Patient Education and Counseling 84 (2011) 10–15

Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pateducou

Provider Perspectives

Implementation of Motivational Interviewing in a diabetes care management initiative in the Netherlands

Yvonne J.L. van Eijk-Hustings [a,*], Lianne Daemen [a], Nicolaas C. Schaper [b], Hubertus J.M. Vrijhoef [a,c,d]

[a] Department of Integrated Care, Maastricht University Medical Centre, Maastricht, The Netherlands
[b] Department of Internal Medicine, Maastricht University Medical Centre, Maastricht, The Netherlands
[c] School for Public Health and Primary Care, The Netherlands
[d] Tilburg University, The Netherlands

ARTICLE INFO

Article history:
Received 25 November 2009
Received in revised form 11 June 2010
Accepted 12 June 2010

Keywords:
Diabetes mellitus
Care management
Life style
Motivational Interviewing
Implementation

ABSTRACT

Objective: Motivational Interviewing (MI) is a counseling approach to support behavioural change. The objective of the present study was to examine the uptake of MI in daily practice by health care professionals in a care management initiative for patients with diabetes in the region of Maastricht, the Netherlands.
Methods: MI was implemented by means of a training. Directly and six months after the training, the application of MI was measured objectively (MITI) and subjectively (questionnaire). In focus interviews, MI-trained professionals ($n = 10$) and MI untrained professionals ($n = 10$) were asked about facilitators and barriers for implementation. Additionally, data on patient characteristics ($n = 141$) were collected.
Results: Spirit of MI was present among professionals directly after the training and increased during follow-up. Mostly uncomplicated techniques were applied. Professionals stated the need for training and practice to be able to apply more complicated techniques.
Conclusion: The applicability of MI in daily practice was found feasible, with various degrees of uptake. Relevant conditions to further improve the implementation of MI in daily practice were identified.
Practice implications: In daily practice, a phased training in MI is recommended, with sufficient time and support by colleagues as essential conditions to profit most from the training sessions.

1. Introduction

1.1. General introduction

In the last decades, a growing insight in the needs of chronically ill has initiated changes in chronic care. Perhaps best known from an international perspective on chronic care improvement is the Chronic Care Model (CCM). It provides a framework for relevant interventions, directed to community and health systems aspects as well as patients and professionals aspects, aiming to improve outcomes and thus supporting these changes [1]. Redesign of health care delivery, more focus on patient empowerment and self-management combined with evidence based, protocol-directed interventions take place [2,3] and lead to a shift from acute, reactive care to planned, pro-active care for people with chronic conditions [4].

The focus on a pro-active approach demands specific skills of patients (e.g. self-management) and health care professionals (e.g. motivational skills) and therefore, results of interventions should not only focus on medical outcomes, like blood pressure or glycated haemoglobin concentration, but also on barriers and facilitators of implementation of these specific skills.

1.2. Diabetes care management

In the region of Maastricht, the Netherlands, the care for people with diabetes mellitus is organized in a care management initiative, in which patient-centred care is considered a quality dimension. Patient-centred care is defined as "the experience of transparency, individualization, recognition, respect, dignity and choice in all matters without exception, related to one's person, circumstances and relationships in healthcare" [5]. Consequently, patients are encouraged to self-management. Delivery of care and coordination of care is further supported by the introduction of an electronic, web-based patient record.

Care is carried out by a multidisciplinary team of primary and secondary health care professionals. The general practitioner (GP), supported by practice nurses and dieticians, is primarily responsible for the majority (85%) of the people with diabetes

* Corresponding author at: Department of Integrated Care, Maastricht University Medical Centre, Post-Box 5800, 6202 AZ Maastricht, The Netherlands.
Tel.: +31 43 3874426.
E-mail address: yvonne.eijk.hustings@mumc.nl (Y.J.L. van Eijk-Hustings).

0738-3991/$ – see front matter © 2010 Elsevier Ireland Ltd. All rights reserved.
doi:10.1016/j.pec.2010.06.016

type 2. A team of internist, endocrinologist, diabetes specialist nurse, dietician and ophthalmologist, employed by the Maastricht University Medical Centre (MUMC), is primarily responsible for people with diabetes type 1 and for people with diabetes type 2 in need for complex care. The team of the MUMC also has a consultative role for GPs in case of inter-current health problems in their patients. The involved health care professionals collaborate in an alliance (DIAMAND), responsible for the multidisciplinary protocols, patient allocation and quality of care [6].

Life style has an important impact on the course of diabetes. Life style interventions lead to improvement in glucose tolerance [7] and life style induced changes in insulin resistance are strongly related to fatty acid profiles [8]. One of the components to improve healthy life style is the behaviour of persons with diabetes. To support this, several methods are available with motivation being regarded as essential for all of them [9,10].

1.3. Motivational Interviewing

Motivational Interviewing (MI) is a directive, client-centred counseling style, designed to elicit behaviour change by helping people to explore, clarify and resolve ambivalence to this change [11]. Ambivalence is of main importance in the process of change. Assessment of advantages and disadvantages of current behaviour and intended behaviour is considered a key to change. Therefore, the counselor is intentionally directive in pursuing this goal [11,12]. In nature (the spirit), MI encourages people to identify their own attitudes and behaviour, related to the state of health, and to explore their barriers with regard to change, thus evoking intrinsic motivation. The counselor facilitates this process and supports the person in setting realistic targets for behavioural change [11]. Both client and counselor are equal partners in the process of change. Expressing empathy, developing discrepancy (increasing the difference between current and intended behaviour), moving with resistance, avoiding discussion and supporting personal effectiveness are basic principles of MI [12]. Necessary skills to apply these basic principles are [12]:

- ask open questions;
- summarize the elements of the conversation;
- support and confirm the client during the care process;
- elicit change talk;
- listen reflective.

The application of these skills facilitate to respond to change talk (discussing opportunities and expectations for change) and to resistance of the client [12].

1.4. Diabetes Motivational Interviewing Study Maastricht (DIMION)

MI has been applied in a variety of settings and on various client groups and yields positive results [13–15]. Also with regard to people with diabetes, MI positively influences treatment results [16–18]. However, it is not always clear what the intervention involves or how it is modified for a specific population. Furthermore, it is unclear how much training is needed for competent appliance of MI and how patient characteristics may influence the implementation of MI [19]. Therefore, the research issue addressed in this article was focussed on various facets of the process of implementation of MI in the diabetes care management initiative in Maastricht. Additionally, data on patient characteristics were collected to profile the population of diabetes patients in this initiative.

2. Patients and methods

2.1. Study population, design and intervention

A total of 35 practice nurses, diabetes specialist nurses and dieticians, involved in the diabetes care management initiative, was invited to participate in the study. In this descriptive study, use was made of a convenience sample of four practice nurses, eight diabetes specialist nurses and eight dieticians. These professionals were all interested in MI and willing to be trained. The sample was randomly split in an intervention group, to be trained in MI, and a reference group. The reference group was told that they were going to receive the training after finishing the study. The reference group was used to identify barriers for training and uptake of MI that could be attributed to the care management initiative (e.g. workload, job satisfaction), more than to MI itself. The researchers took care of an equal distribution of professions in the two groups.

The study started with the development of a training for health care professionals. Based on the results of a previous study [16,20], it was decided to offer an intensive training, over a six months period. The training was aimed at understanding the nature of MI, learning communication skills to apply MI and consolidating obtained behavioural change of the health care professionals. In two full days, a qualified trainer (CvN) educated the health care professionals from the intervention group concerning MI and trained them in its application. After six weeks they returned for another full day of training. In addition, over a period of four months, two sessions of two hours each of intervision were offered, two recorded conversations were evaluated and a part of one day coaching on the job took place. This additional support was offered by an experienced, but not yet qualified trainer (LD).

During the first weeks of the study both groups of professionals invited patients, who received planned regular consultations, to participate in this study. Inclusion criterion was a diagnosis of diabetes mellitus and because of expected problems with the questionnaires, the exclusion criterion was illiteracy. No further in- and exclusion criteria were formulated.

2.2. Data collection

2.2.1. Extent of implementation of MI

The uptake of MI was measured by investigating the applicability of MI by the health care professionals in the intervention group in two ways:

(a) Objectively, by using the Motivational Interviewing Treatment Integrity (MITI) Scale [21,22] version 2.0, explicitly aimed at measuring the extent to which MI is recognizable in a therapeutic consult. The MITI focuses exclusively on therapist functioning and is developed to evaluate his or her competence in MI [22]. The health care professionals in the intervention group were asked to audiotape two samples of consultations directly after the end of the entire training period of six months and another two samples six months thereafter. Two members of the project group (LD, MH) were trained by a qualified trainer (RB) in coding consultations according to the MITI. The coders assessed at random 20 min of each sample by making global assessments of empathy and overall MI spirit on a 7-point Likert scale and behaviour counts of specific MI adherent statements (e.g. ask permission to give advice) and MI non-adherent statements (e.g. give advice without permission), open and closed questions and simple and complex reflections. The percentage of time caregivers talk during consultations was calculated to support the global assessment of empathy and spirit.

The way results are presented is based on a previous study [16,20]. Against the background of the professionals and the