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Cost-benefit analysis of dietary treatment

English summary

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Summary

Treatment by the dietitian has various social benefits. The health of the patient (and his family) improves, such that costs of health care can be avoided and the production of the patient increases. The treatment of patients with obesity and obesity-related diseases creates social benefits of € 0.5 to € 2.3 billion over a period of five years. For every € 1, - spend on dietary counseling of these patients, society gets a net € 14,- to € 63, - in return: € 56, - in terms of improved health, € 3, - net savings in total health care costs and € 4, - in terms of productivity gains.

Motivation for this report

Although the positive effects of dietary advice are well described in the scientific literature, the total (monetary) benefits of a specialized dietary treatment have not yet been calculated. Benefits can take the form of a higher quality of life of patients, fewer hospitalizations, lower costs of medications and a higher productivity. The Dutch Association of Dietitians therefore asked SEO Economic Research to calculate the social costs and benefits of treatment by the dietitian. Benefits are calculated for the group of patients who are not only overweight but also suffer from diabetes, a high blood pressure (hypertension), and/or high cholesterol levels (hypercholesterolemia/hyperlipidemia).

Care provided by the dietitian

Care for patients with (multiple) medical conditions

The medical diagnoses of the patients treated by the dietitian vary widely: from underweight to overweight and from cancer to COPD. The needs of the patients of the dietitian are often complex: the majority of patients who were treated by a dietitian in 2010 have more than one medical or dietetic diagnosis.

The dietary treatment: focus on the individual and focused on self-management

An important feature of the dietary treatment is that the dietitian considers the personal situation of the individual. The dietitian sets achievable goals, such that patients are better motivated to adapt their eating behaviour in the long run (Dalle et al 2005; Provencher et al 2007; Teixeira et al 2004). Another feature of the treatment is that the dietitian strives for a situation in which the patient can make informed (food related) decisions themselves. The treatment comprises more than just giving advice about how to choose and eat healthy products.

Treatment by the dietitian cannot be substituted by advice from other careproviders

Advice from a general practitioner does not provide a good alternative for treatment by the dietitian: GPs say they lack the time and knowledge to provide patients with the appropriate dietary advice. In addition, several studies show that treatment by the dietitian is more effective (in terms of weight loss and a decrease in the cholesterol level) than care provided by the GP. Advice from a so-called 'weight consultant' or participation in a support group such as weight watchers only provides an alternative for people who are moderately overweight, but are not

diagnosed with other risk factors or comorbidities such as hypertension, hypercholesterolemia or diabetes.

Effects of treatment by the dietitian

Increase in physical health

As a result of treatment by the dietitian, the physical health of the patient improves. On average, patients lose 4-6 kilos, 12 months after start of treatment. At the end of treatment, patients have a lower blood pressure, lower cholesterol levels and a lower blood glucose level.

Increase in mental health

A dietary treatment by a dietitian leads to an increase in the mental health of the patient. The increase in mental health can have various causes: the dietitian contributes to an increase in the mental health of the patient directly by paying attention to the patient. In addition, following weight loss and better physical health, social and emotional problems of the patient decline.

Prevention of medical conditions

A dietary treatment ensures that fewer people develop diabetes. A relatively small weight loss of five percent of the body weight is associated with a reduction in blood pressure and a reduction of cholesterol levels. Because a diet can prevent medical conditions (or delay the start of a medical condition), the mortality of patients is considerably lower ten years after being treated by the dietitian.

Benefits of treatment by a dietitian

Higher quality of life

As a dietary treatment causes the health of the patient to improve, the patient experiences a higher quality of life. In some cases the family of the patient also benefits: for example, because the whole family eats healthier or because a patient with gestational diabetes gets advice on proper nutrition for the infant.

Savings in health care costs

The increase in quality of life of the patient and his family is not the only benefit of a dietary treatment: health costs for hospital care and medication are avoided. Because the savings in health care costs are higher than the cost of the dietary treatment, there is a net saving on the total costs of care. More specifically: every € 1, - spent on a dietary treatment saves € 4, - in terms of other health care costs (hospitalization, medication). Treatment by the dietitian more than pays for itself.

More productive workers

The employer of the patient benefits from a healthier worker: the productivity of the patient increases and the number of sick days decreases. These are also benefits from treatment by a dietitian.

Total net benefits € 0.5 - € 2.3 billion

Due to the low cost of dietary advice (€ 58, - per hour) and high benefits, every € 1, - spend on dietary counseling presents society with net benefits of € 14, - to € 63, - over a period of five years. In other cost-benefit studies conducted by SEO Economic Research € 1, - spend on a (medical) intervention approximately returns a net € 3, - to € 5, -. Dietary advice is very cost effective, especially compared to other medical treatments.

The total benefits of the treatment of patients with obesity and comorbidities such as diabetes, hypertension, hyperlipidaemia/hypercholesterolaemia are € 0.5 to € 2.3 billion. This means that the treatment of patients with obesity and comorbidities by the dietitian yields € 0.5 to € 2.3 billion over a period of five years.