

## Research paper

# Cardiovascular-risk patients' experienced benefits and unfulfilled expectations from preventive consultations: a qualitative study

Dea Kehler MD PhD

Institute of Public Health, the Research Unit and Department of General Practice, University of Aarhus, Denmark

Bo Christensen PhD

Professor and General Practitioner, Institute of Public Health, Department of General Practice, University of Aarhus, Denmark

Torsten Lauritzen DMSC

Professor and General Practitioner, Institute of Public Health, Department of General Practice, University of Aarhus, Denmark

Morten Bondo Christensen PhD

Senior Researcher and General Practitioner, Research Unit of General Practice, Aarhus, Denmark

Adrian Edwards MRCGP MRCP PhD

Professor, Department of Primary Care and Public Health, School of Medicine, Cardiff University, Wales, UK

Mette Bech Risør PhD

Anthropologist and Senior Researcher, Research Clinic for Functional Disorders and Psychosomatics, Aarhus University Hospital, Denmark

## ABSTRACT

**Background** The development of consultations towards more patient centredness and shared decision making has greatly influenced general practice. Several patient-based studies have been published on shared decision making in screening and health checks. However, few studies have explored the process in-depth to understand perspectives of patients at high cardiovascular risk and their experiences of preventive consultations.

**Aim** To explore and analyse experiences of preventive consultations in patients at high cardiovascular risk.

**Method** Individual, semi-structured interviews with 12 patients at increased risk of cardiovascular disease (CVD) conducted within two weeks of a dedicated preventive consultation. Grounded theory was used in the analysis.

**Results** The patients' experienced benefits from the consultation included changed emotions, thoughts, readiness to change lifestyle and perceived knowledge related to health and risk. Patients reported that their experienced benefits were related to the

general practitioner's (GP's) professional competence, communication in the consultation and especially the doctor–patient relationship. Patients also expressed a number of unfulfilled expectations concerning their opportunities to contribute their personal perspectives to the consultation, short consultation duration, problems with appropriate timing and personal relevance of content and insufficient tailoring to their personal situation. GPs' communication skills and scheduling of follow-up consultations were reported by the patients as essential for these specific aspects to be addressed successfully.

**Conclusion** Patients reported a number of benefits from preventive consultations. However, their unfulfilled expectations suggest the benefits could be even greater, both with enhanced communication skills from doctors, and attention to appropriate timing of the consultations at stages of life when patients are more able to make changes.

**Keywords:** cardiovascular disease, general practice, primary prevention, qualitative research/methods

## How this fits in with quality in primary care

### What do we know?

We know that the quality of general practice consultations is important for patients, that shared understanding is a central consultation objective, and that patients prefer shared decision making, especially once they have experienced it. It is also clear that many challenges exist in primary prevention of lifestyle-related diseases such as cardiovascular disease (CVD) in general practice.

### What does this paper add?

This study shows that patients at high cardiovascular risk experienced benefit from preventive consultations. Benefits include changed emotions, readiness to change lifestyle, improved thoughts and perceived knowledge of health and risk. This study furthermore identifies potential areas for improvement derived from addressing unfulfilled patient expectations: being able to present their perspectives in the consultation, appropriate consultation duration, timing and content, the GPs' communication abilities, and availability of follow-up consultations.

## Introduction

Patient-centred communication is the common denominator of a number of clinical initiatives within general practice internationally, designed to make the patient an active partner in the consultation process.<sup>1-4</sup> Several patient-based studies have been published on this issue,<sup>5-25</sup> but few have explored the preventive consultation process in depth with qualitative designs to identify patients' perspectives in detail.<sup>17-24</sup> Quantitative studies have examined patients' emotional reactions, such as satisfaction, emotional vulnerability and self-perceived health.<sup>5-25</sup> Qualitative studies have explored patient outcomes of consultations,<sup>18-24</sup> including patient satisfaction,<sup>19,21</sup> perceptions of risk, risk communication,<sup>18</sup> shared decision making,<sup>20,22,23</sup> and expectations.<sup>24</sup> These studies have shown that in general practice consultations, common understanding and shared decision making are important for patients especially once they have experienced them.<sup>19,20,22,26</sup> But how do patients at increased risk of cardiovascular disease (CVD) actually experience preventive consultations? No qualitative studies seem to have explored this research question either nationally or internationally. This study aimed to explore and analyse cardiovascular-risk patients' experiences from preventive consultations.

## Method

### Sample

This study draws its data from 12 one-to-one interviews conducted 1-2 weeks after 12 'preventive consultations', which were videotaped. These consultations have been advocated by the Danish College of General

Practitioners since 1999 as an approach to the prevention of lifestyle-related diseases such as CVD. The preventive consultation is a scheduled consultation focusing on individual prevention and risk-reduction strategies, where the person is aware of the agenda such as diet, physical activity, smoking, alcohol or other issues in advance, and therefore able to prepare him or herself for the consultation. An agreement is sought about treatment goals to meet public health priorities towards decreasing the risk of diabetes, CVD, cancer, osteoporosis, chronic obstructive lung disease, asthma, chronic muscle diseases and mental health conditions.<sup>27</sup>

Thirty GPs were included from the Health Insurance Register in Vejle and Aarhus counties. They were sampled purposefully according to age, sex, communicative education and preventive consultation activity. This helped us to ensure that the sample reflected the range of general practitioners (GPs) involved in the daily care of patients at increased risk of CVD on the basis of their preventive service experience and the public guidelines. Seven female and five male GPs, mostly from group practices, participated. The GPs had worked as practitioners for an average of 12.8 years and their average age was 47.7 years. Three of the 12 GPs had prior education and training in myocardial infarction (MI), another three had psychological training from Balint groups and one from a cognitive therapy course.

Each participating GP recruited one patient purposefully in relation to the following criteria or instruction: 20% or higher risk of developing ischaemic heart disease within the next 10 years, no earlier participation in a preventive consultation, and variability in sex, age and education. Purposeful sampling implies that information-rich cases are chosen because of their importance to the purpose of the study.<sup>28</sup> With a qualitative approach that draws on relatively small samples, the investigator is able to acquire in-depth

understanding of the investigated phenomena. Furthermore, the simultaneous nature of analysis and sampling allows sampling to be theoretically guided in order to gather information-rich cases.

The study was approved by the Danish Data Protection Agency. Patients and GPs who participated gave their informed consent. The Scientific Committee for the county of Aarhus, Denmark indicated that the Biomedical Research Ethics Committee System Act did not apply for this project.

## Data processing

A pilot interview study ( $n = 3$ ) was conducted during the development of the interview guide, which was continually modified as new themes emerged from the data. The pilot study was analysed in the same way as the interviews of the main study. The first author, a physician, with research interest in risk and communication, conducted the one-hour semi-structured interviews in the patient's home within two weeks after their participation in the preventive consultation. The interviewer saw the videotaped consultation belonging to the specific person (mean duration 18 minutes) to inform and 'qualify' the interview guide on the basis of thematic analysis, i.e. to ensure that the subsequent interview addressed issues relevant to the patients' specific consultation. Thus, the videotaped consultations were not a primary data source and the patients did not see the videos. During the interview, patients were first asked to recall whatever they remembered from the consultation, and how they felt about it. Then they were encouraged and prompted to address two areas of questions concerning the issues shown in Table 1.

The interviews were transcribed verbatim by a trained secretary and the first author (DK) read and coded first and then discussed after each coding with the last

author (MBR), a trained qualitative researcher. That is, the first author carried out the initial coding of the interviews in the four grounded theory analytical phases (see below). Subsequently, MBR read the interviews and identified codes independently. Finally DK and MBR met to discuss, add or revise the coding of each interview.

## Analysis

The coding of themes consistently followed the objectivistic grounded theory rules,<sup>28,29</sup> and was carried out through four phases supported by the software program Nvivo 2.0: an *open coding phase*, an *axial coding phase*, a *selective coding phase* and finally a *theory- or concept-generating phase*. For a detailed example and description of the coding, see Box 1.

Data were collected, prepared and analysed in a concurrent repetitive process involving the empirical material (researcher and participants' constructions of the consultation), the interview guide, theoretical aspects of health prevention and the study objectives. A so-called analytical 'round dance' took place, where data, method and theory goes hand in hand through the analytical process.<sup>30</sup> Given the grounded theory method, the focus of the interviews developed and became more theoretically specific as the sequence of interviews progressed, that is data were gathered, driven by emerging categories and theory development (theoretical sampling).<sup>28</sup> During the data processing, the emerging categories were examined for theoretical saturation,<sup>29</sup> i.e. to examine whether further comparisons, properties or relationships developed or new theoretical insights were revealed (but not for saturation to achieve representativeness).<sup>30</sup>

## Results

Table 2 shows the characteristics of the informants. None of the patients had previously participated in a dedicated preventive consultation about CVD, but according to their number of risk factors and average age over 50 years, they had probably been exposed to opportunistic preventive messages from their normal consultations. Two women and ten men participated; their average age was 57.8 years and they came from different social classes and had attained varying educational levels.

The analysis of patients' experiences and expectations from preventive consultations brought forward four core categories related to patients' experienced benefits (Box 2) and one core category named unfulfilled expectations (Box 3). The following section presents the categories together with an integrating theme

**Table 1** Interview guide with the topic questions

Area	Questions
Experiences	Tell me about your experiences from the consultation?
Elaboration	Did you have positive experiences?
	Did you have negative experiences?
Expectations	Tell me about your expectations, before you participated in the consultation

### **Box 1** The analytical phases in the conceptualisation of patients' experienced feelings from the preventive consultation

The category 'experienced benefits', consisting of changed feelings in relation to risk management and health information, is used as an example.

#### **The open coding phase**

In this phase, we coded the person's immediate experiences from the consultation. The following categories are examples of the initial categories identified in the open coding phase:

- concern
- relaxation
- relief
- feeling of responsibility
- satisfaction
- health information and risk of disease.

#### **The axial coding phase**

In this phase the dimension and property of the different categories are identified. For instance the common property of the categories was identified as feelings, which were found to have the above-mentioned characteristics and the following dimensions:

- the concerns were minor
- the relaxation increased
- the feeling of responsibility was higher
- patients felt satisfied with the consultation and relieved.

Furthermore, we found that all the feelings were related to risk of disease and health information.

#### **The selective coding phase**

In this phase the main categories were identified and named from their empirical characteristics as 'experienced benefit in the form of experienced feelings'.

#### **The theory- or concept-generating phase**

The patients' experienced benefits from preventive consultations are experienced feelings in relation to health and risk of disease.

about the critical role of the doctor–patient relationship, and quotations to illustrate common themes, identifiable to individual interviews.

## **Feelings about health and risk of disease**

This category captured the patients' experienced feelings from a preventive consultation such as satisfaction, less concern, relaxation, relief and feelings of responsibility:

'I was very satisfied with the preventive consultation, which influenced me in a positive way. I have had difficulties with tackling my risk in an active manner where I actually act preventively. I have had some thoughts and ideas, but had difficulties with getting my act together ... it is a step forward in a more healthy direction. I need some professional support.' (ID 11, male, 48 years old)

These emotional reactions were described by all of the informants but in different degrees.

The patients responded positively, were satisfied and experienced the consultation as useful and as a step

forward in a more proactive direction. They felt satisfied because they got support from their GPs. In particular, patients, who found it difficult to change, expressed a need for preventive consultations to resolve their health situation and be pushed towards a healthy lifestyle change. Furthermore, the consultation was experienced as valuable, and the patients could recommend it to others.

The patients' concerns about health and risk of disease were minor following a consultation. They felt more capable of playing an active role and thus a step closer to reaching a lifestyle-changing goal. They had raised awareness of health issues and felt closer to handling and converting feelings or thoughts into actions:

'I am still worried, but not in panic. Some of my concerns about risk are gone, some still exist. My focus is now to do something based on my concerns. My worries would not disappear but when I act on my concerns, I will probably feel better.' (ID 2, male, 69 years old)

The patients also felt more relaxed, relieved and less concerned, because they had shared their concerns with

**Table 2** Characteristics of the patients

Informants	Sex	Age (years)	Employment	Risk factors	Co-morbidity
1	Male	74	Factory worker, now pensioner	Hypertension, hypercholesterolaemia, ex-smoker, overweight	None
2	Male	69	Taxicab owner, now pensioner	Hypertension, smoker, hypercholesterolaemia, IGT	None
3	Female	57	Factory worker, in early retirement	Hypertension, hypercholesterolaemia, smoker, overweight, IGT	Fibromyalgia
4	Male	43	Drilling rig personnel, wage earner	Smoker, hypercholesterolaemia, overweight	Knee problems
5	Male	73	Engineer, now pensioner	Hypertension, hypercholesterolaemia, ex-smoker	None
6	Female	51	Interpreter, wage earner	Hypertension, hypercholesterolaemia, smoker	None
7	Male	42	Architect and manager of the firm, wage earner	Hypercholesterolaemia, overweight, hypertension	None
8	Male	54	Manager in the provision industry, wage earner	Hypercholesterolaemia, hypertension, smoker, overweight, IGT	None
9	Male	49	Gardener, wage earner	Hypercholesterolaemia, hypertension, overweight, ex-smoker	None
10	Male	69	Grocer, now pensioner	Hypercholesterolaemia, hypertension, smoker	None
11	Male	48	Manager and local politician, wage earner	Hypercholesterolaemia, hypertension, smoker, overweight	None
12	Male	65	Dock worker, now pensioner	Hypercholesterolaemia, hypertension, overweight	None

Hyperstension: blood pressure > 140/90 mmHg; hypercholesterolaemia: cholesterol >5 mmol/l; overweight: body mass index (BMI) > 25 kg/m<sup>2</sup>; smoker: daily smoking; IGT: positive glucose intolerance test

### Box 2 Patients' experienced benefits from preventive consultations

- Changed emotions about health and risk of disease
- Improved readiness to change lifestyle
- Changed thoughts about risk and health
- More perception of knowledge related to health and risk of disease

### Box 3 Categories of unfulfilled expectations

- GP recognition of patient perspectives
- Consultation timing and content
- The duration of the consultation
- The GP's communicative abilities
- Follow-up consultations

a professional and got confirmation about the preventive possibilities. They experienced a good doctor-patient relationship, based on feelings of trust, empathy, acceptance and support in the consultations.

'I felt relieved after the consultation because I had a toolbox full of preventive options. My doctor had shown me trust, empathy, acceptance and wanted to support me with handling my risk of cardiovascular disease.' (ID 11, male, 48 years old)

Finally, the patients described feelings of greater health responsibility from the consultations. They felt responsibility themselves, since they realised that prevention is most of all a question of lifestyle changes.

'The consultation made me aware that I have to take responsibility for my health if I am to prevent cardiovascular disease. If I were already sick, it would probably be medication controlled by my GP and in that case his responsibility to a much larger degree.' (ID 10, male, 69 years old)

## Readiness to change lifestyle

The patients perceived readiness to change lifestyle as a process influenced by pros and cons regarding the specific life habit. Enhancement of motivation was experienced as being influenced to varying degrees by symptoms, risk assessment, social network, knowledge of risk and CVD, experiences with disease, patience and stubbornness. Motivation was experienced as being diminished by stress, conflicting feelings and thoughts, having few resources, too much work, economic and physical or mental problems. The patients experienced an improved readiness to implement lifestyle changes following a preventive consultation, which was most

often expressed in relation to eating habits, then physical activity and smoking. The patients, who altered their eating habits, changed one or several diet components, or they changed some of their shopping habits. In addition, some patients took the initiative to engage in physical activities, typically walking or bicycling, or they increased their existing activities:

'In the weeks after the consultation, I replaced butter with oil and milk with water and took the scales out of my wardrobe.' (ID 1, male, 74 years old)

'I went home and looked in my refrigerator with my wife and found several kinds of food, which we decided to stop buying. Besides, I decided to walk in the evening with my wife and dog, even though it is my wife's dog.' (ID 11, male, 48 years old)

## Thoughts about risk and health

The patients had many thoughts about risk, health, habits and quality of life, which became more reflective, specific and varied following the consultation, because they felt more aware and conscious of their health situation. However, they did not report that GPs had explored their thoughts or took action in the consultation. They understood 'action' to mean that the GP would discuss their thoughts, expectations and particular life situation in the consultation. What they experienced had actually happened was that the focus of the consultation shifted away from them into what was important for the GP.

'I had many thoughts and reflections about risk and health before and after the preventive consultation. The doctor listened to some of them, but he did not take action. In most of the consultation, it was my doctor's own agenda from his medical world that was in focus.' (ID 5, male, 73 years old)

The patients' perceptions of risk, health and CVD did not change in the weeks after the consultation. However, they paid more attention to their present life situation and unhealthy lifestyle.

'The consultation did not affect my perception of health, risk and disease, but I became more aware of my lifestyle, unhealthy habits and risk of cardiovascular disease.' (ID 4, male, 43 years old)

The patients hoped for an increased quality-of-life related to both their personal and working life and improved health in the long run, if they could address their risk habits in the light of their own health situation and their GP's recommendations.

'If I can follow some of my own thoughts and the doctor's advice about lifestyle change, I think that I would experience an immediate reduction of quality of life, but in the long run a better health and quality of life.' (ID 12, male, 65 years old)

Few patients were convinced that they would actually experience a loss of quality of life in the long run. They either preferred to enjoy life as it was or had few resources to change lifestyle.

‘My way of living is my quality of life. Even if I follow my doctor’s lifestyle advice, I would lose some of my quality of life in the long run because I enjoy life to the full.’ (ID 11, male, 48 years old)

## Knowledge of risk, health and disease

The patients did not feel that they had an appreciably increased knowledge of CVD, risk factors and treatment following a consultation. However, they experienced changes in their personal knowledge of risk, health and disease. They explained this shift as the result of a higher degree of confirmation, clarification and overview of their health situation following the consultation, and thus they had more control over their health and wellbeing:

‘My knowledge of cardiovascular disease did not increase appreciably, but I felt more ready and more sure, even though I had still many speculations and thoughts following the consultation that I want to share with my GP. I had a kind of new perspective on my knowledge after the consultation because the conversation made my knowledge more dynamic, useful, placed my life in a broader and more long-term perspective. My risk and knowledge of cardiovascular disease moved into my living-room.’ (ID 4, male, 43 years old)

They felt that their knowledge became more operational and found it easier to put things into practice. However, they still expressed a need for follow-up consultations to share their thinking about lifestyle change.

## Common features of the patients’ experienced benefits from preventive consultations

The patients’ experienced benefits had three cross-cutting aspects in common: patients’ perceptions of the doctor–patient relationship, the impression of the GPs’ professional and personal abilities, and how they communicated in the consultation. These common aspects were noted among all informants’ views, although the benefits were experienced to different degrees between interviewees. One person expressed the importance of these consultation aspects very clearly and explicitly:

‘The doctor–patient relationship is very important if you want someone to move from one lifestyle to another. I think there are three building blocks with relevance to ... a preventive consultation: the GP’s professional ability, communication style and the doctor–patient relationship. The doctor–patient relationship is the most important.

Without a good relation, there will be no confidence, support, common understanding or partnership.’ (ID 5, male, 73 years old)

Our analysis furthermore showed that the doctor–patient relationship was the most important factor influencing patients’ benefits, and that, further, when the patients experienced the doctor–patient relationship as good, they seemed more inclined to describe benefits from preventive consultations.

## The patients’ unfulfilled expectations from preventive consultations

The informants were encouraged to tell about both experiences from the preventive consultations and their expectations. Regarding patients’ expectations, we identified one core category: unfulfilled expectations, which could be divided into five sub-categories (see Box 3).

The patients expressed that if GPs had been more aware of their perspectives, such as their life stories, thoughts and perceptions, they would have experienced more benefits from the consultation.

‘It is important that the consultation is based on me as a person, my life, living habits, thoughts and perceptions – that I am a part of a family. If I cannot see the relevance of the consultation from my perspective, in the end my benefits from it would be minimal.’ (ID 7, male, 42 years old)

Patients identified consultation ‘timing’, content and duration as important areas for improvement. Concerning timing, they noted that the first preventive consultation needs to be appropriately related to their life situation, risk of disease and resources. Additionally, they stated that, if they are not ready for change, then GPs should engage in ‘watchful waiting’ until the time comes, when they are ready for change and have the resources to instigate those changes. Concerning the content of the consultation, the patients proposed an increased focus on the individual person and their risk behaviour and that the intervention should be tailored to the individual person rather than simply being discussed in general terms:

‘In a period of my life where I lack resources, the preventive consultation would be a waste of time. Besides, the agenda must have a specific personal relevance and not just be a general agenda.’ (ID 4, male, 43 years old)

Concerning the duration of the consultation, they felt a preventive consultation of more than 15 minutes was required. The consultations took 18 minutes on average.

‘The consultation time is important. You don’t take me seriously if you only give me 15 minutes when the subject is my risk, disease and how to change lifestyle. I think most patients need about half an hour to discuss serious health topics such as risk of disease and how to prevent it.’ (ID 5, male, 73 years old)

Finally, patients' unfulfilled expectations also included GPs' communicative abilities and follow-up consultations.

'The doctors' communication skills decide whether the consultation could result in a change in living habits or not.' (ID 11, male, 48 years old)

They suggested increased education in communication on dilemmas related to potential lifestyle changes or medical treatment. This suggestion derived from their experiences of not being properly involved in a consultation in terms of life story, life phase, daily concerns and personal priorities. Better communication skills were identified as a remedy:

'My doctor's personal communication style is important in relation to my benefits from the consultation. If my doctor is open-hearted and personal in his counselling about lifestyle changes, then the credibility of the consultation increases.' (ID 4, male, 43 years old)

Only half of the patients made follow-up appointments with their GP. Patients without a follow-up appointment particularly expressed the importance of follow-ups, because they reasoned that to change lifestyle takes time and requires support. Consequently, they found it a waste of time if the first preventive consultation was not followed up to review progress.

## Discussion

### Principal findings

The patients' experienced benefits captured feelings related to risk and health, readiness to change lifestyle, thoughts and perceptions about risk and health and were especially dependent on their experience of the doctor-patient relationship. Patients expressed some unfulfilled expectations, which were particularly concerned with a lack of opportunities to present their personal perspectives in the consultation; other areas for improvement included appropriate consultation duration, timing and content; GPs' communication abilities, and availability of follow-up consultations. Patients varied in which unfulfilled expectations they noted and the extent to which they experienced them as problematic.

### Strengths and weaknesses of the study

The pilot study was useful for optimising the interview guide, which was further elaborated and refined as the interviews progressed, by focusing on derived analytical categories from the preceding interviews. The GPs videotaped the consultations and thus they were not influenced directly by the researcher, which would have been a risk if we had chosen a direct observational

method. The GPs and patients did not appear to be influenced by the video camera except perhaps during the first minutes of the consultations. The patient informants were sampled purposefully by the GPs, on the basis of specific instructions reflecting the purpose of the study to gather information-rich cases, likely to produce rich analytical categories about patients' experiences of a preventive consultation. Even so, some GPs may have had a certain professional interest in preventive consultations, which may have shaped their choice of patients, so that they would either include problematic cases or more straightforward cases, perhaps including patients with higher-than-average health literacy and interest in health and lifestyle change. There was some evidence of these characteristics in the sample, but also of more problematic cases. Consequently it is important to be aware that patients at different risk of CVD and with different motivation might not have the same experienced benefits and unfulfilled expectations following the consultations as patients with increased risk of CVD.

Although analysis suggested theoretical data saturation, i.e. that no new theoretical insight and categories emerged in the later interviews, the sample was small and other studies with a wider range of patient types and selection are required to investigate the generalisability of the findings to preventive consultations with patients at increased risk of CVD in general, both nationally and internationally. Given the concept of theory and its validation as used by Strauss and Corbin,<sup>28</sup> and referring to the constructivist position by Charmaz,<sup>29</sup> the analysis of patients' benefits and unfulfilled expectations from the consultation and its theoretical contents was derived from the empirical material, but it was also informed by the researcher's theoretical background and interpretive understanding of the meanings of the interviews.<sup>30</sup> The analytical concepts and categories were, however, found to be consistent with the patients' lives and statements. During the analysis, we were aware of ideal answers and quotes, which may not illustrate what the patients actually did or thought after the consultation. By using the comparative analytical grounded theory strategy to compare the generated categories and person characteristics, we explored but were not able to identify consistent relationships between specific person characteristics and the experienced benefits and unfulfilled expectations. We chose to conduct the interviews within 1–2 weeks after the consultation to capture the immediate experiences and avoid loss of data validity related to lack of memory in later stages.

### The findings in theoretical context

This study consolidates our knowledge about the patients' experienced benefits from a preventive consultation

related to feelings, thoughts, readiness to change lifestyle and knowledge of risk and health. From a theoretical standpoint, altered thoughts and readiness to change lifestyle particularly relate to described determinants of health actions or behaviour change. These determinants include patients' beliefs about a given health behaviour, motivation to change,<sup>31</sup> and patients' wishes or intentions to change a specific behaviour. These in turn relate to different behavioural theories,<sup>31–35</sup> such as motivational interviewing,<sup>31</sup> or the trans-theoretical stages of change model of Prochaska and DiClemente,<sup>35</sup> which are recommended models in the preventive consultation in Denmark. Concerning the determinants of health actions or behaviour changes, motivational interviewing focuses on ambivalence and thus motivation or readiness to change. The trans-theoretical model relates to different phases of change, from the stage where a person at increased risk wishes to change, to later stages of intention to change, and then actually changing their behaviour.

The findings suggest that even dedicated GPs implementing specific interventions, such as the preventive consultation are partly, but not sufficiently, addressing these determinants in the consultations. For instance, GPs generally did not respond to the patients' thoughts in the consultation, but changed to his/her own medically driven agenda. GPs need to be more sensitive to patients' individual perceptions, thoughts and personal situations, actively seeking these out and encouraging them to contribute personally to the discussion. Besides GPs may also find it more productive to engage in 'watchful waiting' until the appropriate time comes, when the patients are ready to change. There are, of course, consultation benefits as described, but even greater personal (patients') and health benefits may be reaped. Communication skill development among all clinicians is important. Training and skill development could address this need in the preventive consultation context. It requires further evaluation as to whether the contents of such consultation discussions will be more rewarding for patients at increased risk of CVD and whether they will enhance patients' ability to make the desired lifestyle changes.

## Findings in the literature

Patients at increased risk of CVD appreciate and are satisfied with the preventive consultation. The consultation does not adversely affect their emotional vulnerability, which confirms earlier patient-evaluation studies of health checks or screening procedures.<sup>5–7,12–14,18–20,36</sup> The patients felt relieved, less concerned, and more responsible for their own health following a preventive consultation. However, they also felt that the interventions were not sufficiently tailored to their situation and needs and that they were

often getting 'average' advice that might not be personally relevant to them. Thus, there could be an opportunity to enhance the effectiveness of preventive consultations through tailored assessment and recommendations, as has been found in other fields.<sup>37</sup> We note, however, that although the patients expressed these preferences, the evidence that tailored or 'individualised' approaches are more 'effective' in the screening context is equivocal, and it depends on the objectives and outcomes assessed.<sup>38,39</sup> They argued that the intervention should take place at a time when they were willing and able to address risk behaviour. Systematic screening of the population, with intervention to those at the highest risk, is a blunt instrument with which to attempt to meet this need. It may be that opportunistic screening and prevention activities are more likely to be effective and efficient.

## Implications for practice

The doctor–patient relationship in the consultation was perceived as important, indeed fundamental, in relation to patient-experienced benefits. This is consistent with studies of patients' perceptions of outcome of general practice consultations in general,<sup>19,40</sup> which identified 'common understanding' as an essential feature of the doctor–patient relationship and relevant for all major consultation outcomes. The informants also proposed that preventive consultations could be improved, partly, at least, through core communication skills development, and this may be a highly effective way of developing primary prevention of CVD, because it will build on health-promotion opportunities that are already well recognised.<sup>39,40</sup> Furthermore, patients expressed that the benefit from the consultation did not take the form of small reductions in risk following the consultation, but in the overall effect the consultation had on the person as a whole. In other words, the main merit of the consultation lay in its ability to address the whole person, body and mind.

In daily practice, it would be interesting to explore whether greater awareness and reinforcement of patients' experienced benefits would enhance the patient-centred focus of communication and achieve greater effects on motivation and behavioural change in preventive consultations.

## Further research

We need to examine whether the findings from this sample can be replicated in a wider range of practices and settings, and in internationally different contexts for health provision, and whether screening and prevention can be restructured to happen at moments that are more opportune for the individual person and

their needs. Further research into evaluations would also be required in relation to communication skills training for GPs in the context of preventive consultations.

## Conclusions

Patients at increased risk of CVD are satisfied and not adversely affected emotionally by a preventive consultation. They experience benefits from preventive consultations, which seem to depend especially on the doctor–patient relationship. However, patients also expressed several unfulfilled needs, which GPs can address to further develop the preventive consultation in general practice. These include longer consultation times, better timing of the consultations, more personal relevance, opportunities to bring in the patient perspective and more focus on scheduling follow-up consultations.

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#### ETHICS

Patient consent was obtained and all reasonable steps have been taken to maintain person confidentiality. We confirm that all person identifiers have been removed or disguised so that none of the participants are identifiable.

#### PEER REVIEW

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#### CONFLICTS OF INTEREST

None.

#### ADDRESS FOR CORRESPONDENCE

Dea Kehler, Institute of Public Health, the Research Unit and Department of General Practice, Vennelyst Boulevard 6, DK-8000 Aarhus C, University of Aarhus, Denmark. Tel +45 89426057,+45 86143390; fax +45 86124788; email address: [dk@alm.au.dk](mailto:dk@alm.au.dk)

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