

To Do or Not to Do: Self-Management of Diabetes

Chronic illness has a profound effect on a person's life requiring daily management. Adjustments occur as the body ages and the disease progresses. Developments in medications and the organization of hospitals to serve acute episodes place greater emphasis on patient self-management in chronic illness. How a person adjusts their life in response to a chronic illness and effectively self manage is not well understood. There are many factors that influence self-management, including the particular disease, patient education, psycho-social adjustment, and individual beliefs around health and self-regulation. How people manage their health, including their illness, their behaviours, and their daily practices is complex. Personal habits result from life's history. A chronic illness provides an excellent opportunity to study self-management.

Compliance is the extent a patient behaves according to doctors instruction including the taking of medication, the following of diets, and the adoption of other life-style changes. The term 'compliance' was first introduced in 1974, but 'non-adherence' is now favoured for its less authoritarian tone. Compliance and adherence inherently relate to people who suffer a chronic disease. Those with acute episodes of disease or ill-health invariably play a passive role in their treatment. However, a patient with a chronic condition is required to play an active role in their treatment. In a review of noncompliance it was found between 38-75% of patients do not follow doctor's orders.

Understanding how people self-manage may explain the reason why people prefer tasks that are more pleasant in the short term and find changing daily habits on the promise of future benefits difficult.

A patient's thoughts about their health and their illness is important in understanding adherence and self-management practices. How a person thinks effects personal practices, decision-making, and use of health care services. How a person's identity changes in response to a diagnosis offers another understanding. How people deal with their own feelings and the feelings of others as to why they have been diagnosed with a chronic illness can change the way they view themselves. It can also change their sense of happiness and hope. These personal changes explain how individuals understand their situation and how they self-manage.

Diabetes Mellitus is a chronic endocrine disease diagnosed when the blood contains too much glucose (hyperglycaemia). There are two types of diabetes. Type 1 accounts for approximately 20% of diagnoses and occurs when the pancreas fails to produce insulin. Type 2, the focus of this study, accounts for approximately 80% of diagnoses and is associated with aging or lifestyle and occurs when the insulin produced is either

insufficient or ineffectively used. The worldwide prevalence of diabetes mellitus is approximately 2.7%. This is expected to double by 2030. In 2004, 3.5% of the Australian population was diagnosed with diabetes, up from 2.4% in 1995. Diabetes is the most frequently diagnosed chronic disease and for every known case of diabetes there is one undiagnosed case. Approximately 16.5% of Australian adults also have a condition associated with developing Type 2 diabetes. This means 1 in 4 adult Australians have abnormal glucose levels. As the population ages, becomes more inactive, and more likely to be over-weight the number of people with Type 2 diabetes is expected to rise.

Diabetes is known to cause damage to the heart, blood vessels, eyes, kidneys, and nerves resulting in heart disease, stroke, neuropathy, retinopathy, kidney disease, and limb amputation.

Diabetes and peripheral vascular disease (neuropathy) are the leading cause of lower limb amputation. The incidence of neuropathy in diabetics is between 42-70% and is caused by the immunological environment of high glucose. Neuropathy causes loss of sensation, gait deformities and blood flow irregularity. It is present in 82% of diabetics who also have foot wounds. The incidence of lower-limb amputation is 200-300 per 100,000 in the diabetic population compared with 7 per 100,000 in the general population.

Lower limb amputation results in issues to do with loss, not only the limb itself but also what it represents in terms of completeness, mobility, and independence. Although the use of prosthesis will return most prior function, it is not without its complications in terms of self-management. Optimal self-management is complicated considering amputees are more likely to get depressed and feel anxious; experience pain; and feel their health is poorer. In addition, the fit of the prosthesis can also become an issue with care needed to avoid blisters, sores and rashes on the residual limb.

These issues complicate daily self management.

1. Impaired Glucose Tolerance (IGT) and Impaired Fasting Glycaemia (IFG)

Miss Nicola Blaxill is undertaking a short research project as part of her 4th year in psychology. The project is looking at compliance in the self-management of diabetics who are also amputees. For more information please contact Nicola directly on nrbla2@student.monash.edu or 0402 497 539.



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