Enhancing patient participation in patient-provider consultations

– A research proposal

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ABSTRACT

Non-adherence to treatment regimes is a topic of concern in the medical world, especially concerning the non-adherence of older patients with chronic diseases who require long-term therapy.

The Dutch Health Insurance Act of 2006 states that the patient has the responsibility to obtain optimal care. This means that patients are given more control over their own treatment. A disease where self-management plays a central role is type 2 diabetes (T2DM). In Europe, only 28% of patients treated for diabetes achieved good glycaemic control. Lifestyle factors are also important in the control of T2DM. However, underuse of recommended preventive care practices is common among T2DM patients, leading to unnecessarily suffering and high healthcare costs.

Elderly patients appear to be less assertive than younger patients during consultation. As a result, questions remain unanswered and patients may not know how to take the prescribed medication. Since good communication in healthcare is correlated with better patient adherence the elderly with T2DM need to be encouraged to participate more actively with respect to their medication and lifestyle behaviour.

The result may be visible in better interaction, better use of medication and higher patient satisfaction. Therefore, a tailored tool for older people with T2DM will be developed and tested in order to prepare them for an active role, starting with consultations with a practice nurse (PN) and pharmacist.
INTRODUCTION

‘Increasing the effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments.’

- Sabaté, 2003

The Dutch Health Insurance Act of 2006 states that the patient has the responsibility to obtain optimal care. This means that patients are given more control over their own treatment; he is expected to increasingly behave as an empowered healthcare consumer (VWS, 2012; Bensing et al., 2006). Therefore, the support of people in self-care is a vital element of any policy tackling the rising tide of chronic disease (Nolte & McKee, 2008), with governments and health service providers already engaged in initiatives to develop new ways of supporting people to manage their own health issues (Nolte & McKee, 2008).

However, for many people with type 2 diabetes (T2DM), self-management is challenging as they do not possess adequate knowledge, skills or motivation to initiate and maintain behaviours that can help them control their disease (Thoolen et al., 2008).
1. EPIDEMIOLOGY

T2DM is a chronic metabolic disease characterized by high blood glucose levels caused by a combination of insulin deficiency and insulin resistance (American Diabetes Association, 2004). In T2DM, long-term damage to blood vessels and nerve tissue often leads to macro and microvascular complications, such as cardiovascular disease, diabetic retinopathy, blindness, kidney disease and numbness and/or pain in the limbs.

The prevalence of diabetes (type 1 and type 2) in the Netherlands is 364 per 1,000 people over 65 years (Nivel, 2013), with 90% of all diabetes patients diagnosed with T2DM. Since the second half of the 1990s, the number of T2DM patients has rapidly increased (RIVM, 2013a). Taking into account the growth in and aging of the Dutch population, the prevalence of diabetes in the period 2011-2030 is expected to rise further.

T2DM is mainly treated in primary care, with most T2DM patients relying on their general practitioner (GP) as the main health care provider (HCP), who takes primary responsibility for their care (TherapietrouwMonitor, 2013). The treatment of patients with T2DM focuses on two elements: lifestyle behaviour and medication behaviour combined with self-monitoring. While a practise nurse (PN) usually discusses lifestyle factors with the patient, pharmacists currently have a major role in relation to medication-related issues.

2. ADHERENCE TO T2DM TREATMENT

A large-scale international review for the period 1948-1998 showed an average non-adherence rate of 25% (DiMatteo, 2004). In Europe, only 28% of patients treated for diabetes achieved good glycaemic control (Sabaté, 2003). However, lifestyle adherence is also an important factor in the control of T2DM. T2DM has increasingly become a disease where self-management plays a central role. Self-management can be defined as the active participation of patients in their treatment (Koch et al., 2004) to minimize the impact of chronic disease on their physical health and functioning, and to enable patients to cope with the psychological effects of the illness (Lorig & Holman, 1993).

Unfortunately, the patient does not translate the HCPs requirements automatically to effective self-management in daily life (Menon, 2002). In the United States, less than 2% of
T2DM patients fully realize the level of care recommended by the American Diabetes Association (Beckles et al., 1998). Patients indicate that they particularly have problems to stop smoking, lose weight, exercise and stick to a diet (Johnson, 1992). Self management support involves a patient-centred collaborative approach to care, promoting active patient involvement, education and empowerment (Goldstein, 2004).

Non-adherence can be considered a significant healthcare problem, especially for patients with chronic illnesses (Van den Brink-Muinen et al., 2004) because adherence is a crucial factor in the effectiveness of a therapy (DiMatteo, 2004). Clearly, if health systems were more effective in promoting adherence to self-management of diabetes, the human, social and economic benefits would be substantial. Improving adherence to T2DM therapy has been associated with a reduction in the reliance on the system (Ache et al., 2011; Hong & Kang, 2011; Lau & Nau, 2004; Balkrishnan et al., 2003), a reduction in healthcare costs (Sokol et al., 2005; Roebuck et al., 2011; Salas et al., 2009) and a lower mortality risk (Hong & Kang, 2011).

3. PATIENT- PROVIDER COMMUNICATION

In recent years, patients have asked fewer biomedical questions and expressed fewer concerns to their GP (Bensing et al., 2006). On average, they ask less than four questions during a consultation with an HCP. Topics such as the use of medication and medication adherence are neither frequently nor consistently addressed by patients and their HCPs in the consulting room (Vervloet et al., 2009). Moreover, the DAWN-study shows that T2DM patients have many concerns and questions which are almost never discussed with GPs (Peyrot et al., 2005). This can be attributed to both parties (Van Bijnen & Van Dulmen, 2010).

Shifts in physician behaviour may provide an explanation. Low patient participation may be explained by the assumption that patients, contrary to expectations, simply have not become active, independent and emancipated consumers when it comes to medical consultations (Bensing et al., 2006). Moreover, patients are not at their best when they are ill.

The results of the meta-analysis by Haskard-Zolnierek & DiMatteo (2009) also revealed differences between elderly subjects (65+) and other adults (45-65). Older people appeared to be less assertive than other patients and asked fewer questions. In addition, older people appeared less involved in the decisions of the GP compared to other age groups. They also obtained less
medical information. As a result, questions remained unanswered and this may lead patients to worry unnecessarily (Haskard-Zolnierek & DiMatteo, 2009).

The argument in the preceding section leads us to the conclusion that it is important to change how T2DM patients participate in consultations with their GP, giving them an active role, which presumably results in increased adherence. This will lead to positive health outcomes, namely a greater understanding of treatment, more satisfaction about both the visit and the doctor’s behaviour and less concern about the treatment decision and finally better adherence (Stevenson et al., 2004; Bultman & Svarstad, 2000).

4. INTERVENTIONS IMPROVING PARTICIPATION AND/OR ADHERENCE

Recent decades have seen many studies on interventions to improve patient participating during consultation and adherence, all of which are diverse in approach and scale. Van Dam et al. (2003) concluded that patient-focused interventions among people with T2DM were more effective than provider-focused solutions. However, the various patient-focused interventions barely differed in their effectiveness (Van Dam et al., 2003).

The application of internet-based health interventions to improve medication adherence – for example computer technologies that tailor health messages to the personal situation of the patient (eHealth) – is increasing. There are indications that computer-based tailored interventions can enhance adherence (Linn et al., 2013). The results of a recent meta-analysis have revealed that, compared to usual care, web-based tools improve blood glucose control among patients with diabetes (Angeles et al., 2011). Moreover, it appears that tailored interventions can also lead to better outcomes during both the acute stage and in follow-up treatment (Vergouwen et al., 2002).

In 1988, Greenfield et al. developed an intervention designed to increase the involvement of patients in medical decision-making. In a 20-minute session before a regular visit to a physician, a clinical assistant reviewed each experimental patient’s medical record with them, guided by a diabetes algorithm. Using systematic prompts, the assistant encouraged the patient to use the information gained to negotiate medical decisions with the doctor. This study confirmed that an
intervention increasing patient participation in medical care decisions can improve both blood sugar control and patient functioning in everyday life (Greenfield et al., 1988).

Almost two decades later, Williams et al. (2005) compared an active intervention to passive education for T2DM patients. The active intervention increased the active involvement of patients with T2DM in their visit to the practitioner, and this led to improved glycaemic control.

Thoolen et al. (2008) developed and evaluated a brief self-management course for patients who had recently been diagnosed with T2DM. This resulted in a significant improvement in terms of proactive coping, goal achievement and self-efficacy for the course participants compared with the control group.

Recently, Heinrich et al. (2013) also evaluated a web-based self-management education programme aimed at improving knowledge, encouraging active patient participation and providing supportive self-management tools for patients with T2DM. Their tool can improve knowledge and thereby has the potential to contribute to self-management.

Today, a number of countries appear to be developing or implementing systematic strategies to support the process of patient self-management, with such support recognized as an important element in chronic care (Goldstein, 2004). Nolte and McKee (2008) concluded that further tailoring of self-management support is needed to ensure that it meets the needs of different people.

5. FUTURE RESEARCH

There is a need for a tool for older people with T2DM that can prepare them for a more active role in dealing with their illness through medication and lifestyle, beginning with the consultation with their PN or pharmacist. Since patient-focussed, web-based, tailored tools appear to be effective, the enhancement of patient participation during the consultation and improved adherence to medication and lifestyle advices can be expected from such an application.

For the time being, the tool will be called ConsultHulp, and it will be made available in primary care in the Netherlands for T2DM patients, tailored to address self-perceived communication barriers, questions and needs, as well as the difficulties experienced with taking medication for a
chronic condition. The application will be made available in the waiting room of the general practice, with the patient using it prior to his visit to the PN. Where the intervention seems to be effective in relation to the PN consultation, it is of interest to determine whether it also influences the consultation at the pharmacist.

**Research question**

Can a computer-based tailored application enhance 65+ T2DM patients’ actual and perceived participation during a consultation with the PN or pharmacist in primary care in the Netherlands, and ultimately improve their adherence to treatment?

The next step will be a systematic literature review to determine effective components to improve patient participation and adherence.


Sokol MC, Mcguigan KA, Verbrugge RR & Epstein RS (2005) Impact of medication adherence on hospitalization risk and healthcare costs. Med Care 43(6):521-530


