‘Aiming for the stars’—GPs’ dilemmas in the prevention of cardiovascular disease in type 2 diabetes patients: focus group interviews

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**Background.** Studies have revealed low adherence to guidelines for treatment of diabetes and cardiovascular risk factors.

**Objective.** To explore GPs’ experiences regarding treatment practice in type 2 diabetes with specific focus on the prevention of cardiovascular disease.

**Methods.** Fourteen experienced GPs from nine health care centres with group practices were interviewed in focus groups. The interviews were digitally recorded, transcribed verbatim and analysed by qualitative content analysis.

**Results.** The overall theme was ‘dilemmas’ in GPs’ treatment practice for type 2 diabetes patients. Five main dilemma categories were identified. First, the GPs were hesitant about labeling someone who feels healthy as ill. Second, regarding communicating a diabetes diagnosis and its consequences; should the patient be frightened or comforted? Third, the GPs experienced uncertainty in their role; were they to take responsibility for the care or not? Fourth, the GPs expressed a conflict between lifestyle changes and drug treatment. Fifth, the GPs described difficulties in integrating science into reality.

**Conclusions.** The five dilemmas in the GPs’ approach to diabetes patients and the treatment of their cardiovascular risk were related to the GPs’ professional role and communication with the patient. To consider these dilemmas in educational efforts is probably essential to achieve improved diabetes care and guideline adherence.

**Keywords.** Diabetes mellitus, family physicians, focus group interview, guideline adherence, primary health care.

**Introduction**

The most common life-threatening complication of type 2 diabetes is cardiovascular disease (CVD). Measures to prevent CVD have therefore been included in clinical practice guidelines (CPGs) on diabetes. In Sweden, type 2 diabetes patients are typically cared for by GPs and diabetes nurses in group practices. As in many other countries, local treatment practice in diabetes care is expected to be based upon national guidelines (Figure 1 can be found in the supplementary material online). Numerous studies from different countries, however, have revealed discrepancies between guidelines and treatment practice in diabetes care especially in the prevention of CVD.

Attitudes to and experiences of guidelines have been studied in order to understand problems with CPG adherence. A systematic review of 30 surveys in nine Western countries summarized that a majority of clinicians found CPGs useful, educational and likely to improve quality. Very positive attitudes towards guidelines for the treatment of diabetes in general practice were disclosed. However, a recent meta-synthesis of 12 qualitative studies from the UK, US, Canada and The Netherlands revealed concern for the individual patient’s needs coupled with scepticism about applying research findings to individuals as main barriers to CPG adherence.

Obstacles specific to adherence to CPGs for diabetes care in general practice have also been studied...
The above studies\(^3\)–\(^{12}\) where doctors’ opinions were included were carried out close to the introduction of the new CPGs and were not focused specifically on CVD prevention in diabetes care. Thus, our aim was to explore GPs’ experiences regarding treatment practice in type 2 diabetes with specific focus on the prevention of CVD.

**Methods**

Focus group method was used. We developed an interview guide in order to cover the topic and stimulate discussion (Table 1). The further development of the discussion was aimed at through open-ended questions, such as ‘Could you please elaborate on what you mean?’

We contacted health care centre superiors in the County of Västerbotten, Sweden, and asked for names of experienced GPs, both men and women, with type 2 diabetes patients within their practices in order to find suitable informants. In all, 42 GPs were invited. Fourteen GPs from nine different group practices chose to participate. Two GPs in one of the focus groups worked at the same practice, the others knew of each other but did not work together. Reasons for not participating were not asked for, but a majority spontaneously mentioned other engagements, meetings or being on leave, and two GPs explicitly declared that they did not want to be interviewed. One GP accepted participation in the study, but did not show up. The four focus groups consisted of three (male (M)/female (F) 1/2), three (M/F 3/0), three (M/F 1/2) and five (M/F 1/4) participants, respectively (Table 2). The interviews were conducted between January and May 2007.

The moderator, a registered nurse who has moderated several focus groups, introduced and led the discussions while the first author (EF) observed, took field notes and handled the technical equipment. The moderator encouraged all GPs to participate in the discussion and ensured that the questions in the interview guide were covered. The interviews lasted about one and a half hours and were recorded digitally and transcribed verbatim.

The transcribed interviews were analysed according to qualitative content analysis.\(^13\) After the first interview, it was decided that the interview guide was sufficient to serve the aim. When the interviews were completed, each author (EF, OR, EEJ) read the text and ‘units of meaning’ were identified. The process of analysis included both naive reading of the transcribed interviews to obtain a sense of the whole and interpretation of the latent content of the interviews. In a number of meetings between the authors, the findings emerging from the interviews were discussed and the units of meanings were coded and grouped into categories and theme. An example of coding and categorization is shown in Table 3. Categories are presented in the Results section and exemplified by citations from the GPs. Citations are marked with the number of the focus group interview (I–IV) and GP (individual capital letter, not initial). After conducting the fourth interview in our study, the analysis revealed no new categories and it was decided that saturation was fulfilled.

**Results**

The overall theme in the analysis of GPs’ thoughts and experiences was ‘dilemmas’ in clinical work with type 2 diabetes patients. Five dilemma categories were identified, in the following presented as subheadings.

To label someone that feels healthy as ill

One dilemma expressed by GPs in all groups was that health surveys and random blood glucose testing identify patients who feel healthy as having a chronic, potentially life-threatening, illness, i.e. type 2 diabetes.

\(\ldots\) they feel healthy when they come and then go home ill and the thing is to find a balance in that \(\ldots\) (III:I)

\(\ldots\) sometimes it’s like burdening them with diabetes, a disease, and then they become weighed down \(\ldots\) (IV:N)

The GPs were very much aware of the elevated risk of CVD and would also identify patients at high risk of CVD even without a diabetes diagnosis, i.e. obese patients, smokers and patients with hypertension, and expressed concern about the absence of action against these major health problems by the society. However, eye to eye, the task of putting a diabetes label on the subjectively healthy patient felt uncomfortable.

The dilemma also included how to motivate patients for lifestyle changes and/or medication, when they feel healthy. This was described in contrast to patients who see the doctor for symptoms or complications of their diabetes who were easier to treat.
... when they are ill in some way ... then they’re more open to information ... (I:C)

There were also some voices of dissent for whom labelling was not a dilemma. For instance, one GP clearly expressed positive feelings about meeting diabetes patients early in the course of their disease and being able to prevent and postpone complications. The GPs also gave examples from own experience of courses and training aiming at facilitating the communication with the diabetes patient. Some described having participated in education in cognitive attitude or motivating conversation including role play in cautiously positive terms.

**To frighten or comfort the patient**

The GPs described how communicating a diabetes diagnosis and its consequences was something that had to be dealt with carefully to keep a trustful contact with the patient. They discussed the need both to frighten and comfort the patient. Fright could be necessary so the patient would take the advice of the physician seriously. On the other hand, the GPs clearly understood diabetes as something close to a death sentence and wanted to spare the patient from this knowledge. The dilemma of comforting or frightening included uncertainty as to how much to tell the patient about the disease.

... yes, you have to frighten them ... a little ... just enough ... (I:C)

... portion the information in a way that won’t make the patient pull down the curtain and never come back ... (II:E)

However, measures to make the patient feel safe and secure and giving them hope taken in clinical practice were also described. These included easy access to the GP or diabetes nurse, patients’ self-testing and adjusting management according to values and diabetes education in tune with the individual patient.

**To take responsibility for the care or not**

There was ambivalence among the GPs concerning their role and responsibilities in diabetes care in relation to patients and co-workers such as diabetes nurses. Providing the diabetes patient with sufficient information enabling him/her to take necessary actions was regarded as the physician’s responsibility by the GPs. However, many GPs also said that the ultimate responsibility for the outcome of cardiovascular prevention lies within the patient himself/herself. Between these two extremes—the start and end point of the

**Table 1**  
**Thematic guide for focus group interviews**

- What is a good management of diabetes patients?
- What do you regard as most important in the encounter with diabetes patients? What does prevention in diabetes care mean in your opinion? What are the most important goals in the prevention in diabetes patients? What is most important to achieve?
- Who is responsible for preventive measures in your opinion? That is, how is responsibility distributed?
- What is necessary to succeed in preventing CVD in type 2 diabetes patients?
- What is your opinion on guidelines (national, local) for the prevention of CVD in clinical practice? How can they be used?
- What obstacles do you think exist in the realization of guidelines?
- In the best of worlds—what do you think is required to achieve better prevention of CVD?
- What would help to improve your work with diabetes patients?
- What would improve the patients’ situation?
- How do you know that you do a good job? What kind of feedback do you receive? What means of follow-up are there, for individual patients and for the whole group of diabetes patients?

**Table 2**  
**Characteristics of family physicians participating in the focus group interviews**

| Sex (M/F) | 6/8 |
| Age (median, range) | 54 (43–64) |
| Years since medical degree (median, range) | 24 (10–36) |
| Rural/urban practice (n) | 5/9 |
| Appointed diabetes responsibility (n) | 5 |

**Table 3**  
**Example of meaning units, codes, categories and theme**

<table>
<thead>
<tr>
<th>Meaning units</th>
<th>Codes</th>
<th>Category</th>
<th>Theme</th>
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<tr>
<td>to prevent the development of stroke and myocardial infarction good lipid values and lowered A1C and a good blood pressure and reduced risk factors the individual is naturally the basis and I don’t recognize the patient it’s more surprising that guidelines are so poorly followed pretty dramatic for someone who doesn’t regard himself as ill sometimes it’s like burden them with diabetes, a disease, and then they become weighed down</td>
<td>Treatment goals</td>
<td>To integrate science into reality</td>
<td>Dilemma</td>
</tr>
<tr>
<td></td>
<td>Questioning guidelines</td>
<td>Supporting guidelines</td>
<td>Diagnosis without symptoms</td>
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<td></td>
<td>Making the patient feel bad</td>
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course of diabetes care—the GPs would take different positions in relation to the patient. It was clear from the discussions that some GPs regarded themselves as responsible for the care and treatment of the patient and would intervene when necessary. They would act as active coaches and prescribe adequate medical treatment when needed to prevent cardiovascular complications. Others described their role as providing adequate information—then leaving it to the patient to decide whether to comply or not. The GP would accompany the patient along the road and provide counselling—act as sounding board—when contacted by the patient.

... we shall see to it that their multifactorial treatment works ... (III:H)

... because it’s [the diabetes disease] theirs [the patients'], they are the ones to treat it, not us ... (I:C)

Some GPs said that the diabetes care at their clinic depended on the diabetes nurse rather than on their own activities and would support the nurse when asked to do so. The diabetes nurses were described as well educated, having time for the patients and regularly participating in diabetes education. The nurse could be the one to keep track of the patient and suggest alterations in treatment.

... at the heart of things, however, is the diabetes nurse ... (I:B)

A conflict between lifestyle changes and drug treatment
The necessity of lifestyle changes in discussing the treatment of type 2 diabetes in order to avoid cardiovascular complications was stressed. Increased physical activity, diet, weight loss and smoking cessation were mentioned as important steps for the diabetes patient to take. In this, the GPs were ambivalent towards drug treatment early in the course of diabetes. They said that patients might refrain from making necessary changes in lifestyle if they were given the impression that drugs were an effective alternative.

... and it’s important that we don’t medicalize too much either ... (II:F)

During the course of diabetes, the GPs repeatedly dealt with test results diverging from treatment goals. Lifestyle changes were described as the optimal choice in this situation but finally, according to most GPs, the diabetes patient would have several pharmaceutical pills. In some GPs’ opinion, this was inevitable, though not desirable.

... but it’s not prevention if you think that it’s just diet and physical exercise ... if we don’t provide medical treatment for them ... (III:G)

... pills can’t solve anything ... (IV:J)

The GPs asked for collegial support, case discussions in the practice setting and consulting diabetes specialists at the hospital as means to improve treatment in difficult patients.

The interviews contained stories about exceptional patients, who changed their lifestyle in a way that altered their glucose tolerance to normal. These miraculous patients, who had followed their doctor’s orders in the letter, served as a relief. They seemed, on one hand, to support the GPs’ opinion of the importance of lifestyle changes also in other patients and, on the other, to support their hesitation about drug treatment.

... then I saw him one year later ... and he had lost ten kilos, stopped smoking, took walks every day, had changed his diet, didn’t need medication for his diabetes ... then I was taken aback; “but you told me to”, he said ... wow ... (I:B)

To integrate science into reality
In the focus groups, there was consensus; preventing CVD in diabetes patients by the treatment of lipids, blood pressure and glucose levels was important.

... to prevent them from getting a stroke and myocardial infarction ... (I:C)

... good lipids and lowered A1C and a good blood pressure and reduced risk factors ... (III:H)

However, different opinions on guidelines for type 2 diabetes were expressed. The very existence of guidelines was not openly questioned, but scepticism as well as strong beliefs in their beneficial effect was revealed.

... use these guidelines with reason, naturally ... (II:D)

... guidelines are very useful and it’s more surprising that adherence to guidelines is so poor in clinical care ... (II:F)

... You can never get stuck in a guideline and say that it should rule in any way because if it rules ... then I lose ... then I become a robot ... (III:G)

The need to individualize and adapt goals depending on which patient you are treating was strongly expressed in all groups. In this, great scepticism about specific treatment goals in guidelines was disclosed. In real life, the aim had to be adjusted to something more achievable. How to involve the patient in the decisions was not discussed. These clinical considerations were made by the GPs with the patients’ well-being in mind.

... I still think that clinical guidelines must imply that you aim for the stars and reach the treetops ... (IV:J)
The patients’ own sense of well-being was considered very important, and several GPs described this as their primary treatment goal where side effects of medication could interfere. The patients’ well-being could also be threatened if the GP focused on treatment goals instead of focusing on ‘meeting’ the individual patient.

... test results are important, OK, but how do you feel? ... (III:I)

... if as a bonus they achieve good test results then that’s nice ... (IV:K)

Discussion

This study has enlightened a number of dilemmas in GPs’ encounters with diabetes patients. CVD prevention was considered important and the GPs seemed to be well informed about current CPGs. There was some ambiguity concerning responsibilities in relation to co-workers but mainly the dilemmas occurred within the GP’s consultation with the diabetes patient.

To label a patient who feels healthy as having a chronic, potentially life-threatening disease, diabetes, was a dilemma to our GPs in spite of their awareness of the elevated risk of future CVD. This ethical consideration resembles recent debate claiming that patients should not be confronted with biomedical risks unrelated to his or her reasons for seeing the doctor. Our results, however, indicate that the problems lie within communicating risk rather than questioning diabetes screening measures. Authors have suggested that the traditional focus in medicine on relieving symptoms and a lack of training in treating threats to the patients’ health, expressed as abnormal values, contributes to lack of action against identified risks, so-called clinical inertia. In our GPs’ experience, diabetes patients who presented with symptoms were easier to handle which was in line with this idea. Treating conditions with definite symptoms was also described in an earlier study as easier than treating diabetes, where symptoms often are subtle and last over a long period of time.

To frighten or comfort the patient includes actions to overcome the patients’ real or imagined lack of true understanding of a diabetes diagnosis. The idea of having to frighten the diabetes patient in order to overcome patients’ barriers has been described previously. Withholding information or comforting the diabetes patient in order not to lose contact with the patient, as described by our informants, could also be characterized as paternalistic. The alternative would be a more open communication based on shared knowledge and regarding the diabetes patient as a capable individual, which was also described by some informants.

To put the ultimate responsibility for the outcome of diabetes on the patient, as expressed by our GPs, could be interpreted as externalization, an interpretation supported by a somewhat resigned tone in some GPs. It has been described that frustrated physicians tend to give up responsibility. However, patients’ adherence to treatment and evidence-based lifestyle measures are crucial to the results and the conclusion has been drawn that the diabetes patients’ primary responsibility is an alteration in lifestyle. GPs’ considerations in their professional role and responsibilities has earlier been described as a balancing act between alternate perspectives, one of them described as ‘the good shepherd’ versus ‘the medical expert’, and these findings resemble the dilemma identified in our study.

The GPs in our study emphasized the importance of preventing CVD by reducing risk factors, which was in line with present knowledge and guidelines. The apparent conflict between lifestyle changes and drug treatment, expressed by GPs in our study, has not been described previously. The perception of a conflict could be interpreted as moralistic, i.e. lifestyle change represents higher values than drugs and hence is preferred. However, if early medical treatment interferes with lifestyle changes remains to be clarified.

Scepticism about treatment goals in CPGs was revealed in our study. The both favourable and limiting effect of guidelines on clinical care and the need to tailor treatment practice to the individual patient’s opinion, status, concomitant diseases or medication have also been expressed by family physicians in other studies. Both family physicians and internists viewed diabetes management as a process of compromise between ideal care and the pragmatic reality of patient adherence, preferences and circumstances. Further studies on the consequences of intense medical treatment of CVD risk on diabetes patients’ senses of well-being might assist both physicians and patients in their decisions.

Our study showed that important problems in treatment practice for diabetes patients remain to be addressed. The need for organizations to have a process for implementing prioritized clinical topics and guidelines has been described and the results of our study could be included in such a process. As primary care clinicians usually work with ‘knowledge in practice’ rather than with written sources as guidelines, new knowledge need to be introduced through trusted sources as colleagues and other local networking. Our findings also indicate a need to focus the interaction and communication between physician and patient in order to improve the outcome of diabetes care. Problems in risk communication as well as risk management might have an even greater impact on the outcome in a situation where screening leads to a greater proportion of the diabetes patients having elevated levels of CVD risk markers but no symptoms of their disease, as revealed in our study. Improving physicians’ communication skills and the use of mutual agreement on shared decisions have also been
proposed as means to improve the results of diabetes care and our findings strongly support this conclusion.16

On method
Recruitment of physicians to participate in the focus group interviews was a challenge, also recognized by others.16 The low number of group members was a concern but the gathered information was plentiful. One participant in one of the later groups made a revealing slip after the first focus group by asking ‘How did they do in the test?’ This question might well reflect that doctors were embarrassed being asked questions about clinical practice and guidelines and thus refrained from participation in order to avoid a possible knowledge test. The fact that the moderator was a nurse without any involvement in diabetes care could have facilitated the discussions. The possibility of individual voices of dissent being silenced in a group must be recognized, and this was met through encouragement by the moderator.

Conclusion
This study has identified problem areas in the GPs’ approach to diabetes patients that might have substantial impact on the outcome of diabetes care and the prevention of cardiovascular complications.

Our study has shown that a group setting allows GPs to discuss their dilemmas concerning their own professional role in relation to the patient and how to communicate with the diabetes patient. To consider these dilemmas in educational efforts is probably essential to achieve improved diabetes care and guideline adherence.

Supplementary data
Supplementary Figure 1 is available at Family Practice online (http://fampra.oupjournlas.org/).

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Declaration
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