Stress management

In the ESSENCE model, ‘stress’ covers mental health generally. In Ornish’s lifestyle program for heart disease, stress management was the vital factor to ensure all the others.3 In his program, ‘stress management’ included group support, meditation, greater emotional intelligence, and simple yoga exercises. We know that making healthy lifestyle change while stressed or depressed is difficult, if not impossible. Mental health has a profound and direct effect upon physical health and recovery from illness. Although in our minds and language we draw an imaginary line below which a person has mental illness and above which they don’t, a wellness model acknowledges that health is a continuum. There would be few people, with or without mental illness, for whom better mental and emotional health is not important.

Depression is a major independent risk factor for cardiac disease.4 The addition of a comprehensive psychologically based stress management plan to conventional cardiac rehabilitation nearly halves the number of cardiac events.5

Spirituality

Spirituality is not necessarily being ‘religious’. It can be related to ‘meaning’, ‘purpose’, or ‘a belief in something greater than oneself’. Each individual will explore and express spirituality in a way relevant to themselves and their cultural background. The influence of spirituality on health is not always easy to determine, yet evidence shows it has an important role in the prevention and management of psychological and physical diseases.6,7 as well as helping one to cope, especially with chronic and life threatening disease.8 The search for meaning or spiritual and religious issues are noted to be protective against suicide attempts.9 It also seems that spirituality plays an important part in a medical student’s personal and professional development, learning to cope,10 and avoiding substance abuse.11

Many doctors may not feel that spirituality is the domain of the medical practitioner despite the fact that 80% of patients wish that doctors would discuss it with them.12 If doctors are to be open to spiritual and religious issues being an important part of the total approach to health care, then patient appropriate language, an attitude of cultural and religious tolerance, and appropriate referral sources are essential.

Exercise

Exercise in itself is a therapeutic tool and lack of exercise ranks second to smoking as a cause of disability and death in Australia.13 Regular exercise reduces all cause mortality,14 and mortality from heart disease.15 Exercise decreases disease specific mortality from osteoporosis, diabetes,16 and a range of cancers.17–19 Exercise also plays an important role in mental health in helping to raise self esteem, and prevent or treat depression and anxiety.20–21

Nutrition

Unhealthy nutrition and obesity is escalating in Australia. Encouraging healthy nutrition is more than providing guidelines about the amount of fat or salt in the diet. Food can be a powerful medicine. A deficient diet can also be a major source of illness and supplements are no replacement for healthy nutrition. There is much that can be offered when counselling someone about preventing or treating cardiovascular disease. Fish oils, for example, are as much medicinal as they are nutritional with benefits for triglyceride22 and VLDL profiles,23 prevention of arrhythmias,24 reduction of blood pressure,25 reduced atherogenesis,26 and antithrombotic and antiplatelet activity. A person with hypercholesterolaemia can be given specific advice to lower saturated fats, increase unsaturated fats, increase fibre, and to eat specific foods such as apples,27 prunes,28 and avocados.29 Ginger,30 fish oils,31 and onion and garlic,32 have been found to have beneficial effects upon platelet aggregation.

Connectedness

Connectedness, or social support, is vitally important at any age or situation in life and the GP plays a significant part in providing professional and emotional support as well as encouraging a patient’s seeking of social supports. For example, connectedness at home and school are particularly important for adolescents in being protective against comorbidities such as depression, suicide, drug and alcohol abuse, teen pregnancy, crime and violence.33 The presence of ‘functional relationships’ is associated with far greater recovery from depression. Social marginality has been shown to predispose to heart disease, cancer, depression, hypertension, arthritis, schizophrenia, tuberculosis and overall mortality.34 With regard to heart disease, socioeconomic and occupational factors are independent risk factors.35 and in a person with well established heart disease, their social context has a profound effect on recovery. There is a four-fold increase in death rate following acute myocardial infarction (AMI) if the person is socially isolated and experienced high levels of stress.36 Those aged over 65 years were three times more likely to die post-AMI if they had poor social support as measured by the simple question, ‘Can you count on anyone to provide you with emotional support (talking over problems or helping you to make a difficult decision)?’37
Environment
Environment means more than avoiding pollution. It also includes the number and types of chemicals we expose ourselves to, domestically and occupationally. An overly noisy medical environment is associated with poorer health and higher stress. Regular moderate doses of sunlight help reduce the incidence of depression, heart disease, melanoma, multiple sclerosis, and osteoporosis. Air pollution contributes significantly to the risk of cardiovascular events including AMI and stroke. General practitioners can give practical advice on many environmental issues, as well as being community advocates, policy makers or researchers.

ESSENCE in practice
The ESSENCE model is designed to give a structure to lifestyle and holistic management (see Case history). Without structure it is often difficult for doctors and patients to set systematic, specific and achievable goals.

Case history – Helen
Helen is 37 years of age and has a history of MS. She recently moved from interstate with her husband and two children. She presents with a view to finding a new GP. You have an initial consultation and find that she has only mild permanent neurological impairment. She is interested in taking a holistic approach to her illness, so you make a future long consultation to discuss the ESSENCE approach. In the meantime, you research background information about lifestyle factors and MS to help inform yourself more fully. At the follow up consultation you discuss with Helen the following issues:

Education: this is provided by the following information and self help strategies and reading on the subject

Stress management: psychological health and how a person copes can have a significant impact upon the progression of MS. The basic principles of how stress affects immune function is discussed, and Helen expresses an interest in joining stress management classes

Spirituality: Helen states that although she is not overtly religious, spirituality and looking for meaning in dealing with her illness are important aspects of her being able to cope. Helen is encouraged to continue to explore this area of her life

Exercise: exercise can provide MS patients with increased general fitness and strength, reduced disability, improved mood and coping, less falls and fractures, social interaction, and improved immune function. An ‘exercise prescription’ is discussed and agreed on. Helen is encouraged to explore a hydrotherapy program and walking regularly

Nutrition: dietary interventions for the management of MS suggest a low fat diet (<20 g/day) results in lower death rates, disability and number of exacerbations. Supplements with omega-3 fatty acids are associated with significant reductions frequency and severity of relapses. Fish and flaxseed oils, high in omega-3 fatty acids, have significant anti-inflammatory properties, and fish oils are also an excellent source of vitamin D. Vitamin D enhances immune function and may reduce the incidence and progression of MS. Protective nutrients include vegetable protein, dietary and cereal fibre, vitamin C, thiamine, riboflavin, calcium and potassium. Helen will commence these dietary changes with some selected dietary supplements

Connectedness: stressful life events and unupportive social environments are associated with the onset and exacerbation of a variety of autoimmune diseases. Helen has support from her family, although moving interstate has been a source of potential concern. She is also going to the MS Society where she has found support

Environment: countries with lower levels of sunshine have significantly higher incidences of MS. The benefits of sunlight may be due to the direct effects of sunlight on immune function, melatonin levels, and vitamin D. Helen says that she has tended to avoid sunshine and will make an effort to get at least 20 minutes of sun exposure on a daily basis.

You make plans to review Helen’s progress in 1 month.

Often it is beneficial to work on one goal at a time, and as individual behaviours become established move on to the next goal. Many ESSENCE aspects, such as making healthy dietary changes, may need the support and engagement of family members.

Conclusion
Important future directions include rigorous, long term outcome research into the effects of holistic and lifestyle approaches into the prevention and management of chronic illnesses. Dean Ornish’s holistic approach to the management of heart disease serves as an excellent model. It may be that the greatest advances in future health care will not be to conquer another scientific mountain as in past centuries, but for us to learn to conquer and direct our own health behaviours.

Conflict of interest: none declared.

Acknowledgment
Thanks to Professor Marc Cohen and Jarrod Lewis in the evolution of the ESSENCE model.

References


