Doctor, can you spare some time?

The role of workload in general practitioners' involvement in patients' mental health problems

Else M Zantinge

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Dokter, kunt u wat tijd missen?
De rol van de werklast van huisartsen in relatie tot hun betrokkenheid bij de psychische problemen van patiënten
(met een samenvatting in het Nederlands)

Proefschrift

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Contents

Chapter 1

Introduction

Introduction

The study described in this thesis addresses the role played by general practitioners' (GPs') time and workload with regard to their involvement in patients' mental health problems. For this study data are used from the second Dutch National Survey of General Practice[1;2].
In this introductory chapter, the background and reasoning behind our study are described, as well as an explanation of the context of general practice in the Netherlands. In order to put our study into a broader perspective, a theoretical framework of GPs' involvement in mental health care and their workload is outlined. Finally, the specific research questions are formulated, followed by a description of the study design, and the outline of this thesis.

Background
Mental health problems are common in the population and in general practice. According to self-ratings, around one quarter of the total population reports some kind of current mental distress[3-5]. Among general practice attenders, 40% to 50% feel distressed[6-8]. These feelings may vary between mild psychological distress and serious psychopathology.
Mental health problems cause disabilities for the patients and a poorer quality of life[9-12]. Furthermore, these problems may have negative consequences for society: mental health problems are a major cause of sick leave[13] and increase overall medical consumption[14;15].
To avoid the complaints deteriorating, and to relieve patients' burden, early identification and the possibility of support from a professional are desirable. GPs have an important position in this, as they are often the first health professionals contacted by patients with mental distress or more severe mental health problems, especially in countries where the GP has a gatekeeper function for other health care providers, as in the Netherlands, UK, Denmark and Ireland[16]. Moreover, GPs are generalists, assigned to provide integrated care for both patients' somatic and psychological problems.

When a patient with mental health problems contacts a GP, the first critical step for the GP is to notice that psychological factors play a part, and recognise and diagnose the patient's mental health problems, even if the patient does not explicitly present these problems. This increases the possibility of further support and treatment for the patient[6;17-20]. Even though the outcomes for the patient of this recognition are not unequivocally

demonstrated[20-22], the idea is that recognition of mental health problems may eventually result in a reduction in the patient's problems[6;19].

In spite of the importance of recognition and treatment of mental health problems, GPs are sometimes reluctant to become involved. They report that mental health care is one of the aspects of their job that places particular demands on their available time and perceived burden[23;24]. It is known that consultations containing mental health problems take more time compared to other consultations[25-29], and increase the demand for health care[30]. This might be a problem because GPs already complain about their workload and lack of patient time[23;31;32]. GPs report feelings of distress and job dissatisfaction, and they mention their workload as an important reason for these negative feelings[33-39]. Additionally, shortages of GPs are set to increase, not just in the Netherlands but internationally, as a result both of demographic changes in society, such as aging, and profession developments, such as the trend towards more part-time working[40-45].

There is evidence that extra time for the patient is associated with a higher quality of care[46-49] and more patient satisfaction[46;50]. Additionally, some authors suggest that GPs' negative feelings about their job may reduce the quality of their patient care[51-53]. Other studies show that exhaustion and burnout among physicians are associated with more medical errors [54-56]. But little is known about the relationship between GPs' workload and lack of time and patients' mental health care. A lack of time and workload are supposed to be especially important issues in relation to patients' mental health problems, because these problems are supposed to demand extra time and energy from the GP. This extra time and energy can be a problem when a GP's workload is already high. In one study it was found that a longer consultation corresponds with a higher detection of mental health problems[8]. Additionally, GPs mention themselves that workload and lack of time are sometimes obstacles to the detection of mental health problems[57-61]. Other information about the relationship between workload and GPs' involvement in patients' mental health problems is lacking. Our study is meant to fill this gap.

There are basically two perspectives from this relationship which are important to study.
Firstly, it is relevant from the perspective of the organisation of general practice to investigate if patients' mental health problems induce a higher objective and subjective workload, and how this workload is manifested. These issues are important for GPs' well-being, but also for health policy makers. A high workload is a major cause of GPs' turnover[35;37;38], which in turn may add to a negative image of the profession. These developments are reasons for concern for health policy makers. Furthermore, it provides input for discussions about the GPs' position in mental health care, the system of remuneration and the organisation of work.
Secondly, it is relevant from the perspective of the quality of care to investigate if a GP's high workload is a barrier against their involvement in their patients' mental health problems. This might have negative consequences for the patient, because if the patient's mental health problems are unaddressed, this is a missed opportunity for finding adequate care for the patient. A more detailed explanation about these mechanisms is presented further on in this chapter.

The context of Dutch general practice
In the Netherlands GPs make a psychological or social diagnosis in, on average, 8% of all consultations[62]. Besides that GPs report that patients' psychological problems has a part in 20% of all consultations on average[24;63], because psychological factors may also play a part in somatic problems. It is known that GPs treat most of patients' mental health problems by themselves[6;64;65].
The Dutch GP has a gatekeeper function for other more specialised health care providers. In addition every GP has a fixed patient list. This system enables GPs to build and maintain personal relationships with patients, and incorporate the social context and course of life of a patient.
During the period of our study, GPs were paid according to a mixed system: GPs received a capitation fee for publicly insured patients on their lists, and a fee for service for the privately insured patients. Dutch citizens below a fixed income level (64%) were covered by compulsory public insurance; 36% of the population was privately insured[66]. Since 2006, GPs are paid according to a new mixed remuneration system. They receive a fixed capitation fee for all patients on their patient list in addition to a fee for service. GPs can claim fees for their patients' medical use, dependent on the type of patient contact.

In all patient contacts GPs can claim a consultation twice when consultation time lasts longer than 20 minutes[67].

In 1999, the Dutch Ministry of Health, Welfare and Sport (VWS) formulated a new policy with respect to the position of primary care in mental health care[68]. This policy was directed at reinforcing primary mental health care disciplines (the GP, primary care psychologists and social workers), in order to treat as many mental health problems as possible in primary care. The main reasons for this reinforcement were the growing need for mental health care, together with long waiting lists in specialist mental health care. According to the principle of stepped care, the intention is that patients with mental health problems are treated in primary mental health care generally and briefly, if possible, and specific and intensive in secondary mental health care, if needed. Therefore in 2001 a national programme was started to reinforce primary health care which included several interventions. An important intervention for general practice was the deployment of psychiatric nurses from secondary care in general practice. These were intended to substitute and complement GPs' mental health care tasks and to increase GPs' skills in mental health care. From the start in 2001, the number of GPs making use of this possibility have increased every year[69]. In 2007, one quarter of all Dutch general practices collaborated with a psychiatric nurse[70]. During the period of this study, this development was just in its infancy.
One of the preconditions of the new policy was that the increase of mental health problems in primary care should not result in increased workload on general practitioners, because their workload was already high. This statement led to a more detailed investigation into the relationship between workload and mental health care in the Netherlands, including the research described in this thesis.

Theoretical framework
Only 35% to 40% of people with a mental disorder receive mental health care from a professional[71-73]. Goldberg and Huxley (1980; 1992) developed an illustrative and widely used model that shows the common pathways to care for patients with mental health problems[74;75]. According to this model, a patient can reach several levels in the health care system, from generalist to specialist care, by passing some filters. At each subsequent level, there are fewer patients left than in the level before.

The first level is the community which contains all people with mental health problems. Level two includes all patients with mental health problems attending their general practitioner. To reach level two, a patient has to pass the first filter: the decision to visit their doctor. After level two, the next and second filter is the GP's recognition of a patient's mental health problems. By passing this filter, only the patients who are recognised by their GP as having mental health problems are left and enter level three. The next filter is the GP's decision to refer a patient to specialist mental health care, resulting in level four, where only patients in psychiatric care are left. The final filter is the decision to refer the patient to a psychiatric hospital, the last level in the mental health care system.

In this thesis, the main focus is on the second filter: the GP's recognition of their patients' mental health problems. After passing this filter, level two and three are connected: the patient with mental health problems visiting the GP is recognised by the GP as having mental health problems. It is known from the literature that GPs recognise on average around half of their distressed patients as having mental health problems[7;8;18;21]. The reasons mental health problems go unrecognised can be related to the patient as well as the doctor.

It is known that patients with mental health problems often present their problems somatically[74;76-78], or they only present somatic symptoms. There are several reasons why patients' mental health problems are often manifested in somatic complaints. Patients justify their visit with their somatic complaints, because they think the doctor expects them to do this[74]. This has also to do with the stigma of mental illness, and the belief that somatic complaints are more respectable than mental health problems[74;79]. Furthermore, somatic and mental health problems are often entangled[74]. Patients may be emotionally distressed about their somatic problems, or somatic problems can deteriorate, or be experienced as more severe, when a patient has a period of mental distress.
Other reasons related to the patient for non-disclosure of mental health problems are, for example, that patients think they can cope with their problems themselves[80], that they are hesitant about troubling their doctor[80] or that they think the GP is not the right person[79] to deal with their mental health problems.

Despite these factors relating to non-disclosure by the patient, the doctor remains an important factor in the detection of their patients' mental health problems. GPs have some decision room to get more or less involved in patients' mental health problems. It is known that GPs differ strongly with respect to their reports of the psychological aspects in their consultations[63;74;81-83]. Some GPs are more inclined toward psychological interpretations than other GPs. Goldberg & Huxley (1980) call this inter-doctor variation the GP's bias: their tendency to make, or to avoid making psychiatric or psychological assessments[74]. The GP's bias differs from their accuracy, that is the GP's overall ability to make assessments of psychiatric or psychological disturbances which are congruent with the patient's degree of symptoms[74]. There are three factors which determine GPs' detection of patients' mental health problems and their involvement in mental health problems in general: doctor's attitudes, their communication and consultation style, and structural or organisational factors.

Firstly, GPs' attitudes with respect to mental health care are reflected in their consultations: GPs who are more psychologically oriented, with a broad perception of their with respect to patients' mental health problems, pay more attention to psychological aspects, compared to GPs who are more focused on patients' somatic complaints[74;84-86]. Also GPs themselves report a strong link between their perception of their role and how they perform their tasks related to mental health problems[83;87]. It is not clear which part of GPs' attitudes is due to the character of the doctor, or due to their training.

Secondly, the GP's detection of patients' mental health problems is associated with their consultation style and communication skills. The theory is that patients with mental health problems often offer cues that are indicative of their distress[88;89]. GPs can use their communication skills to influence the rate at which their patients offer cues[88;90]. These skills are associated with longer consultations[91-93]. It is known that if a GP adopts a more patient-centred style of consulting, the patient will offer more cues[90], resulting in a greater tendency to evaluate their patients' problems as psychological[20;94]. Psychological evaluations are also associated with GPs showing empathy[20;90], asking questions about psychological issues[20;88;90;95], and GPs' eye contact[95-97]. Also patients mention that their GPs' interviewing skills are sometimes reasons for not disclosing their mental health problems[80].

Finally, there are structural and organisational factors that determine the GP's detection of, and involvement in, patients' mental health problems, as for example the prevalence of mental health problems on the GP's patient list[58]. GPs also mention a lack of referral possibilities and mental health care facilities as obstacles in their detection and involvement in mental health problems[60;61].
But, according to their own perceptions, the main factor that determines why GPs are not able to detect their patients' mental health problems, or get involved in patients' mental health problems in general, is their available time and workload[57-61;98]. Also patients mention that their doctors' lack of time is a reason for not disclosing their mental health problems[80;99]. Remarkably, while initiatives to improve the GP's detection rates are often found in training, GPs themselves mention lack of time and workload, and not their competence, as a barrier to applying the skills they already have in order to detect their patients' mental health problems. In two studies it is even noted that GPs make a choice about their involvement in patients' mental health problems, dependent on their available time and energy[58;61].

There are several factors that make up a GP's workload. Available time and energy, feelings of a lack of time and stress, all contribute to workload, along with the number of working hours and patients contacts, and GPs' feelings of burnout or job satisfaction. But there is no clear description or definition of workload. It is a concept with many faces. In each measure of workload only one specific aspect of workload is covered[100]. In spite of this broad variety of workload measures, a commonly used structure in these measures is the sub-division between objective and subjective workload.
Objective workload refers to the work that is done and the time that it takes. But if a GP's workload is objectively high, for example due to a high number of patient contacts or working hours, this does not automatically result in a GP's subjective experience of workload, for example feelings of lack of time or stress. To illustrate how objective and subjective workload are interrelated and explained, we look towards equity theory[101;102]. In the literature of work-related stress, several 'balance' models, originally based on this theory, are developed to explain stress and burnout, for example the Dual Level Social Exchange model[103], the Effort Reward Imbalance model[104] and the Job Demand-Resources model[105]. According to equity theory, people evaluate their relationships with others in terms of input (or job demands and investments) and output (or outcomes and rewards) compared to others around them. This

principle can, except for interpersonal relationships, also be applied to organisational settings[103-105], and to explain burnout among general practitioners[106;107]. In work settings people compare their job demands and investments they make with the rewards they receive. Objective workload, the amount of work that is done and the time that it takes, overlaps mainly with job demands. Rewards are sometimes called 'job resources'[105]. These are, for example, found in financial rewards, respect, and social contacts.

When job demands are high, rewards are low, or both, people may experience an inequity or imbalance. But "equity is in the eye of the beholder"[102]: the evaluation of the balance between job demands and rewards is personal. The same amount of work, with the same rewards, can be evaluated as in balance for the one, but out of balance for someone else. Personal factors such as someone's perception of their role, preferences and competence determine that person's evaluation of the fairness of the investments versus the rewards.

People who experience an imbalance between their investments and rewards develop stressful feelings, and a long-lasting period of stress may eventually lead to burnout[103;105;107]. The link between stress and burnout is also demonstrated in general practitioners. It is known that GPs with high levels of burnout often have high stress levels, and a high perceived workload[108;109].

Burnout is a work-related health problem, that is initiated by chronic stress at work[110]. It is 'a syndrome of emotional exhaustion, depersonalisation and reduced accomplishment that can occur among individuals who work with people in some capacity'[111]. However, it is also demonstrated that burnout may also occur outside human services[105;108;111]. Emotional exhaustion and depersonalisation are the key concepts of burnout. Emotional exhaustion refers to feelings of energy depletion. Depersonalisation is expressed in a negative, cynical and distant attitude towards others. Reduced personal accomplishment is a negative attitude to oneself, in relation to one's job.

According to equity theory, people who experience an imbalance are strongly motivated to restore this imbalance. Solutions to dissolve the imbalance are found in changing the job demands (for example compensating extra job demands by reducing other work), adjusting someone's expectations, or increasing the rewards. Decreasing the job demands is the most obvious solution, as it is demonstrated that high job demands are more strongly related to burnout than a lack of job resources[112]. For example, it is demonstrated in one study that limiting the working hours of medical residents is associated with a reduction in burnout[113].

Except for the division between objective and subjective workload, a second useful clustering is the subdivision between workload on a micro level and overall workload. A GP's workload on a micro level is the workload at a specific moment, for example during a consultation, or their workload with respect to a specific aspect of their job, for example the workload belonging to their mental health care. Overall workload indicates how busy the GP is in general, indicated by the sum of all their job demands, or the GP's overall subjective workload, as, for example, in the case of burnout.

The aim of this study is on the one hand, to investigate to what extent the GP's involvement in their patients' mental health care is demanding with respect to the GP's workload, and to specify how this workload is manifested. We distinguish measures of objective and subjective, as well as overall workload measures, and workload on a micro level, to cover the 'workload concept' as completely as possible. The expectation is that when GPs make more mental health assessments, their objective workload, or job demands, will increase. As a higher objective workload may affect the balance between job demands and rewards, and GPs claim that mental health problems are generally more demanding compared to other problems, we expect that more mental health diagnoses will result in an increased subjective workload, manifested as feelings of a lack of time or burnout.
Additionally, we focus on the GPs themselves. We expect that GPs with a broader perception of their role with respect to mental health care, who pay more attention to psychological aspects, have a greater involvement in patients' mental health problems, and therefore have a higher overall objective and subjective workload.
On the other hand, we investigate GPs' involvement in patients' mental health problems when their workload is already high. If GPs' involvement in their patients' mental health problems demands extra time, this might be a problem especially when GPs' objective workload is already high, or if they already have stressful feelings about their job. This is illustrated by the fact that GPs and patients both claim that time is a significant factor when discussing mental health problems during consultations, and lack of time and workload are barriers to this. In terms of Goldberg & Huxley's filter model, workload is supposed to be a barrier to passing the second filter, in which a patient with mental health problems, who visits a GP, is recognised by the GP as having mental health problems. According to equity theory, GPs with high job demands or even a high subjective workload will, in order to restore the

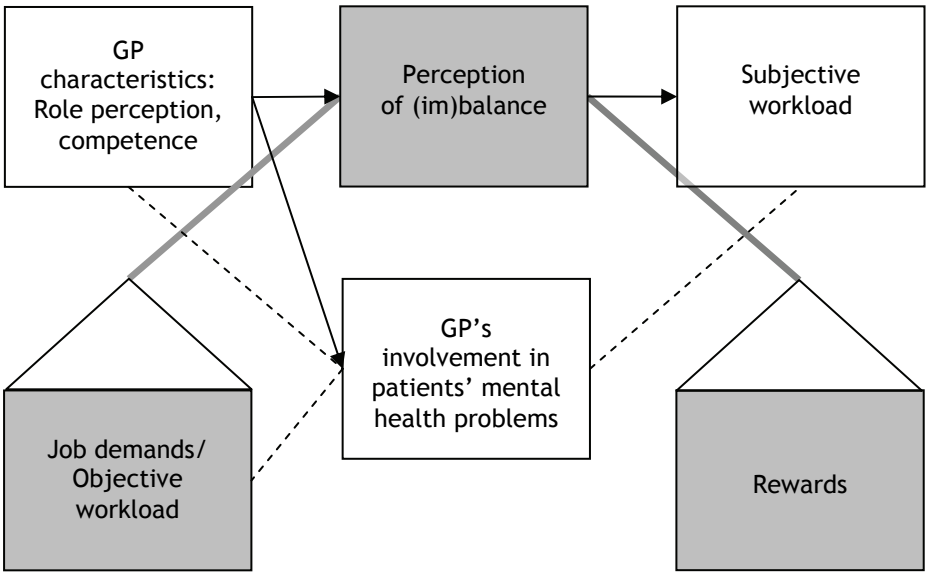
balance, prefer to reduce their job demands, instead of investing extra time and energy. Therefore the expectation is that, in order to gain time and energy, GPs with a high workload will be less inclined to get involved in their patients' mental health problems compared to GPs with a low workload. We expect that GPs with a high workload will adapt their communication to elicit less patient disclosure with respect to their mental health problems. There will be less encouragement for their patients to discuss their mental health problems, resulting in less involvement of psychological aspects in the consultation. This will be especially the case with a GP suffering from feelings of burnout. It can be expected that their distant, cynical attitude that characterises burnout will reduce their openness and affect upon their patients, resulting in less involvement in mental health problems in the consultation.

Aims and research questions

The central aim of this study is to unravel the relationship between GPs' workload and their involvement in patients' mental health problems. GPs' involvement in mental health problems is indicated by their psychological or social assessments; mental health treatment is left out of the consideration. To deepen this question we also studied the relationship between GPs' workload and their communication that is supposed to encourage the patient to disclose their mental health problems.

In model 1, the main concepts that are investigated in this thesis are presented. The shaded concepts reflect the balance between job demands and rewards, while the others are the relevant concepts that are supposed to influence this balance. The arrows between the concepts indicate the relationships that are already known. The dotted lines correspond with the relationships that are investigated in this study.

Model 1: Conceptual model



We address several specific research questions by adopting two perspectives. The starting point from the first perspective is that patients' mental health problems may affect GPs' objective and subjective workload. Three questions are posed with regard to this perspective; each question corresponds with a chapter in this thesis. The first two questions provide information about the extra workload on a micro level specifically due to patients' mental health problems.

1a) Do patients with psychological diagnoses make greater demands of general practice than patients with only somatic diagnoses?
1b) Is this demand dependent on the character of the patients' psychological diagnoses?

2) Is a GP's objective and subjective workload on a micro level greater in consultations involving patients' psychological problems compared to consultations without involvement of psychological problems?

In other words, we investigate in the questions above if patients with mental health problems increase GPs' job demands and subjective workload. We distinguish different categories of mental health problems and consider not only patients' mental health problems but also somatic problems in which psychological factors play a part.
In questions 1 and 2, the focus is on GPs' workload on a *micro* level; the specific workload that is associated with GPs' mental health involvement. But it is not clear if GPs who are more inclined to make psychological assessments, and are more involved in patients' mental health problems, also have a higher *overall* workload compared to GPs who are less inclined toward psychological evaluations. Therefore the third research question is:

3) *Do GPs who pay more attention to their patients' psychological problems have a higher overall workload compared to GPs who are more focused on a patient's somatic problems?*

In the second part of this thesis the focus is on the perspective of the quality of care. The basic idea is that when a GP's workload is already high, and their job demands and rewards are already out of balance, GPs will, in order to gain time and energy, be less inclined to get involved in patients' mental health problems. Special attention is given to GPs' burnout and dissatisfaction with the available time, two negative feelings that are viewed in this study as aspects of GPs' subjective workload. From this perspective we ask:

4) *Does a GP's objective and subjective workload affect their communication and psychological assessments in their consultations?*

The reasoning behind this question is that GPs with a higher workload are supposed to be less inclined to encourage their patients to disclose their mental health problems, and therefore make less mental health assessments, compared to GPs with a lower workload. This might limit the possibilities of finding adequate care for the patient.

Design of the study

Secondary analyses were performed on data from the second Dutch National Survey of General Practice, a cross-sectional survey that was carried out from April 2000 till January 2002[1;2]. This National Survey was conducted in 104 Dutch general practices with 195 GPs, and a practice population of 385,461 patients. The participating GPs were representative of all Dutch GPs with respect to age, gender, region, urbanisation level, and full-time versus part-time working[1]. The patients enlisted in the participating practices were representative of the Dutch population with respect to age, sex and type of insurance[114]. The privacy of the participating persons is guaranteed in accordance with Dutch legislation[1]. The data collections from the National Survey that are used for this study are described below.

Medical records

During one calendar year, all participating GPs kept an electronic medical record of all the contacts they had with their patients (see Van der Linden et al., 2004[66]). This registration was part of their standard medical registration. In total approximately 1.5 million contacts were recorded[1]. GPs coded patients' diagnoses according the International Classification of Primary Care (ICPC). Afterwards episodes of illness were constructed which were integrating one or more contacts concerning the same problem or illness[66]. In this study symptoms and diagnoses in ICPC chapter P 'Psychological' and Z 'Social' are compared to somatic symptoms and diagnoses in other ICPC chapters.

Video observation

A sample of 142 GPs that participated in the National Survey gave permission to videotape their consultations over a period of one to two days (see Van den Brink et al, 2004[115]). These 142 GPs were representative of the Dutch population of GPs with regard to their age, sex, education, length of residence, degree of urbanisation and number of working hours[115]. The video registration was principally meant to determine the GP's style of communication. 88.1% of the patients gave informed consent to participate in the video recording. Roughly 15 consultations per GP, in total 2095 consultations, were videotaped and observed by trained observers. GPs' verbal communication was coded according to the Roter Interaction Analysis System (RIAS), a widely used and validated observation instrument for coding verbal communication in medical interactions[116-118]. The interrater reliability for GP communication expressed in Pearson's correlation coefficients varied between

.72 and .95[115]. After each consultation, the GP completed a registration form about the consultation. Patients completed a questionnaire before and after each consultation.

GP questionnaire and diary

All GPs were sent two written questionnaires, covering a wide range of topics, as, for example, workload, job attitudes, job satisfaction, and several demographic GP characteristics (see Van den Berg et al., 2004[119]). The response rates for the two questionnaires were respectively 96% and 87%. Additionally, the participating GPs kept a detailed log of their use of time every quarter, by registering their activities during a representative working week. The response rate was 84%.

Patient census

All 385,461 enlisted patients were sent a questionnaire in order to determine socio-demographic characteristics, as, for example, age, sex, education level, and country of birth (see Cardol et al., 2004[121]). The response here was 76.5%.

Box 1 presents an overview of all measures used in this study. Dependent on the research question, data are organised and analysed on GP, patient, or consultation level. Unique identifiers were used to enable interlinking of all data on different levels of measurement. A more detailed description of all measures and variables is given in the chapters concerned.

Box 1: Overview of all measures

Measure	Database
GP's objective overall workload	
Nr. of hours worked weekly per fte involved	GP diary
Nr. of weekly patient contacts per fte involved	Contact registration
Personal list size	GP questionnaire
GP's objective workload on micro level	
Nr. of contacts, diagnoses and episodes of illness per patient with mental health problems per year	Contact registration
Nr. of diagnoses per consultation	Video observation
Consultation length	Video observation
GP's subjective overall workload	
Job satisfaction with the available time	GP questionnaire
Burnout: emotional exhaustion, depersonalisation, reduced accomplishment	GP questionnaire
GP's subjective workload on micro level	
Feelings of lack of time before and after the consultation	GP questionnaire after the consultation
GP's involvement in mental health problems	
Psychological assessments	
Psychological or social diagnosis in consultation	Video observation
GP's psychological awareness/consultation	GP questionnaire after the consultation
Attention to psychological problems	
Psychosocial role perception	GP questionnaire
% psychological/social diagnoses per year	Contact registration
Communication	
Verbal and nonverbal communication	Video observation
GP and patient characteristics	
GP socio-demographic characteristics: age, sex, years of establishment, FTE's involved, urbanisation level practice	GP questionnaire
Patient socio-demographic characteristics: age, sex, health insurance, education level, occupational status, ethnicity	Patient census
Patient's feelings of distress	Patient questionnaire before the consultation

Outline of this thesis

Chapters 2 to 6 were aimed at answering the research questions. These chapters can be read independently, because each chapter is already

published (chapters 2, 3, 4 and 5) or submitted (chapter 6) in scientific journals. As a consequence, the content of these chapters may overlap, especially with respect to the methods.

In chapter 2 and 3 we investigated if a GP's involvement in patients' mental health problems is related to a higher workload on microlevel. Chapter 2 describes whether patients with psychological or social diagnoses make greater demands on their general practice compared to patients with only somatic problems. Chapter 3 reports on GPs' workload in consultations involving patients with mental health problems, as main problems, or present in the background.

Furthermore, we investigated if a GP's higher workload on microlevel is also translated into a higher overall workload. Therefore we describe in chapter 4 if GPs who pay more attention to patients' mental health problems have a higher overall workload compared to GPs who pay less attention to patients' mental health problems.

Chapter 5 aims to give insight into the relationship between GPs' workload and their communication and awareness of psychological aspects in the patients' complaints.

In chapter 6 we describe if consultations by GPs who feel burnt out or dissatisfied with the available time contain less psychological elements compared to those from GPs without these negative feelings.

In chapter 7, the results of the research chapters are summarised and discussed in the light of the methods, theory and earlier findings. The implications for practice are formulated, as well as recommendations for future research.

References

1. Westert GP, Schellevis FG, Bakker DH, Groenewegen PP, Bensing JM, Zee J van der (2005). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health, 15(1), 59-65.
2. Westert G, Jabaaij L, Schellevis F (2006). Morbidity, performance, and quality in primary care. Oxford/Seattle: Radcliffe Publishing.
3. Bijl RV, Ravelli A, Zessen G van (1998). Prevalence of psychiatric disorder in the general population: results of The Netherlands Mental Health Survey and Incidence Study (NEMESIS). Soc Psychiatry Psychiatr Epidemiol, 33(12), 587-95.
4. Koeter M, Ormel J (1991). General Health Questionnaire. Nederlandse Bewerking (Dutch version). Lisse: Swets & Zeitlinger.
5. Verhaak PFM, Hoeymans N, Garssen AA, Westert GP (2005). Mental health in the population and in general practice: 1987-2001. Br J Gen Pract, 55(519), 770-5.
6. Ormel J, Brink W van den, Koeter MW, Giel R, Meer K van der, Willige G van de et al. (1990). Recognition, management and outcome of psychological disorders in primary care: a naturalistic follow-up study. Psychol Med, 20(4), 909-23.
7. Howe A (1996). Detecting psychological distress: can general practitioners improve their own performance? Br J Gen Pract, 46(408), 407-10.
8. Stirling A, Wilson P, McConnachie A (2001). Deprivation, psychological distress, and consultation length in general practice. Br J Gen Pract, 51(467), 456-60.
9. Bijl RV, Ravelli A (2000). Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). Psychol Med, 30, 657-68.
10. Ormel J, Von Korff M, Ustun T, Pini S, Korten A, Oldehinkel T (1994). Common mental disorders and disability across cultures. Results from the WHO collaborative study on psychological problems in general health care. JAMA, 272, 1741-8.
11. Wohlfarth TD, Brink W van den, Ormel J, Koeter MW, Oldehinkel AJ (1993). The relationship between social dysfunctioning and psychopathology among primary care attenders. Br J Psychiatry, 163, 37-44.
12. Alonso J, Angermeyer M, Bernert S, Bruffaerts R, Brugha T, Bryson H et al. (2004). Disability and quality of life impact of mental disorders in Europe: results form the European Study of Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatr Scand Suppl, 420, 38-46.
13. Meijer S, Smit F, Schoemaker C, Cuijpers P (2006). Gezond verstand. Evidence-based preventie van psychische stoornissen (Common sense. Evidence-based prevention of mental disorders). Bilthoven: RIVM.
14. Narrow W, Regier D, Norquist G, Rae D, Kennedy C, Arons B (2000). Mental health service use by Americans with severe mental illnesses. Soc Psychiatry Psychiatr Epidemiol, 35, 147-55.
15. Westert G, Verkleij H (2006). Zorgbalans, de prestaties van de Nederlandse gezondheidszorg in 2004 (Dutch Health Care Performance Report in 2004). Bilthoven: RIVM.
16. Boerma WGW, Verhaak PFM (1999). The general practitioner as the first contacted health professional by patients with psychosocial problems: a European study. Psychol Med, 29(3), 689-96.
17. Bushnell J, McLeod D, Dowell A, Salmond C, Ramage S, Collings S et al. (2006). The treatment of common mental health problems in general practice. Fam Pract, 23, 53-9.

18. Ormel J, Koeter M, Brink W van den, Willige G van de (1991). Recognition, management, and course of anxiety and depression in general practice. Arch Gen Psychiatry, 48, 700-6.
19. Roter DL, Hall JA, Kern DE, Randol Barker L, Cole KA, Roca RP (1995). Improving Physicians' Interviewing Skills and Reducing Patients' Emotional Distress. A randomized Clinical Trial. Arch Intern Med, 155, 1877-84.
20. Pasch M van der, Verhaak PFM (1998). Communication in general practice: recognition and treatment of mental illness. Patient Educ Couns, 33, 97-112.
21. Tiemens BG, Ormel J, Simon GE (1996). Occurrence, recognition, and outcome of psychological disorders in primary care. Am J Psychiatry, 153(5), 636-44.
22. Tiemens B, Ormel J (1996). The capricious relationship between recognition and outcome of mental illness in primary care. Epidemiol Psichiatr Soc, 5, 160-3.
23. Scott A, Wordsworth S (1999). The effects of shifts in the balance of care on general practice workload. Fam Pract, 16(1), 12-7.
24. Visscher A, Laurant M, Schattenberg G, Grol R (2002). De rol van de huisarts inzake geestelijke gezondheidszorg (GP's role in mental health care). Nijmegen: Centre for quality of care research, UMC St Radboud.
25. Andersson SO, Ferry S, Mattson B (1993). Factors associated with consultation length and characteristics of short and long consultations. Scand J Prim Health Care, 11, 61-7.
26. Carr-Hill R, Jenkins-Clarke S, Dixon P, Pringle M (1998). Do minutes count? Consultation lengths in general practice. J Health Serv Res Policy, 3, 207-13.
27. Deveugele M, Derese A, Brink-Muinen A van den, Bensing J, Maeseneer J de (2002). Consultation length in general practice: cross sectional study in six European countries. BMJ, 325, 472-7.
28. Howie J, Porter A, Heaney D, Hopton J (1991). Long to short consultation ratio: a proxy measure of quality of care for general practice. Br J Gen Pract, 41, 48-54.
29. Hutton C, Gunn J (2007). Do longer consultations improve the management of psychological problems in general practice? A systematic literature review. BMC Health Serv Res, 7:71.
30. Sturmberg JP (2002). General practice-specific care categories: a method to examine the impact of morbidity on general practice workload. Fam Pract, 19(1), 85-92.
31. Morrison I, Smith R (2000). Hamster health care. BMJ, 321, 1541-2.
32. Rout UF, Rout JK (1994). Job satisfaction, mental health and job stress among general practitioners before and after the new contract-a comparative study. Fam Pract, 11(3), 300-6.
33. Appleton KF, House AF, Dowell A (1998). A survey of job satisfaction, sources of stress and psychological symptoms among general practitioners in Leeds. Br J Gen Pract, 48, 1059-63.
34. Burdi MD, Baker LC (1999). Physicians' perceptions of autonomy and satisfaction in California. Health Aff (Millwood), 18, 134-45.
35. Dowell AC, Hamilton S, McLeod DK (2000). Job satisfaction, psychological morbidity and job stress among New Zealand general practitioners. N Z Med J, 113, 269-72.
36. Edwards N, Kornacki M, Silversin J (2002). Unhappy doctors: what are the causes and what can be done? BMJ, 324, 835-8.
37. Post D, Calkhoven JE, Krol B, Dijkstra M, Groothoff JW (2002). Groeiend ongenoegen. Een onderzoek onder huisartsen (Increasing discontent. A study among GPs). Medisch Contact, 57(2), 63-5.

38. Sibbald B, Bojke C, Gravelle H (2003). National survey of job satisfaction and retirement intentions among general practitioners in England. BMJ, 326, 22-5.

39. Whalley D, Bojke C, Gravelle H, Sibbald B (2006). GP job satisfaction in view of contract reform: a national survey. Br J Gen Pract, 56, 87-92.

40. Bakker D de, Polder J, Sluijs E, Treurniet H, Hoeymans N, Hingstman L et al. (2005). Op één lijn. Toekomstverkenning eerstelijnszorg 2020 (Public health forecast for primary care in the Netherlands in 2020). Utrecht/Bilthoven: NIVEL/RIVM.

41. Capaciteitsorgaan (2004). Ontwikkeling capaciteit huisartsenzorg 2000-2004-2012 (Development of capacity in general practice 2000-2004-2012). Utrecht: Capaciteitsorgaan.

42. British Medical Association (2006). Health Committee Inquiry into Workforce Planning, British Medical Association Memorandum of Evidence. London: British Medical Association.

43. Association of American Medical Colleges (2005). The Physician Workforce: Position Statement. USA: Association of American Medical Colleges.

44. Medical Council of Canada (2006). Medical Workforce Policy-making in Canada: 1993-2003. Canada's Medical Workforce Policy Makers' Current Challenges. Two Responses to the Enrollment Cutbacks of the 1990's. Montreal: Medical Council of Canada.

45. Australian Medical Workforce Advisory Commitee (2005). The general practice Workforce in Australia: Supply and requirements to 2013. Sydney: New South Wales Health Department.

46. Dugdale DC, Epstein R, Pantilat SZ (1999). Time and the patient-physician relationship. J Gen Intern Med, 14 Suppl 1, S34-S40.

47. Freeman GK, Horder JP, Howie JG, Hungin AP, Hill AP, Shah NC et al. (2002). Evolving general practice consultation in Britain: issues of length and context. BMJ, 324, 880-2.

48. Wilson A, Childs S (2002). The relationship between consultation length, process and outcomes in general practice: a systematic review. Br J Gen Pract, 52, 1012-20.

49. Howie J, Heany D, Maxwell M, Walker J, Freeman G, Rai H (1999). Quality of general practice consultations: cross sectional survey. BMJ, 319, 738-43.

50. Anderson R, Camacho F, Balkrishnan R (2007). Willing to wait?: The influence of patient wait time on satisfaction with primary care. BMC Health Serv Res, 7:31.

51. DeVoe J, Fryer Jr GE, Hargraves JL, Phillips RL, Green LA (2002). Does career dissatisfaction affect the ability of family physicians to deliver high-quality patient care? J Fam Pract, 51, 223-8.

52. Grol R, Mokkink H, Smits A, Eijk J van, Beek M, Mesker P et al. (1985). Work satisfaction of general practitioners and the quality of patient care. Fam Pract, 2, 128-35.

53. Williams E, Manwell L, Konrad T, Linzer M (2007). The relationship of organizational culture, stress, satisfaction, and burnout with physician-reported error and suboptimal patient care: results from the MEMO study. Health Care Manage Rev, 32, 203-12.

54. Landrigan CP, Rothschild JM, Cronin JW, Kaushal R, Burdick E, Katz JT et al. (2004). Effect of reducing interns' work hours on serious medical errors in intensive care units. N Engl J Med, 351, 1838-48.

55. Shanafelt TD, Bradley KA, Wipf JE, Back AL (2002). Burnout and self-reported patient care in an internal medicine residency program. Ann Intern Med, 136, 358-67.

56. West CP, Huschka MM, Novotny PJ, Sloan JA, Kolars JC, Habermann TM et al. (2006). Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. JAMA, 296, 1071-8.

57. Bushnell J, McLeod D, Dowell A, Salmond C, Ramage S, Collings S et al. (2005). General practitioners' perceptions of barriers to their provision of mental health care: a report on Mental Health and General Practice Investigation (MaGPIe). N Z Med J, 1118(1222).

58. Howe A (1996). "I know what to do, but it's not possible to do it"--general practitioners' perceptions of their ability to detect psychological distress. Fam Pract, 13, 127-32.

59. Oöpik P, Aluoja A, Kalda R, Maaroos H (2006). Family doctors' problems and motivating factors in management of depression. BMC Fam Pract 7:64.

60. Telford R, Hutchinson A, Jones R, Rix S, Howe A (2002). Obstacles to effective treatment of depression: a general practice perspective. Fam Pract, 19, 45-52.

61. Dew K, Dowell A, McLeod D, Collings S, Bushnell J (2005). "This glorious twilight zone of uncertainty": mental health consultations in general practice in New Zealand. Soc Sci Med, 61, 1189-200.

62. Meijer SA, Zantinge EM, Verhaak PFM, Scholten M, Pols J, Valenkamp MW et al. (2003). Evaluatie versterking eerstelijns GGZ. Tweede interim-rapportage. (Evaluation of the reinforcement of primary mental health care. Second interim-report). Utrecht: NIVEL.

63. Verhaak PFM (1995). Mental Disorder in the Community and in General Practice: Doctors' Views and Patients' Demands. Avebury: Aldershot.

64. Verheij R, Te Brake J, Abrahamse H, Van den Hoogen H, Braspenning J, Jabaaij L et al. (2007). Landelijk Informatienetwerk Huisartsenzorg. Feiten en cijfers over huisartsenzorg in Nederland. (Netherlands Information Network of General Practice. Facts and figures about GP care in the Netherlands). Utrecht/Nijmegen: NIVEL/WOK.

65. Verhaak P (1993). Analysis of referrals of mental health problems by general practitioners. Br J Gen Pract, 43, 203-8.

66. Linden MW van der, Westert GP, Bakker DH de, Schellevis FG (2004). Klachten en aandoeningen in de bevolking en de huisartspraktijk (Complaints and illnesses in the population and in general practice). Utrecht: NIVEL.

67. Vogelaar E (2005). Voorstel van Ella Vogelaar, onafhankelijk voorzitter van het overleg tussen LHV, VWS en ZN, aan genoemde partijen voor een Beleidsagenda en bekostigingssystematiek huisartsenzorg voor 2006 en 2007 (Proposal of Ella Vogelaar, independent chairman of the consultation between LHV, VWS and ZN, to the parties mentioned, with respect to a policy agenda and finance system for general practice care for 2006 and 2007).

68. Dutch Ministry of Health, Welfare and Sport (1998). Beleidsvisie Geestelijke Gezondheidszorg 1999 (Policy view Mental health care 1999). Den Haag: Elkerhout.

69. Verhaak P, Groenendijk J, Zantinge E, Vonk E, Voordouw I, Veen C van der (2006). GGZ-consultaties aan de eerstelijnszorg. Eindrapportage (Mental health consultations to primary care. Final report). Utrecht: NIVEL.

70. Hansen J, Nuijen T, Hingstman L (2008). Monitor multidisciplinaire samenwerkingsverbanden in de eerste lijn. Utrecht: NIVEL.

71. Alonso J, Angermeyer M, Bernert S, Bruffaerts R, Brugha T, Bryson H et al. (2004). Use of mental health services in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatr Scand Suppl, 47-54.

72. Bijl R, Ravelli A (2000). Psychiatric morbidity, service use and need for care in the general population: results of the Netherlands Mental Health Survey and Incidence Study. Am J Public Health, 602-7.

73. Kessler R, Berglund P, Bruce M, Koch J, Laska E, Leaf P et al. (2001). The prevalence and correlates of untreated serious mental illness. Health Serv Res, 36, 987-1007.

74. Goldberg D, Huxley P (1980). Mental illness in the community. The Pathway to Psychiatric Care. London/New York: Tavistock Publications.

75. Goldberg D, Huxley P (1992). Common mental disorders. A Bio-social Model. London: Routledge.
76. Cape J (2001). How general practice patients with emotional problems presenting with somatic or psychological symptoms explain their improvement. Br J Gen Pract, 51, 724-9.
77. Gulbrandsen P, Fugelli P, Hjortdahl P (1998). Psychosocial problems presented by patients with somatic reasons for encounter: tip of the iceberg? Fam Pract, 15, 1-8.
78. Robinson JW, Roter DL (1999). Psychosocial problem disclosure by primary care patients. Soc Sci Med, 48, 1353-62.
79. Bushnell J, McLeod D, Dowell A, Salmond C, Ramage S, Collings S et al. (2005). Do patients want to disclose psychological problems to GPs? Fam Pract, 22(6), 631-7.
80. Cape J, McCulloch Y (1999). Patients' reasons for not presenting emotional problems in general practice consultations. Br J Gen Pract, 49, 875-9.
81. Marinus AMF (1993). Inter-doktervariatie in de huisartspraktijk (Interdoctor variation in general practice). Amsterdam: University of Amsterdam.
82. Gulbrandsen P, Hjortdahl P, Fugelli P (1997). General practitioners' knowledge of their patients' psychosocial problems: multipractice questionnaire survey. BMJ, 314, 1014-8.
83. Meer K van der (1994). Patiënten met psychische en sociale problemen in de huisartspraktijk (Patients with psychological and social problems in general practice). Lelystad: Meditekst.
84. Howie JG, Hopton JL, Heaney DJ, Porter AM (1992). Attitudes to medical care, the organization of work, and stress among general practitioners. Br J Gen Pract, 42(358), 181-5.
85. Kerr M, Blizard R, Mann A (1995). General practitioners and psychiatrists: comparison of attitudes to depression using the depression attitude questionnaire. Br J Gen Pract, 45, 89-92.
86. Ross S, Moffat K, McConnachie A, Gordon J, Wilson P (1999). Sex and attitude: a randomized vignette study of the management of depression by general practitioners. Br J Gen Pract, 49, 17-21.
87. Kolthof E, Zantinge E, Berg M van den, Bakker D de, Zee J van der (2004). Psychosociale zorg in de huisartspraktijk en werkbelasting (Psychosocial care in general practice and workload). In Berg M van den, Kolthof E, Bakker D de, Zee J van der. De werkbelasting van huisartsen (The workload of general practitioners). Utrecht: NIVEL.
88. Del Piccolo L, Saltini A, Zimmermann C, Dunn G (2000). Differences in verbal behaviours of patients with and without emotional distress during primary care consultations. Psychol Med, 30, 629-43.
89. Salmon P, Dowrick CF, Ring A, Humphris GM (2004). Voiced but unheard agendas: qualitative analysis of the psychosocial cues that patients with unexplained symptoms present to general practitioners. Br J Gen Pract, 54, 171-6.
90. Goldberg DP, Jenkins L, Millar T, Faragher EB (1993). The ability of trainee general practitioners to identify psychological distress among their patients. Psychol Med, 23, 185-93.
91. Robinson JW, Roter DL (1999). Counseling by primary care physicians of patients who disclose psychosocial problems. J Fam Pract, 48, 698-705.
92. Winefield H, Murrell T, Clifford J, Farmer E (1996). The search for reliable and valid measures of patient-centredness. Psychology & Health, 11, 811-24.
93. Roland MO, Bartholomew J, Courtenay MJ, Morris RW, Morrell DC (1986). The "five minute" consultation: effect of time constraint on verbal communication. Br Med J (Clin Res Ed), 292, 874-6.

94. Millar T, Goldberg DP (1991). Link between the ability to detect and manage emotional disorders: a study of general practitioner trainees. Br J Gen Pract, 41, 357-9.

95. Verhaak P, Bensing J, Brink-Muinen A van den (2007). GP mental health care in 10 European countries: patients' demands and GPs' responses. Eur J Psychiatry, 21, 7-16.

96. Bensing JM, Kerssens JJ, Pasch M van der (1995). Patient directed gaze as a tool for discovering and handling psychosocial problems in general practice. J Nonverbal Behav, 19, 223-42.

97. Giron M, Manjon-Arce P, Puerto-Barber J, Sanchez-Garcia E, Gomez-Beneyto M (1998). Clinical interview skills and identification of emotional disorders in primary care. Am J Psychiatry, 155, 530-5.

98. Rost K, Humphrey J, Kelleher K (1994). Physician management preferences and barriers to care for rural patients with depression. Arch Fam Med, 3, 409-14.

99. Hopton JL, Howie J, Porter AM (1993). The need for another look at the patient in general practice satisfaction surveys. Fam Pract, 10, 82-7.

100. Scott A, Vale L (1998). Increased general practice workload due to a primary care led National Health Service: the need for evidence to support rhetoric. Br J Gen Pract, 48, 1085-8.

101. Adams J (1965). Inequity in social exchange. In Berkowitz L. Advances in Experimental Social Psychology, 2, 267-99. New York: Academic Press.

102. Walster E, Walster G, Berscheid E (1978). Equity: Theory and Research. Boston: Allyn & Bacon.

103. Buunk BP, Schaufeli WB (1999). Reciprocity in interpersonal relationships: An evolutionary perspective on its importance for health and well-being. In Stroebe W, Hewstone M. Eur rev soc psychol (vol 10). Chichester: John Wiley.

104. Siegrist J (1996). Adverse health effects of high effort-low reward conditions. J Occup Health Psychol, 1, 27-41.

105. Demerouti E, Bakker AB, Nachreiner F, Schaufeli W (2001). The Job Demands-Resources Model of Burnout. J Appl Psychol, 86, 499-512.

106. Bakker A, Schaufeli W, Sixma H, Bosveld W, Dierendonck D van (2000). Patients demands, lack of reciprocity and burnout: a five year. J Organiz Behavior, 21, 425-41.

107. Dierendonck D van, Schaufeli W, Sixma H (1994). Burnout among general practitioners: a perspective from equity theory. J Soc Clin Psychol, 13(1), 86-100.

108. Schaufeli W, Dierendonck D van (2000). UBOS (Utrechtse Burnout Schaal). Handleiding. (Utrecht Burnout Scale. Manual). Lisse: Swets & Zeitlinger.

109. McManus IC, Winder BC, Gordon D (2002). The causal links between stress and burnout in a longitudinal study of UK doctors. Lancet, 359, 2089-90.

110. Schaufeli W, Enzman D (1998). The burnout companion to study & practice. A critical analysis. Londen: Taylor & Francis.

111. Maslach C, Jackson S, Leiter M (1996). Maslach Burnout Inventory Manual. Palo Alto, California: Consulting Psychologists Press.

112. Schaufeli W, Bakker A (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. Journal Organiz Behavior, 25, 293-315.

113. Martini S, Arfken CL, Balon R (2006). Comparison of burnout among medical residents before and after the implementation of work hours limits. Acad Psychiatry, 30, 352-5.

114. Schellevis F, Westert G (2006). The design of the second Dutch National Survey of General Practice. In Westert G, Jabaaij L, Schellevis F. Morbidity, performance, and quality in primary care, pp 10-8. Oxford/Seattle: Radcliffe Publishing.

115. Brink-Muinen A van den, Dulmen AM, Schellevis FG, Bensing JM (2004). Tweede Nationale Studie naar ziekten en verrichtingen in de huisartspraktijk. Oog voor communicatie: huisarts-patiënt communicatie in Nederland (Second Dutch National Survey in General Practice. Focus on communication: doctor-patient communication in the Netherlands). Utrecht: NIVEL.
116. Roter D, Larson S (2002). The Roter interaction analysis system (RIAS): utility and flexibility for analysis of medical interactions. Patient Educ Couns, 46, 243-51.
117. Ong LML, Visser MRM, Kruyver IPM, Bensing JM, Brink-Muinen A van den, Stouthard JML et al. (1998). The Roter Interaction Analysis System (RIAS) in oncological consultations: psychometric properties. Psycho-Oncology, 7, 387-401.
118. Roter DL (1991). The Roter Method of Interaction Process Analysis (RIAS Manual). Baltimore: The Johns Hopkins University.
119. Berg M van den, Kolthof E, Bakker D de, Zee J van der (2004). De werkbelasting van huisartsen (The workload of general practitioners). Utrecht: NIVEL.
120. Cardol M, Dijk L van, Jong JD de, Bakker DH de, Westert GP (2004). Huisartsenzorg: Wat doet de poortwachter? (GP care: what does the gatekeeper do?) Utrecht: NIVEL.

Chapter 2

The workload of GPs: patients with psychological and somatic problems compared

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Abstract

Background
General practitioners (GPs) state that patients with mental health problems make heavy demands on their available time. To what extent these perceived problems correspond with reality needs more investigation.

Objectives
To investigate the effect of patients with psychological or social diagnoses on GPs' workload, expressed in time investments.

Method
Data were derived from a cross-sectional National Survey in General Practice, conducted in the Netherlands in 2000-2002. For a year, all patient contacts with a representative sample of 104 general practices were registered. Patients diagnosed with one or more diagnoses in ICPC (International Classification of Primary Care) chapter 'Psychological' or 'Social' (n=37,189) were compared to patients with only somatic diagnoses (n=189,731). A subdivision was made in diagnoses depression, anxiety, sleeping disorders, stress problems, problems related to work or partner and 'other psychological or social problems'. Workload measures are the consultation frequency, number of diagnoses and episodes of illness of the patients involved.

Results
Patients in all categories of psychological or social problems had almost twice as many contacts with their general practice as patients with only somatic problems. They received more diagnoses and more episodes of illness were shown. Patients with psychological or social diagnoses also contacted their general practice about their somatic problems more frequently, compared to patients with only somatic problems.

Conclusion
Patients with psychological or social problems make heavy demands on the GP's workload, for the greater part due to the increase in somatic problems presented.

Introduction

General practitioners (GPs) are usually patients' first contact with health care in the Netherlands, as they are in the UK, Ireland and Denmark[1]. They also play an important part in mental health care[2]. Recognition and diagnosis of psychological or social problems, often followed by treatment, are common tasks for a Dutch GP. Recent findings of the Dutch National Survey of General Practice show that about 8% of all diagnoses in general practice concern psychological or social diagnoses[3]. In fact, GPs in the Netherlands have a core position in mental health care, because government policy is directed at treating as many psychological and social problems as possible in primary health care. GPs have been reluctant to accept such a position because of the perceived lack of support from primary care psychologists, social work or other primary care counselling facilities and because of adverse referral possibilities to secondary mental health care. Additionally, they mention the time-consuming nature of patients with mental health problems[4;5]. The latter point is essential because GPs complain a lot about increasing workload and insufficient patient time, a development that seems to be international[6-10]. Lack of time is one of doctors' main complaints and particularly with respect to psychosocial care GPs state that patients consume a lot of their available time. In a nationwide survey among 1336 Dutch GPs about psychological and psychosocial care, 58% reported problems in this respect[4]. Similarly, in a British survey among general practitioners, psychiatric and psychological services were reported as one of the four main impact factors on GPs' work-load[5]. To what extent these perceived problems correspond with reality needs more investigation.

In this paper we investigate the effect of patients with psychological or social problems on GPs' workload, expressed in time investments. We aim to compare GPs' workload caused by patients with psychological or social problems to the workload caused by patients without our defined psychological or social problems, by considering whether patients with psychological or social problems contact their doctors more often and reveal more problems, resulting in more time investments of the GP. We distinguish between five prevalent categories of psychological and social problems of patients in general practice: depression, anxiety, sleeping disorders, stress problems and problems related to work or partner. In addition, a category with 'other psychological or social problems' is used. In earlier research, several authors

have demonstrated that patient characteristics like sex, age, kind of insurance, ethnicity, education level and employment status may influence GPs' workload[11-15]; they are included here in the analysis.

Method

The data for this study were collected within the framework of the second Dutch National Survey of General Practice (DNSGP-2), conducted in the Netherlands in 2000-2002[17]. During a one-year period, 195 general practitioners in 104 practices kept an electronic record of all the contacts they had with their patients, by means of a computer system that was added to their standard practice computer. The GP recorded the diagnoses of their patients and any prescriptions and referrals. Diagnoses were coded according to the International Classification of Primary Care (ICPC)[16]. Afterwards episodes of illness were constructed in which one or more contacts concerning the same problem or illness were integrated. Patient characteristics, including age, sex, kind of insurance (public versus private), ethnic background (Western versus non-Western), employment status (employed or not) and education (none, primary school, secondary school, higher vocational training/university), were gathered from a registration form that was sent to all patients on the lists of the participating practices. The Dutch National Survey sample is representative for the Dutch population of patients, GPs and practices[17]. Selection of the 104 practices was based on three stratification criteria: region, level of urbanisation and practice type (single-handed or group). Privacy of the participating persons is guaranteed and in accordance with Dutch legislation. Patients were informed about the study prior to data collection[17].

Measures

Registration data from 99 of 104 practices were suitable for analysis; 5 practices were eliminated because of incompleteness of registration. All adult patients (≥18) that contacted their general practice during the year are included in the study. Patients were categorised according to their ICPC diagnoses in the National Survey contact registration. Patients that received one or more diagnoses in ICPC chapter P 'Psychological' or Z 'Social' (n=37,189) were compared to patients without diagnoses in ICPC chapter P or Z (n=189,731). Obviously, patients with psychological of social diagnoses may also have somatic diagnoses. The group of patients without our defined

psychological or social diagnoses, are in this paper referred to as patients with only somatic diagnoses.

A further distinction was made between patients in five prevalent categories of P and Z diagnoses:

- Depression (P76 'Depression' and P03 'Depressive feeling')
- Anxiety (P74 'Anxiety disorder' and P01 'Anxious, nervous feeling')
- Sleeping problems (P06 'Sleeplessness, sleeping disorder')
- Stress (P78 'Nervous breakdown' and P02 'Acute stress reaction')
- Social problems (Z05 'Partner problems' and Z12 'Problems in working situation')

Because of co-morbidity, patients may be categorised in more than one P or Z category; 17.7% of the patients received two or more diagnoses in the selected categories. For the sake of completeness, a category of other psychological/ social diagnoses was added. Other psychological/social diagnoses include tobacco and alcohol abuse, problems with loss of partner, dementia and disturbances of memory or concentration. The annual contact frequency, number of diagnoses and episodes of illness per patient were calculated from the National Survey contact registration data. The number of diagnoses is the total frequency that a patient receives a diagnosis; the same diagnosis may occur several times. A contact, diagnosis or episode was defined as 'psychological/social' when the GP made a diagnosis in ICPC chapter P or Z.

Statistical analysis

Comparison of the patient characteristics of the different groups of patients was made using Pearson chi-square and T-tests. A one-way analysis of variance was used to compare means of consultation frequency, number of diagnoses and number of episodes of illness of the groups. Patient characteristics that showed differences between the psychological/social and the only somatic group ($p \leq .01$) were included in analysis of variance as covariates because of their supposed effect on GPs 'workload. A Bonferroni post-hoc test was applied to determine which means differ significantly.

Results

Patient characteristics included in our analyses are given in table 2.1. Patients with a psychological or social diagnosis are on average significantly older ($p<.01$) than those in the only somatic group, especially patients with sleeping problems. In general, they are more often female, publicly insured and more often have a Western nationality. Patients with psychological or social problems are more often unemployed and more highly educated. In general, the patients' characteristics in the specific categories of psychological and social diagnoses reflect the same differences compared to the only somatic group of patients as the total group of psychological and social diagnoses. Only patients with stress or 'other psychological/social problems' more often have a non-Western ethnic background ($p<.01$). Patients with 'other psychological or social diagnoses' are less well educated than patients with only somatic problems, while patients with psychological/social problems are generally more highly educated than the only somatic group.

Table 2.2 presents the mean annual contact frequency, number of diagnoses and episodes of illness of patients with only somatic diagnoses and patients with psychological/social diagnoses, as a result of analysis of variance. A distinction is made between patients with psychological/social diagnoses in the five selected psychological and social categories of diagnosis and a category 'other psychological and social problems'. The means in table 2.2 have been adjusted for the patient characteristics age, sex, kind of insurance, ethnicity, unemployment and education. Means are compared to the group of patients with only somatic problems. Because of co-morbidity, the patients in different groups of psychological/social diagnoses are not mutually exclusive. Comparisons between the 5 categories of diagnoses were therefore not tested.

Table 2.1: Characteristics of patients (aged ≥18) with only somatic diagnoses, patients with psychological/social diagnoses and patients within 6 categories of psychological/social diagnoses

Patient characteristics	Patients with only somatic diagnoses (n=137832 - 189731)	Patients with psychological/ social diagnoses (n=26589 - 37189)	Depression (n=5936-8227)	Anxiety (n=5713-7869)	Sleeping problems (n=5790-7727)	Stress (n=3477-4951)	Social problems (n=2055-2959)	Other psychological/ social problems (n=7540-10923)
Mean age (sd)	37.03 (22.48)	46.68 (21.06)*	48.27 (17.79)*	48.90 (18.64)*	57.12 (19.96) *	43.90 (15.36)*	41.56 (11.80)*	40.93 (25.00)*
% female	53.3%	61.4%*	68.0%*	68.5%*	67.8%*	63.0%*	56.3%*	51.5%*
% public insurance	66.8%	73.7%*	75.0%*	75.4%*	73.6%*	73.0%*	71.9%*	74.1%*
% non-Western	5.8%	5.3%*	4.7%*	4.5%*	3.8%*	6.7%**	6.2%	6.4%*
% unemployed	1.3%	2.3%*	2.8%*	2.3%*	2.0%*	2.0%*	2.1%*	2.6%*
Education								
• none	16.6%	7.6%*	2.0%*	3.4%*	3.8%*	2.0%*	0.8%*	19.6%*
• primary school	18.6%	23.8%	23.3%	26.2%	32.7%	16.0%	11.3%	23.6%
• secondary school	49.1%	53.1%	58.1%	56.6%	49.6%	60.0%	65.1%	44.8%
• higher vocational training/university	15.6%	15.5%	16.7%	13.8%	14.0%	22.1%	22.8%	12.0%

* p<.01; ** p<.05 compared to patients with only somatic diagnoses
Sd standard deviation

Table 2.2: Mean annual scores on workload indicators among patients (aged ≥18) with only somatic diagnoses, patients with psychological/social diagnoses and patients within 6 categories of psychological/social diagnoses

Patient characteristics	Patients with only somatic diagnoses (n=127163)	Patients with psychological/ social diagnoses (n=25324)	Depression (n=5746)	Anxiety (n=5536)	Sleeping problems (n=5484)	Stress (n=3401)	Social problems (n=2006)	Other psychological/ social problems (n=6948)
Contact frequency, of which	4.06	7.45*	8.91*	8.72*	8.93*	7.35*	6.72*	6.40*
- psychological/social contacts	-	2.25	3.45	2.93	2.66	2.57	2.32	1.64
- somatic contacts	3.83	4.80*	4.91*	5.31*	5.80*	4.39*	4.10*	4.42*
- diagnosis-specific contacts	-	-	2.40	1.89	1.59	1.54	1.40	-
Number of diagnoses, of which	4.70	9.04*	10.89*	10.54*	11.15*	8.80*	8.23*	7.70*
- psychological/social diagnoses	-	2.32	3.60	3.05	2.81	2.70	2.47	1.67
- somatic diagnoses	4.44	6.26*	6.68*	6.95*	7.80*	5.67*	5.42*	5.66*
- specific P or Z diagnosis	-	-	2.42	1.90	1.58	1.55	1.42	-
Number of episodes of illness, of which	3.04	5.22*	5.71*	5.77*	6.20*	5.21*	5.02*	4.67*
- psychological/social episodes	-	1.25	1.50	1.46	1.47	1.43	1.40	1.07
- somatic episodes	3.04	3.97*	4.21*	4.32*	4.73*	3.78*	3.62*	3.60*
- diagnosis specific episodes	-	-	1.02	0.96	0.95	0.94	0.91	-

* p<.01 compared to patients with only somatic diagnoses

Patients with psychological or social problems had almost twice as many contacts a year with their general practice as patients with only somatic problems (7.45 versus 4.06 contacts). They received more diagnoses from their GP than patients with only somatic problems – 9 versus nearly 5 diagnoses a year – and more episodes of illness are shown. The higher contact rates in the group of patients with psychological or social diagnoses cannot be attributed to the 'extra' contacts and diagnoses caused by their psychological and social diagnoses. Patients with psychological or social diagnoses also contact their general practice more frequently about their somatic problems, compared to patients with only somatic diagnoses. Patients in all categories differ significantly from the only somatic group in contact rate, number of diagnoses and episodes of illness. The finding that patients with psychological or social diagnoses also have more contacts and diagnoses concerning their somatic problems is valid for all the selected diagnosis categories. Patients with sleeping problems contact their general practice most frequently, particularly as a result of contacts concerning somatic problems. Patients with depression and anxiety diagnoses are also frequent consulters. Within the group of patients with psychological or social problems, they have the most contacts with psychological/social diagnoses in general but also concerning their depression or anxiety. Patients with stress or social problems have the fewest contacts (psychological/social as well as somatic contacts) with their practice.

Discussion

In this paper we investigate the relative contribution of patients with psychological or social problems to the GP's workload, expressed in time investments. Results show that patients with psychological or social problems make heavy demands on the GP's workload. They contact their practice almost twice as often compared to patients with only somatic problems and they receive more diagnoses overall. More episodes of illness are shown, which demonstrates that they have a greater variety of problems. The most prominent finding in this study is that the higher contact frequency of patients with mental health problems can be attributed to contacts concerning both psychological and social problems as well as somatic problems: the results demonstrated that patients with psychological or social problems also have more contacts with their general practice with regard to their somatic problems. Patients with sleeping disorders are the most frequent consulters,

mainly caused by their somatic problems, but patients with depression or anxiety have the most contacts concerning their specific depression and anxiety diagnoses.

The finding that patients with mental health problems contact their general practice more frequently is confirmed by other recent research. Sturmberg showed that psychosocial health problems of patients increase the demand for health care[18] and another study has demonstrated that patients with depressive symptoms or anxiety have higher contact rates than other patients[19].
The result that patients with psychological or social diagnoses also contact their practice more often concerning their somatic problems may be due to patterns that merit further attention. Firstly, as other authors have also demonstrated, patients with psychological or social problems show co-morbidity: they are less healthy and more burdened with somatic problems in addition to mental health problems[20-22]. Furthermore, it is well known that psychological/social problems are often expressed in somatic complaints[23]. Thirdly, it is possible that psychological and social problems are symptoms of a higher burden of disease in general. And finally, it's also well conceivable that patients who contact their doctor more often – due to mental or somatic problems - are able to discuss other problems as well. When they are already in contact with their doctor concerning a problem, it is more easy to bring about another problem as well. Once a doctor-patient relationship has been established, patients may be more willing, or even stimulated by their GP, to supply their other complaints as well. Unfortunately, causes and effects of these possible explanations are unclear, due to the cross-sectional design of the study.
A development that merits some attention, is the trend to advocate psychiatric screening in the community to detect cases of psychiatric illness. This might influence GP's workload, caused by the increase of 'recognised' psychiatric patients. The effectiveness of this kind of screening is unambiguous up till now[24;25]. In the Netherlands, psychiatric screening and disease management programmes are uncommon activities; it might not have influenced the Dutch GPs included in our study.

Methodological considerations
Workload measures in this paper are presented after adjustment for other patient characteristics that might influence the GP's workload. This results in

differences in the GP's workload between the 'only somatic' and 'psychological/social' patients that might be attributed to their diagnoses, rather than other characteristics. In spite of the fact that corrections make it possible to demonstrate the independent influence of a patient's diagnosis on the GP's workload, it is useful to realise that there are relationships between patient characteristics in 'real life', and combinations of some characteristics might increase the pressure on the GP's time.
Another point to be noted is that, because contact frequency has been used as the central workload indicator, all contacts are weighted the same, whereas in practice the workload will fluctuate between different contacts. The higher contact rates of patients with mental health problems affect GPs' workload in a general sense, by demanding more time, but disregards GPs' workload specifically in relation to contacts with patients with mental health problems. Our next study will specify GPs' workload in consultations of patients with mental health problems.

The results in this paper support GPs' claims that dealing with patients with mental health problems is more time-consuming than with patients with only somatic problems, especially due to the increase in their somatic problems. This does not mean that they have to blame patients with mental health problems for their extra demands. As all patients, they deserve the care they need, as far as possible.
In countries were GPs have a gate keeping role, as in the Netherlands, the GP is the first contacted health professional for patients with mental health problems. A good network of other psychological health care services may be of help to provide referral possibilities or to advise the GP. But, due to the complex combination of both somatic en mental health problems of patients, the GP is often the person assigned to assess and integrate patients' problems. Efforts to support the general practitioner in mental health care are – in addition to the availability of appropriate referral possibilities - found in training of GPs. Special attention to psychosocial care and referral skills in (vocational) training of GPs may be of help to reduce GPs' workload.

References

1. Boerma WGW, Zee J van der, Fleming D (1997). Service Profiles of general practitioners in Europe. B J Gen Pract, 47, 481-6.
2. Boerma WGW, Verhaak PFM (1999). The general practitioner as the first contacted health professional by patients with psychosocial problems: a European study. Psychol Med, 29(3), 689-96.
3. Meijer SA, Zantinge EM, Verhaak PFM, Scholten M, Pols J, Valenkamp MW et al. (2003). Evaluatie versterking eerstelijns GGZ. Tweede interim-rapportage (Evaluation of the reinforcement of primary mental health care. Second interim-report). Utrecht: NIVEL.
4. Visscher A, Laurant M, Schattenberg G, Grol R (2002). De rol van de huisarts inzake geestelijke gezondheidszorg (GPs' role in mental health care). Nijmegen: Centre for quality of care research, UMC St Radboud.
5. Scott A, Wordsworth S (1999). The effects of shifts in the balance of care on general practice workload. Fam Pract, 16(1), 12-7.
6. Post D, Calkhoven JE, Krol B, Dijkstra M, Groothoff JW (2002). Groeiend ongenoegen. Een onderzoek onder huisartsen (Increasing discontent. A study among GPs). Medisch Contact, 57(2), 63-5.
7. Morrison I, Smith R (2000). Hamster health care. BMJ, 321, 1541-2.
8. Sibbald B, Bojke C, Gravelle H (2003). National survey of job satisfaction and retirement intentions among general practitioners in England. BMJ, 362, 22-5.
9. Burdi MD, Baker LC (1999). Physicians' perceptions of autonomy and satisfaction in California. Health Aff (Millwood), 18, 134-45.
10. Huby G, Gerry M, McKinstry B, Porter M, Shaw J, Wrate R (2002). Morale among general practitioners: qualitative study exploring relations between partnership arrangements, personal style, and workload. BMJ, 325(7356), 140-4.
11. Groenewegen PP, Hutten JBF, Velden K van der (1992). List size, composition of practice and general practitioners' workload in The Netherlands. Soc Sci Med, 34, 263-70.
12. Whynes D, Baines D (1996). Predicting activity and workload in general practice from the demographic structure of the practice population. J Health Serv Res Policy, 1, 128-34.
13. Neal RD, Heywood PL, Morley S, Clayden AD, Dowell AC (1998). Frequency of patients' consulting in general practice and workload generated by frequent attenders: comparisons between practices. Br J Gen Pract, 48, 895-8.
14. Campbell SM, Roland MO (1996). Why do people consult the doctor? Fam Pract, 13, 75-83.
15. Bruijnzeels MA, Hoop T de, Swart W, Voorham AJJ (1999). Etnische herkomst van patiënten en werkbelasting van de huisarts (Ethnic background of patients and the burden of GPs). Huisarts Wet, 46, 254-8.
16. Lamberts H, Wood M (1987). International Classification of Primary Care. Oxford: Oxford University Press.
17. Westert GP, Schellevis FG, Bakker DH de, Groenewegen PP, Bensing JM, Zee J van der (2005). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health, 15(1), 59-65.
18. Sturmberg JP (2002). General practice-specific care categories: a method to examine the impact of morbidity on general practice workload. Fam Pract, 19(1), 85-92.

19. Kersnik J, Svab I, Vegnuti M (2001). Frequent attenders in general practice: quality of life, patient satisfaction, use of medical services and GP characteristics. Scand J Prim Health Care, 19, 174-7.
20. Hansen MS, Fink P, Frydenberg M, Oxhoj M, Sondergaard L, Eriksen M (2001). Mental disorder in medical inpatients and the association to severity of illness, self rated physical disability and health perception. Psychosomatics, 42, 41-7.
21. Wells KB, Golding JM, Burnam MA (1988). Psychiatric disorder in a sample of the general population with and without chronic medical conditions. Am J Psychiatry, 145, 976-81.
22. Katon W, Sullivan M (1990). Depression and chronic medical illness. Clin Psychiatry, 51, 3-11.
23. Schulberg HC, McClelland M, Burns BJ (1987). Depression and physical illness: the prevalence, causation and diagnosis of comorbidity. Clin Psychol Rev, 7, 145-67.
24. Bijl D, Marwijk HWJ van, Haan M de, Tilburg W van, Beekman AJTF (2004). Effectiveness of disease management programmes for recognition, diagnosis and treatment of depression in primary care. A review. Eur J Gen Pract, 10, 6-12.
25. Gilbody SM, House AO, Sheldon TA (2001). Routinely administered questionnaires for depression and anxiety: a systematic review. BMJ, 322, 406-9.

Chapter 3

The workload of GPs: consultations of patients with psychological and somatic problems compared

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Abstract

Background
GPs report that patients' psychosocial problems play a part in 20% of all consultations. GPs state that these consultations are more time-consuming and the perceived burden on the GP is higher.

Aim
To investigate whether GPs' workload in consultations is related to psychological or social problems of patients.

Design
A cross-sectional national survey in general practice, conducted in the Netherlands from 2000-2002.

Setting
One hundred and four general practices in the Netherlands.

Methods
Videotaped consultations (n=1392) of a representative sample of 142 GPs were used. Consultations were categorised in three groups: consultations with a diagnosis in the International Classification of Primary Care chapter P 'psychological' or Z 'social' (n=138), a somatic diagnosis but with a psychological background according to the GP (n=309), or a somatic diagnosis and background (n=945). Workload measures were consultation length, number of diagnoses and GPs' assessment of sufficiency of patient time.

Results
Consultations in which patients' mental health problems play a part (as a diagnosis or in the background) take more time and involve more diagnoses, and the GP is more heavily burdened with feelings of insufficiency of patient time. Especially somatic diagnoses with a psychological background predict GPs' feelings of insufficiency of time.

Conclusion
Consultations in which the GP notices psychosocial problems make heavier demands on the GP's workload than other consultations. Patients' somatic problems that have a psychological background induce the highest perceived burden on the GP.

Introduction

Mental health problems of patients cover a substantial part of the total spectrum of problems a general practitioner (GP) has to manage. Although the proportion of psychological or social diagnoses among all diagnoses in general practice is relatively small (about 8%[1]), GPs report that patients' psychosocial problems play a part in 20% of all consultations[2;3]. GPs complain about the workload that patients' mental health problems induce: consultations with patients with psychosocial problems may be more time-consuming[4-7] and the perceived burden is higher[8;9].

The increasing workload in general practice is a 'hot topic' the world over. Morrison and Smith introduced a dramatic metaphor of workload in general practice: *"Across the globe, doctors feel like hamsters on a treadmill, that must run faster just to stand still"*[10]. One of the reasons for this negative feeling on the part of GPs is the increasing dissatisfaction with the amount of time doctors can spend with their patients[10]. Although there is no clear evidence for an objective increase in the workload, feelings of dissatisfaction and lack of time are recognised by many doctors in many countries[11;12-14].

We will focus on GPs' investment of time and feelings of insufficiency of patient time in consultations with patients with mental health problems. The background to this subject is that dealing with patients' psychosocial problems is an essential part of the GP's job, although these problems are perceived as being very demanding. In a previous article we demonstrated that patients with psychological or social problems make greater demands on their GPs than other patients; they tend to contact their general practice twice as often as other patients[15].

In this article, we explore the GP's workload during consultations. We consider three categories of consultations:

- consultations in which a psychological or social diagnosis has been made;
- consultations with a somatic diagnosis, in which the GP has assessed the background of the patient's problems as psychological; and
- consultations with a somatic diagnosis in which patients' complaints have been attributed to physical factors.

Distinctions are made between objective measures of time investment and the GP's subjective perception of insufficiency of time. We aim to compare the GP's workload in consultations with patients with psychological or social problems to the workload in other consultations. We investigate whether consultations involving psychological/social problems take more time and

whether the GP manages more problems at once. Additionally, we examine whether the GP is more heavily burdened with feelings of insufficiency of patient time in a psychological/social consultation than in other consultations.
Several authors have demonstrated in earlier research that patient characteristics such as sex, age, type of health insurance, ethnicity, education, and employment status may influence a GP's workload[8;16;17]; such factors are, therefore, included in the analysis.

Method

The data for this study were collected within the framework of the Second Dutch National Survey of General Practice, conducted in the Netherlands from 2000 to 2002[18]. A national representative sample of 195 GPs from 104 general practices participated in the National Survey. Of these 195 GPs, 142 gave permission to record consultations over 1 or 2 days, principally meant to determine the GP's style of communication.
The sample of 142 GPs is representative for the Dutch population of GPs with regard to age, sex, education, length of residence, degree of urbanisation and number of working hours[19]. Patients were asked permission to record their consultation by video when they arrived at the general practice. Of the patients, 11.9 % refused to participate in the video recording. After obtaining informed consent of GPs and patients, 2111 consultations were videotaped, which was roughly 15 consultations per GP. After each consultation, the GP completed a registration form about the consultation and the patient.

Measures

Consultations of all adult patients (aged 18 years or over) were included in this study. In each consultation, one or more diagnoses of the patient were coded according to the International Classification of Primary Care (ICPC)[20]. Additionally, in each consultation the GP assessed to what extent psychological aspects played a part in the presentation of the patient's complaints. These assessments were graded on a 5-point scale, ranging from 1 ('psychological aspects play no part at all') to 5 ('psychological background'). For analysis, consultations were categorised as follows:

- consultations in which the patient received one or more diagnoses in ICPC chapter P 'psychological' or Z 'social' (n=138);

- consultations with a somatic ICPC diagnosis, but a psychological background (scores 4 or 5 on the scale, complaints have mainly a psychological background, n=309); and
- consultations with a somatic ICPC diagnosis and a somatic background (scores 1, 2 or 3 on the scale, n=945).

Diagnoses in ICPC chapters P or Z were clustered; these diagnoses are considered not to be somatic. Furthermore, there are only 22 consultations with social diagnoses; such a small number makes distinction between psychological and social diagnoses difficult.

Consultation length, expressed in minutes to 2 decimal places, was measured afterwards by video observers. Interruptions, such as telephone calls, were subtracted from the total consultation time. GPs recorded the diagnoses of the patients in each consultation. The total number of diagnoses per consultation was calculated afterwards. After each consultation, GPs registered their assessment of insufficiency of time – the subjective workload measure – expressed as 'yes' (insufficient time) or 'no' (sufficient time).
Patient information including age, sex, type of insurance, ethnic background, work situation, and education was gathered from a registration form that was sent to all patients on the lists of the participating practices.

Statistical analysis
After exclusion of consultations concerning patients younger than 18 years and consultations without a registered diagnosis, 1392 of 2111 consultations were suitable for our analyses. Comparison of the patient characteristics between the different groups of patients was made by a chi-square and T-test. Pearson's correlations and èta's were used to describe interrelations between the workload indicators.
Multi-level regression analysis was performed to calculate differences in workload measures. The research design involves a two-stage sampling frame (first stage GPs, second stage consultations per GP) giving rise to possible cluster effects[21]. Cluster effects are present when consultations within GPs are correlated compared with consultations between GPs, and can be measured by means of the intraclass correlation coefficient (ICC)[22]. Consultation length (ICC=0.13), number of diagnoses per consultation (ICC=0.07), and assessment of insufficiency of time (ICC=0.09) all had statistically significant ICCs ($p<.05$; an ICC of 0.15 is considered quite high[23]). In order to account for these cluster effects, a special form of linear regression analysis – multilevel (or hierarchical

linear) modelling – was applied. The multilevel model takes into account the cluster effects that are present in the data and adjusts the standard errors of the estimated coefficients accordingly[23]. Just as is the case in traditional regression analysis, covariates can be included in the multi-level model to correct for confounding variables. Data were analysed in this way, using MlWin software[24]. For consultation length and number of diagnoses per consultation, multi-level linear regression models were analysed; for the assessment of the insufficiency of time (yes/no) a multi-level logistic model was used. Patient characteristics that showed a significant attribution to the regression model (p<=.01) were included as covariates.

Results

Table 3.1 presents patient characteristics, sorted by consultation. Sex was the only factor showing a significant difference between the consultations. In consultations with a somatic diagnosis but psychological background, there were more female patients compared to other consultations.

Table 3.1: Patient characteristics in consultations with psychological/social diagnoses, consultations with somatic diagnoses but a psychological background and somatic consultations

Patient characteristics	Consultations with psychological/ social diagnoses		Consultations with somatic diagnoses, psychological background		Consultations with somatic diagnoses, somatic background	
		N		N		N
Mean age (sd)	47.15 (14.71)	138	49.94 (16.35)	309	49.81 (18.01)	945
% female	63.0*	138	70.6*	309	59.3*	945
% public insurance	78.3	138	71.2	309	70.6	945
% non-Western nationality	5.4	111	5.4	258	4.7	790
% unemployed	2.5	121	3.0	265	1.3	828
Education		109		259		774
• none	0.9		3.1		1.0	
• primary school	20.2		18.9		20.5	
• secondary school	63.3		59.1		60.9	
• higher vocational training/university	15.6		18.9		17.6	

* p<.01
Sd = Standard deviation

Table 3.2: Correlations (Pearson's R and èta) between the indicators of workload (n=1392)

	Consultation length	Number of diagnoses
Number of diagnoses	.24*[a]	-
Consultations with insufficient time	.28*[b]	.15*[b]

* p<.01
[a] Pearson's R; [b] èta

Table 3.2 presents correlations between the different measures of workload. All workload indicators are related to each other: the longer consultations take, the more GPs assess consultation time as insufficient. GPs make more diagnoses in longer consultations, and tend to perceive consultation times as insufficient more often when they make more diagnoses.

Table 3.3 shows differences in workload measures between the three categories of consultation, following multilevel linear regression analysis. Patients' age and sex were included as covariates.

Table 3.3: Mean consultation length, mean number of diagnoses and percentage of assessments of insufficient patient time in three categories of consultations, calculated by multi-level models

Workload measure	Consultations with psychological/ social diagnoses (n=138)	Consultations with somatic diagnosis, psychological background (n=309)	Consultations with somatic diagnoses, somatic background (n=945)
Mean consultation length	12.65*	11.48*	9.06*
Mean number of diagnoses	1.60*	1.34	1.29
Assessments insufficient time (%)	14.00	11.39	4.03*

* p<.01 significant difference from the other 2 consultation categories

Consultations with patients with a psychological or social diagnosis took, on average, 3.6 minutes longer than consultations with a somatic diagnosis and background. Consultation time was also significantly longer (by 2.4 minutes) when a somatic diagnosis was made but the background of the patient's

complaints was psychological, when compared with wholly somatic consultations. Patients received more diagnoses, on average, in consultations with psychological or social diagnoses in comparison with other consultations. In consultations with psychological/social diagnoses or a psychological background, GPs more often considered the available patient time to be insufficient – 14.0% and 11.4% of the consultations, respectively – compared to completely somatic consultations (4% insufficient time).

Table 3.4 presents the results of multilevel logistic regression analysis to predict the GP's assessment of insufficiency of consultation time both from the diagnosis category of the consultations and from the other workload measures 'consultation length' and 'number of diagnoses'.

Table 3.4: Odds ratios and confidence intervals of GPs' assessment of insufficiency of consultation time, calculated by a multi-level logistic regression model (n=1392)

Variable	Assessment of insufficiency of time	
	Odds ratio	95% confidence interval
Type of consultation:		
• Somatic diagnosis, somatic background	1#	
• Psychological or social diagnosis	1.88	0.98 – 3.62
• Somatic diagnosis, psychological background	2.06*	1.23 – 3.45
Consultation length	1.19**	1.13 – 1.24
Number of diagnoses	1.59*	1.19 – 2.14

Reference group
* p<.01; ** p<.001

The odds ratios in table 3.4 show that a longer consultation and a greater number of diagnoses increase the probability that a GP will regard consultation time as insufficient. A consultation with a somatic diagnosis but psychological background is still a significant predictor for an assessment of insufficient consultation time when the consultation length and number of diagnoses are added to the regression model, but the significance of the effect of a psychological or social diagnosis on GPs' assessment of time insufficiency disappears. Evidently, the fact that the consultation takes more time and contains more problems is sufficient to explain an evaluation of insufficient time, whereas the mere fact that there is a psychological or social diagnosis is

not. A consultation with a somatic diagnosis but a psychological background, on the other hand, shows a significant contribution to GPs' assessment of insufficient time.

Discussion

Summary of main findings

These findings demonstrate that consultation time increases when the GP diagnoses psychological or social problems. Additionally, our results show that a psychological or social diagnosis is not the only distinctive factor associated with longer consultations; even in the case of somatic diagnoses, consultations take more time when the GP evaluates the background of the patients' complaints as being psychological. In consultations in which the GP made a psychological or social diagnosis, the patient received more diagnoses than in consultations with only somatic diagnoses. The GP more often experienced a lack of time in consultations involving patients' mental health problems (whether they exist as the focus of the consultation or are in the background). Especially somatic diagnoses with a psychological background predict GPs' feelings of insufficiency of time.

Consultation length, number of diagnoses, and assessment of insufficiency of time are all significantly interrelated, even though the correlation coefficients are not very high. Consultations labelled as insufficient in terms of consultation time are related both to the problems of patients and to a longer consultation time and a greater number of diagnoses. Due to the cross-sectional design of the study, causes and effects of the relationships between the workload measures are unclear.

Strengths and limitations of this study

The Second Dutch National Survey of General Practice obtains representative measures of general practice care in the Netherlands. The video registration is a good method to gather information about GP consulting in a natural setting. The design of the Dutch National Survey makes it possible to integrate information about the consultations with detailed patient characteristics, as obtained from all listed patients. However, there are some methodological considerations and limitations to mention. Of the GPs who participated in the study, 27% did not obtain informed consent to videotape their consultations. This might induce a bias in the selected group of GPs. Perhaps the

participating GPs are more interested in communication (the principal focus of the video registration) and accordingly more psychosocially oriented. These concerns are strongly contradicted by how representative the participating GPs are of all Dutch GPs, making a selection bias less likely. Additionally, because of the limited number of consultations involved in this study, no distinctions are made between subcategories of psychological and social problems. Finally, the characteristics and the personal approach of GPs concerning psychosocial care of patients have not been taken into consideration in this study; a future paper we will explore extensively GPs' influences on psychosocial care.

Comparison with existing literature

Earlier research has also demonstrated that consultation length increases where the mental health problems of patients are concerned[4-7], but the distinction between consultations with a psychological or social diagnosis and a psychological background is new in this paper. Considering the results, the question arises: why do consultations including mental health problems of patients take more time and induce more feelings of insufficient time with the patient than 'somatic' consultations?

These results show that more patient problems are dealt with in longer consultations. Other authors have also demonstrated that the number of topics affects the length of consultations: Carr-Hill et al. found a correlation of 0.16[7]. Another explanation is found in the complexity of the problems; mental health problems could be more complicated to diagnose and treat. One of the difficulties is that psychological and social problems are frequently expressed in somatic symptoms and complaints[25] as, for example, is often the case with unexplained medical complaints. These kind of problems are difficult to deal with because of their ambiguous and unclear character; this might increase the GP's perceived burden. This complexity of the patients' problems may also fit in with the finding that somatic problems in a psychological context, in particular, go hand in hand with more feelings of insufficiency of consultation time.

An alternative perspective is that it is not patients' problems that influence the GP but, on the contrary, the GP that influences patients' problems presented in practice. As other authors have also argued, it seems plausible that where the doctor takes more time for the consultation, patients are able to discuss more problems, and possibly do so in more depth[26;27]. This increases the chance that psychosocial aspects of patients' problems are part of the consultation. However, a longer consultation time does not obviously implicate

higher patient satisfaction: Cape showed that patient satisfaction was not significantly associated with real consultation length, but only with patient-estimated consultation length[28].

Another subject for discussion is the surprising result that it is in those instances when the consultation lasts longer, that the GP is more likely to assess the consultation time as being insufficient. This result can partly be attributed to the topics raised during longer consultations (more complex problems) or the number of diagnoses (more topics at once), but there is also an independent effect. A possible explanation is that feelings of insufficiency of time can be caused by the consultation time itself. Paradoxically, a consultation time that is longer than expected or planned beforehand by the GP can, perhaps, be a stressful event in itself, and give rise to more feelings of insufficiency of consultation time. This agrees with a previous study that demonstrated that longer consultations are associated with more dissatisfaction on the part of the GP about the duration of the consultation[6].

Implications for clinical practice and future research

We can conclude that consultations in which the GP notices psychosocial problems make heavier demands on the GP's workload than other consultations. Somatic problems that have a psychological background, in particular, induce a higher perceived burden on the GP. As previous research has demonstrated, Dutch GPs have stated that psychological or social factors play a part in 20% of all consultations[2;3]. This results in a higher workload for the GP in one in five consultations, a substantial contribution. For future research, we would recommend to distinguish between different mental health problems to explore the fluctuations in workload it might induce.

In an international context, the proportion of consultations involving patients' mental health problems might differ, depending on the health system and the role assigned to the GP. Financial support can be one of the ways to compensate a higher workload in cases of psychosocial care. Besides a discussion about the task profile of a GP, special attention to psychosocial care and medically unexplained complaints in vocational training might be supportive to reduce the GP’s perceived burden.

References

1. Meijer SA, Zantinge EM, Verhaak PFM, Scholten M, Pols J, Valenkamp MW et al. (2003). Evaluatie versterking eerstelijns GGZ. Tweede interim-rapportage (Evaluation of the reinforcement of primary mental health care. Second interim-report). Utrecht: NIVEL.
2. Visscher A, Laurant M, Schattenberg G, Grol R (2002). De rol van de huisarts inzake geestelijke gezondheidszorg (GPs' role in mental health care). Nijmegen: Centre for quality of care research, UMC St Radboud.
3. Verhaak PFM (1995). Mental Disorder in the Community and in General Practice: Doctors' Views and Patients' Demands. Avebury: Aldershot.
4. Howie J, Porter A, Heaney D, Hopton J (1991). Long to short consultation ratio: a proxy measure of quality of care for general practice. Br J Gen Pract, 41, 48-54.
5. Deveugele M, Derese A, Brink-Muinen A van den, Bensing JM, Maeseneer J de (2002). Consultation length in general practice: cross sectional study in six European countries. BMJ, 325, 472-3.
6. Andersson SO, Ferry S, Mattson B (1993). Factors associated with consultation length and characteristics of short and long consultations. Scand J Prim Health Care, 11, 61-7.
7. Carr-Hill R, Jenkins-Clarke S, Dixon P, Pringle M (1998). Do minutes count? Consultation lengths in general practice. J Health Serv Res Policy, 3, 207-13.
8. Bruijnzeels MA, Hoop T de, Swart W, Voorham AJJ (1999). Etnische herkomst van patiënten en werkbelasting van de huisarts (Ethnic background of patients and the burden of GPs). Huisarts Wet, 46, 254-8.
9. Scott A, Wordsworth S (1998). The effects of shifts in the balance of care on general practice workload. Fam Pract, 16(1), 12-7.
10. Morrison I, Smith R (2000). Hamster health care. BMJ, 321, 1541-2.
11. Mechanic M (2001). How should hamsters run? Some observations about sufficient patient time in primary care. BMJ, 323, 266-8.
12. Bailie R, Sibthorpe B, Douglas B, Broom D, Attewell R, McGuiness C (1998). Mixed feelings: satisfaction and disillusionment among Australian GPs. Fam Pract, 15, 58-66.
13. Huby G, Gerry M, McKinstry B, Porter M, Shaw J, Wrate R (2002). Morale among general practitioners: qualitative study exploring relations between partnership arrangements, personal style, and workload. BMJ, 325(7356), 140-4.
14. Sibbald B, Enzer I, Cooper C, Rout U, Sutherland V (2002). GP job satisfaction in 1987, 1990 and 1998: lessons for the future? Fam Pract, 17, 364-71.
15. Zantinge EM, Verhaak PFM, Bensing JM (2004). The workload of GPs: patients with psychological and somatic problems compared. Fam Pract, 22, 293-7.
16. Groenewegen PP, Hutten JBF, Velden K van der (1992). List size, composition of practice and general practitioners' workload in The Netherlands. Soc Sci Med, 34, 263-70.
17. Whynes D, Baines D (1996). Predicting activity and workload in general practice from the demographic structure of the practice population. J Health Serv Res Policy, 1, 128-34.
18. Westert GP, Schellevis FG, Bakker DH, Groenewegen PP, Bensing JM, Zee J van der (2004). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health 15(1), 59-65.
19. Brink-Muinen A van den, Dulmen AM van, Schellevis FG, Bensing JM (2004). Tweede Nationale Studie naar ziekten en verrichtingen in de huisartspraktijk. Oog voor communicatie: huisarts-patient communicatie in Nederland (Second Dutch National Survey of Morbidity and Interventions in General Practice. Focus on communication: Doctor-patient communication in general practice in the Netherlands). Utrecht: NIVEL.

20. Lamberts H, Wood M (1987). International Classification of Primary Care. Oxford: Oxford University Press.
21. Cochrane WG (1997). Sampling Techniques. New York: Wiley.
22. Searle SR, Casella G, McGullogh CE (1992). Variance components. New York: Wiley.
23. Goldstein H (1995). Multilevel statistical models. New York: Halsted.
24. Rasbash J, Woodhouse G (1995). MLN Command Reference. London: Institute of Education, University of London.
25. Schulberg HC, McClelland M, Burns BJ (1987). Depression and physical illness: the prevalence, causation and diagnosis of comorbidity. Clin Psychol Rev, 7, 145-67.
26. Ridsdale L, Carruthers M, Morris R, Ridsdale J (1989). Study of the effect of time availability on the consultation. J R Coll Gen Pract, 39, 488-91.
27. Howie J (1998). Comment: do minutes count for quality in the general practice consultation? J Health Serv Res Policy, 3(4), 213-4.
28. Cape J (2002). Consultation length, patient-estimated consultation length, and satisfaction with the consultation. Br J Gen Pract, 52, 1004-6.

Chapter 4

Does the attention general practitioners pay to their patients' mental health problems add to their workload? A cross-sectional national survey

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Abstract

Background

The extra workload induced by patients with mental health problems may sometimes cause GPs to be reluctant to become involved in mental health care. It is known that dealing with patients' mental health problems is more time consuming in specific situations such as in consultations. But it is unclear if GPs who are more often involved in patients' mental health problems, have a higher workload than other GPs. Therefore we investigated the following: Is the attention GPs pay to their patients' mental health problems related to their subjective and objective workload?

Methods

Secondary analyses were made using data from the Second Dutch National Survey of General Practice, a cross-sectional study conducted in the Netherlands in 2000-2002. A nationally representative selection of 195 GPs from 104 general practices participated in this National Survey. Data from: 1) a GP questionnaire; 2) a detailed log of the GP's time use during a week, and; 3) an electronic medical registration system, including all patients' contacts during a year, were used. Multiple regression analyses were conducted with the GP's workload as an outcome measure, and the GP's attention for mental health problems as a predictor. GP, patient, and practice characteristics were included in analyses as potential confounders.

Results

Results show that GPs with a broader perception of their role towards mental health care do not have more working hours or patient contacts than GPs with a more limited perception of their role. Neither are they more exhausted or dissatisfied with the available time. Also the number of patient contacts in which a psychological or social diagnosis is made is not related to the GP's objective or subjective workload.

Conclusions

The GP's attention for a patient's mental health problems is not related to their workload. The GP's extra workload when dealing in a consultation with patients' mental health problems, as is demonstrated in earlier research, is not automatically translated into a higher overall workload. This study does not confirm GPs' complaints that mental health care is one of the components of their job that consumes a lot of their time and energy. Several explanations for these results are discussed.

Background

Mental health care is an important aspect of the general practitioner's (GP's) job. GPs have a prominent position in signalling, and often also treating patients with mental health problems. But GPs are sometimes reluctant to become involved in their patients' mental health problems. They report that mental health care is one of the components of their job that places particular demands on their time and increases their perceived burden[1,2]. And the GP's workload is already an important topic because GPs often raise concerns about their increasing workload and lack of time with their patients[1,3].
A higher workload due to patients' mental health problems is, for example, expressed in longer consultations[4,7] and a higher contact rate for patients with mental health problems[5,6]. Furthermore, GPs more often experience a lack of time in consultations with patients with mental health problems[5], and more often feel stressed about these consultations[8]. These findings show that dealing with patients' mental health problems can be time consuming and demanding in specific situations such as in consultations. This we call a situational workload. We know that a GP's situational workload is higher in the case of mental health care. But it is not clear if the GP's extra situational workload, when dealing frequently with patients' mental health problems, is also translated into a higher workload overall. Therefore we looked at whether GPs who pay more attention to their patients' mental health problems have a higher workload than GPs who are more focused on a patient's somatic problems.

It is well known that, regardless of the health care system and the patient population, the role that GPs play in mental health care, and their focus on mental health problems, varies widely[9,10]. Some GPs diagnose their patients' problems more often as psychological, while others are more inclined towards somatic interpretations. These differences in interpretation can be related to GPs' attitudes toward mental health problems, as some authors demonstrated[11,12]. While one GP will have a limited definition of mental health care tasks that they perceive as belonging to their role as a GP, others will perceive a broader spectrum of mental health care aspects as belonging to their tasks. However, it has not been known until now if differences in the GP's role perception and diagnosing of mental health problems also results in a variation in workload. Therefore we ask: Is the attention GPs pay to their

patients' mental health problems related to their objective and subjective workload?

Our expectation is that paying more attention to a patient's mental health problems will result in more work for the GP. Patients with mental health problems contact their GP more frequently and their consultations take more time. Therefore, we expect that GPs with more patient contacts concerning patients' mental health problems will have more patient contacts in total and work more hours. Secondly, we expect that GPs who pay more attention to patients' mental health problems perceive their workload as higher, because GPs state that the patient's mental health problems are more demanding than other problems.

This paper describes the results of our study among general practitioners in order to answer the research question and test our expectations. We corrected for GP and patient characteristics that can affect the relationship between a GP's attention to mental health care and workload. GP characteristics that might affect the GP's workload are the GP's sex, age, working experience and personal list size[13-17]. It has also been shown that the degree of urbanisation of the practice and the kind of health insurance, sex, age, ethnicity, employment status and education level of patients, might influence a GP's workload[8,13,17,18]. These characteristics are therefore included in the analyses.

Methods

Design

Secondary analyses were made using data from the Second Dutch National Survey of General Practice (DNSGP-2), a cross-sectional study conducted in the Netherlands in 2000-2002[19]. A nationally representative selection of 195 GPs from 104 general practices participated in this National Survey. Data were collected from general practitioners, other general practice personnel, and patients on the list of the participating practices. The Dutch National Survey sample is representative of the Dutch patient population, GPs and practices. The privacy of the participating persons is guaranteed in accordance with Dutch legislation[19].

An electronic medical registration of all patient contacts was used for our study. During a one-year period, 195 GPs in 104 practices kept an electronic record of all the contacts they had with their patients. The GP recorded the diagnoses of their patients, coded according to the International Classification

of Primary Care (ICPC)[20]. Registration data from 96 out of the 104 practices were suitable for analysis. Eight practices were eliminated because their registration was incomplete. During one year, approximately 1.5 million contacts with patients were registered. Additionally, the participating GPs completed two written questionnaires, covering a wide range of topics, with response rates of 96% and 87% respectively. The GPs also kept a detailed log of their time use every quarter, by registering their activities during a representative working week. Here 84% responded. Patient characteristics were gathered from the practice registration and from a registration form that was sent to all patients on the lists of the participating practices. The response here was 77%.

Measures

In table 4.1 an overview is provided of all measures used in this study and the type of data collection of the DNSGP-2 we applied.

Table 4.1: Overview of all measures used in this paper

Measure	Type of data collection
Dependent:	
Workload	
- Working hours weekly (objective)	GP diary 1 week
- Number of patient contacts weekly (objective)	Contact registration 1 year
- Satisfaction with the available time (subjective)	GP questionnaire
- Emotional exhaustion (subjective)	GP questionnaire
Independent:	
GP's attention for mental health problems	
- GP's role perception with respect to mental health problems	GP questionnaire
- % contacts with psychological or social diagnoses	Contact registration 1 year
GP, practice and patient characteristics	
- Sex, age, years of establishment, personal list size	GP questionnaire
- Degree of urbanisation	GP questionnaire
- % of publicly insured, women, 65+, non-Western, unemployed and low educated patients	Patient registration

Objective workload (dependent)

The objective workload refers to the work that is done and the time that it takes. Two measures were used:

1) Number of hours worked per week. GPs registered in their diaries all the work activities they performed during a week. To prevent bias, the GPs were asked to register their time spent during a normal, representative working week.
2) The number of patient contacts per week was derived from the GPs' registration in their medical records during a year. The total number of patient contacts was divided by 52 to construct a measure of the mean number of contacts per week. A patient contact is an office consultation, telephone call or home visit.

Subjective workload (dependent)

The subjective workload concerns the GP's perceived burden. Two indicators were used for the GP's subjective workload:

1) GPs' satisfaction with the time available. In the GP questionnaire, GPs completed a job satisfaction scale (appendix A), originally derived from McCranie (1982)[21]. According to a list of 16 working activities, GPs recorded their satisfaction with that specific aspect of their job on a 5-point scale, ranging from 1=very dissatisfied to 5=very satisfied. Factor analysis showed a division into three sub-groups: satisfaction with the available time; satisfaction with the material aspects of the job; and satisfaction with colleague cooperation[17]. We made use of the sub-group 'satisfaction with the available time'.
2) GPs' emotional exhaustion, one of the components of burnout. Burnout can be interpreted as a response to chronic stress; emotional exhaustion refers to feelings of energy depletion. In the GP questionnaire, the UBOS[22] (appendix B), a Dutch version of the Maslach Burnout Inventory[23], was used to measure levels of burnout. The UBOS-C consists of 20 items, ranging from 0=never to 6=always, that refer to feelings of emotional exhaustion, depersonalisation or reduced accomplishment. Mean scores are calculated for the exhaustion scale, taking into account the maximum allowed number of missing items[23].

GPs' attention for mental health problems (independent)
Two indicators were used for the attention a GP pays to a patient's mental health problems:

1) The GP's perception of his or her role in mental health care. The GP questionnaire comprised a 5-point role perception scale about mental health care, originally derived from Grol[24] (appendix C). According to a list of 10 mental health care activities, as for example 'discuss relationship problems' or 'support patients with addiction problems', the GP recorded if these activities belong to his or her tasks as a GP (1 = 'not' till 5 = 'fully'). Each GP's mean score on the role perception scale is then calculated.
2) The percentage of patient contacts with a psychological or social diagnosis. This information is derived from the contact registration of the DNSGP-2. We calculated, per GP, which part of all the recorded contacts during a year are contacts with at least one diagnosis in ICPC chapter P 'Psychological' or Z 'Social'. We refer in this paper to these contacts as 'psychological contacts'. In the same contacts, somatic diagnoses may also have been made.

Characteristics of GPs, patients and practices (potential confounders)
GP characteristics are derived from the GP questionnaire:

- Age, sex and years of establishment of the GP and FTE (Full Time Equivalent) hours worked
- Personal list size of the GP. The total number of patients on the practice list is distributed over the GPs in the practice according to their FTEs worked.

The practice and patient characteristics are derived from the GP questionnaire, and the patient registration of the DNSGP-2. In the Netherlands most GPs have fixed patient lists and every patient is registered with just one GP. However, in group practices patients are often able to visit GPs other than their own. In that case patients are sometimes only registered in a general practice, not for a specific GP. For this study the characteristics of the patients on the list of every GP were used when available (103 GPs). When the specific patient lists per GP were not available or not complete, characteristics from the practice population were used (88 GPs).

Adjustments were made in the analyses for the following characteristics:
- Degree of urbanisation of the practice (from 1-not urban to 5-very urban)
- % of publicly insured patients
- % of women patients
- % of patients older than 65 years
- % of patients of non-Western origin
- % of unemployed patients
- % of poorly educated patients (no, or only primary education)

Analyses
The level of analysis is the GP. Analyses were performed using SPSS 11.5 software. First, descriptive statistics of the measures used in this paper are calculated. Several multiple regression analyses were conducted, with objective and subjective workload as outcome measures. The total explained variance is expressed in adjusted R squares. The influences of other GP, practice and patient variables are taken into account in the analysis. Because of the high correlation between a GP's age and years of experience (.91), the latter is excluded as a GP characteristic in the regression analyses. The percentage of unemployed patients and the percentage of poorly educated patients are also excluded, because of their high correlations with the percentage of patients of non-Western origin (.71), and the percentage of publicly insured patients (.67), respectively. The number of FTEs the GP works in practice is excluded due to the concurrence with personal list size.

Results

In table 4.2, the descriptive statistics of the central variables of this paper are presented: the GP's workload; his or her attention to mental health problems; and GP, practice and patient characteristics. The variation between GPs is expressed in the variation coefficient (standard deviation/mean*100).
On average Dutch GPs work 44 hours a week. GPs are not very satisfied with their available time; a mean score of almost 3 means they are partly satisfied, partly dissatisfied. GPs' exhaustion scores are on average low: GPs report average scores between 1 and 2 on the burnout scales varying from 0 to 6. A score of 1 or 2 means that feelings of emotional exhaustion are found 'seldom' or 'sometimes'. With respect to the practice and patient characteristics, most

variation between GPs is found in the percentage of patients of non-Western origin, while little variation is found in the percentage of women patients.

Table 4.2: Statistics describing workload, the GP's attention for mental health problems and GP, practice and patient characteristics

	N	Mean (sd)		Variation coefficient
Workload				
Hours worked weekly	154	43.72	(12.22)	27.95
Number of patient contacts weekly	133	112.64	(36.69)	32.57
Satisfaction with the available time (1-5)	164	2.91	(0.71)	24.40
Emotional exhaustion (0-6)	164	1.58	(0.79)	50.00
GP's attention for mental health problems				
Role perception (1'not'-5 'fully')	187	3.07	(0.50)	16.29
% of psychological contacts	141	9.34	(3.30)	35.33
GP characteristics				
% gender male	190	73%	-	-
Age	190	46.79	(6.58)	14.06
Personal list size	191	2072.30	(692.29)	33.41
Practice and patient characteristics				
Degree of urbanisation of practice (1-5)	190	3.01	(1.31)	43.52
% publicly insured patients	191	64.31	(9.14)	14.21
% female patients	191	50.55	(2.79)	5.52
% patients 65+	191	12.61	(4.96)	39.33
% non-Western patients	190	6.25	(11.27)	180.32

Sd = Standard deviation

In table 4.3 the correlations between GPs' workload and their attention to mental health problems are presented. The objective workload measures are adjusted to the number of FTEs the GPs are working, in order to distinguish between busy and less busy GPs.

Table 4.3 shows that GPs with a broader perception of their role in mental health care work more hours a week. But on the other hand, GPs with a broader perception of their mental health care tasks do not have more patient contacts than GPs with a more limited role perception. The GP's percentage of contacts with a psychological or social diagnosis is also not significantly correlated to one of the objective workload measures. The GP's subjective

workload is neither related to the GP's role perception, nor to his or her psychological contacts.

Table 4.3: Correlations between workload measures and the attention for mental health problems

	1.	2.	3.	4.	5.	6.
1. Working hours weekly/fte	1	-	-	-	-	-
2. Patient contacts weekly/fte	.03	1	-	-	-	-
3. Satisfaction time	-.15	.02	1	-	-	-
4. Emotional exhaustion	.01	.02	-.42**	1	-	-
5. Role perception	.17*	-.04	.04	.10	1	-
6. % P or Z contacts	.16	-.02	.05	.08	.19*	1

* p<.05; **p<.01

Table 4.3 also demonstrates that GPs' objective workload is not related to their subjective workload. GPs who work more hours weekly or have more patient contacts, are not more exhausted or dissatisfied with their available time compared to GPs with less working hours or patient contacts. GPs' working hours and their number of patient contacts, both objective workload measures, are also not correlated. The measures of subjective workload on the other hand are mutually related: GPs who are more satisfied with their available time are less exhausted. Additionally, the two measures that indicated GPs' attention to mental health problems are also correlated: GPs with a broader perception of their role in mental health care, more frequently reach a psychological or social diagnosis in the contacts with their patients.

Table 4.4 describes the results of a multiple regression analysis, to test the relationship between GPs' attention to mental health problems and their objective and subjective workload.
Table 4.4 shows that neither GPs' perception of their role towards mental health problems, nor their percentage of psychological contacts, are related to GPs' objective and subjective workload. The number of patient contacts a GP deals with each week is the only workload measure significantly explained by the regression model. This significance can mainly be attributed to the strong relation with the GP's personal list size: GPs with a larger list size have more patient contacts. Additionally, table 4.4 shows that GPs with larger list sizes have longer working weeks. Two relationships are found between GPs'

subjective workload and the practice population: The GP's satisfaction with the available time is associated with GPs with more older patients on their patient list and secondly, GPs are more exhausted when more women patients are on their patient lists.

Table 4.4: Results of multiple linear regression analysis on the GP's objective and subjective workload, expressed in beta's and explained variance (R^2)

	Working hours weekly (n=120)	Patient contacts weekly (n=127)	Job satisfaction time (n=125)	Emotional exhaustion (n=125)
GP's attention for mental health problems				
Role perception	.04	-.09	.02	.09
% psychological contacts	-.03	.10	.09	.05
GP characteristics				
Gender male	.04	-.07	-.15	.07
Age	.17	.08	.17	-.19
Personal list size	.23*	.62**	-.08	-.03
Practice characteristics				
Degree of urbanisation	.13	-.19	-.14	-.05
% publicly insured patients	.14	-.04	-.19	.01
% female patients	.10	.12	-.17	.27*
% 65+ patients	-.13	-.05	.22*	-.16
% non-Western patients	-.02	.10	.18	-.07
R^2	.06	.36**	.04	.07

* p<.05; ** p<.01

Discussion

Unexpectedly, GPs who pay more attention to their patients' mental health problems do not have a higher objective or subjective workload than GPs with less attention for mental health problems. Neither GPs' perception of their role towards mental health problems, nor their relative number of psychological or social diagnoses in patient contacts, are related to their workload. The GP's number of patient contacts is the only workload measure that is significantly explained by the GP, patient or practice characteristics. A

strong positive relationship is found between the GP's number of patient contacts and the GP's personal list size. Bivariate analyses show that GPs with a broader perception of their role toward mental health care reach relatively more psychological or social diagnoses in the contacts with their patients than GPs with a narrower perception. Finally, we found that objective and subjective workload are substantially different concepts: no associations are found between GPs' objective workload and their feelings of dissatisfaction or exhaustion.

The finding that GPs' perceptions of their role towards mental health care is reflected in the diagnoses they make, agrees with earlier studies in which it is shown that GPs' attitudes toward mental health care affect their work[11,12]. This means that a doctor who wants to see a patient's mental health problems, will have a greater chance of finding them than GPs with a more limited perception of their role towards mental health problems.
As mentioned in the introduction, GPs' attention for patients' mental health problems may influence their workload in specific situations, such as in consultations where patients' psychological complaints play a part[4,7]. Our results show that this 'situational' workload on a specific day or moment is not translated into a higher workload overall. There are several possible explanations for the lack of relationship between GPs' attention for mental health problems and their workload. It is important to bear in mind that mechanisms can differ between GPs, and different processes can exist alongside each other.
One explanation is that a higher workload due to patients' psychological problems is compensated in other aspects of the GP's job. The GP's workload is affected by many factors that possibly override the influence of contacts with psychological diagnoses, as these contacts take, according to our results, only 9% of all GPs' patient contacts. Additionally, there is some decision room for GPs to get involved in the kind of problems and activities they prefer. GPs who feel comfortable with mental health problems, and who are competent in this field, probably spend some extra time and energy on their patients' mental health problems, but limit their involvement in other activities in which they feel less comfortable.
A second explanation is that the workload of GPs in itself also affects GPs' perception of their role in mental health care and their diagnoses of psychological problems, instead of the opposite relationship that we studied. Maybe GPs who have sufficient time available, who do not feel unduly stressed

or burdened, are more likely to broaden their role in mental health care, show more openness towards their patients and make more psychological and social diagnoses. The same can be applied to GPs who have a lot of possibilities for referring patients, or for example, have support from a practice nurse. Conversely, when their workload is higher, or GPs' possibilities for referring patients or getting support are limited, GPs may compensate their higher workload by limiting their role in mental health care and by making fewer psychological and social diagnoses. This reasoning is supported by other authors who suggested that the workload itself may influence GPs' perception of their role[17,25] or their focus on psychological aspects[26].

A last explanation is that patients suffering from mental health problems can be just as 'demanding' and time consuming for the GP irrespective of whether the GP designates their problems as psychological/social or as somatic. It is well known that a patient's mental health problems will not always be recognised and diagnosed by the GP[27,28]. GPs report that patients' psychological problems play a part in 20% of all consultations[2,29], while we found in this paper that a psychological diagnosis was made in 9% of all patient contacts. Some of the patients with mental health problems will get a psychological or social diagnosis while other mental health problems will remain unaddressed by the GP. And possibly assigning psychological or somatic diagnoses to this group of patients makes no difference with regard to a GP's workload. Probably diagnosing a patient's problems as psychological or social may even prevent excessive consulting. This explanation is supported by a trial of Roter (1995), who demonstrated that patients with mental distress who are recognised by their GP, visit their GP more often for a short period of time, but in the long run they do not visit their GP more often[30]. But one can argue if this arises from the recognition itself, or from the fact that the doctors who recognise more mental health problems deal with these problems more effectively compared to GPs who recognise them less.

Limitations

One assumption made in this study is that GPs have fixed patient lists. The patient characteristics on the list of the GPs we controlled for in the regression analyses are based on the fictional situation that every patient visits only one GP. Although most patients in the Netherlands are registered with just one GP, patients in group practices may often be seen by other GPs. Patients can therefore self-select a GP dependent on their health problems. GPs with a broad perception of their role regarding mental health problems, are possibly

visited more often by patients with mental health problems, resulting in more psychological diagnoses. This self-selection process cannot be adjusted for, due to the level of analysis (GP level instead of consultation level). It might partly explain the relationship between a GP's perception of his or her role and psychological diagnoses, but it cannot explain the lack of relationship between a GP's psychological diagnoses and his or her workload.
Secondly, the causes and effects of the studied relationships are unclear due to the cross-sectional character of our study. It is not possible to determine what comes first: GPs' attention for their patients' mental health problems or GPs' workload.

Conclusion
This study shows that the situational workload when dealing with patients' mental health problems, as demonstrated in other studies, is not automatically translated into a higher overall workload. GPs who pay more attention to their patients' mental health problems in their consultations are not more busy than other GPs, and they are as satisfied and exhausted as other GPs paying less attention to their patients' mental health problems. This study does therefore not confirm GPs' complaints that mental health care is one of the components of their job that consumes a lot of their time and energy.

References

1. Scott A, Wordsworth S (1999). The effects of shifts in the balance of care on general practice workload. Fam Pract, 16(1), 12-7.
2. Visscher A, Laurant M, Schattenberg G, Grol R (2002). De rol van de huisarts inzake geestelijke gezondheidszorg (GPs' role in mental health care). Nijmegen: Centre for quality of care research, UMC St Radboud.
3. Morrison I, Smith R (2000). Hamster health care. BMJ, 321(7276), 1541-42.
4. Deveugele M, Derese A, Brink-Muinen A van den, Bensing J, Maeseneer J de (2002). Consultation length in general practice: cross sectional study in six European countries. BMJ, 325(7362), 472-73.
5. Zantinge EM, Verhaak PFM, Bensing JM (2005). The workload of GPs: patients with psychological and somatic problems compared. Fam Pract, 22, 293-7.
6. Sturmberg JP (2002). General practice-specific care categories: a method to examine the impact of morbidity on general practice workload. Fam Pract, 19(1), 85-92.
7. Zantinge EM, Verhaak PFM, Kerssens JJ, Bensing JM (2005). The workload of GPs: consultations of patients with psychological or somatic problems compared. Br J Gen Pract, 55, 609-14.
8. Bruijnzeels MA, Hoop T de, Swart W, Voorham AJJ (1999). Etnische herkomst van patiënten en de werkbelasting van de huisarts (Ethnic background of patients and the burden of GPs). Huisarts Wet, 46, 254-58.
9. Marinus AMF (1993). Inter-doktervariatie in de huisartspraktijk (Inter-doctor variation in general practice). Amsterdam: University of Amsterdam.
10. Kaplan MS, Adamek ME, Calderon A (1999). Managing depressed and suicidal geriatric patients: Differences among primary care physicians. Gerontologist, 39, 417-25.
11. Ross S, Moffat K, McConnachie A, Gordon J, Wilson P (1999). Sex and attitude: a randomized vignette study of the management of depression by general practitioners. Br J Gen Pract, 49(438), 17-21.
12. Howie JG, Hopton JL, Heaney DJ, Porter AM (1992). Attitudes to medical care, the organization of work, and stress among general practitioners. Br J Gen Pract, 42(358), 181-5.
13. Groenewegen PP, Hutten JBF, Velden K van der (1992). List size, composition of practice and general practitioners' workload in The Netherlands. Soc Sci Med, 34(3), 263-70.
14. Bensing JM, Brink-Muinen A van den, Bakker DH de (1993). Gender differences in practice style: a Dutch study of general practitioners. Med Care, 31(3), 219-29.
15. Verhaak PFM, Brink-Muinen A van den, Bensing JM, Gask L (2004). Demand and supply for psychological help in general practice in different European countries: access to primary mental health care in six European countries. Eur J Public Health, 14(2), 134-40.
16. Groenewegen PP, Hutten JBF (1995). The influence of supply-related characteristics on general practitioners' workload. Soc Sci Med, 40(3), 349-58.
17. Berg MJ van den, Kolthof ED, Bakker DH de, Zee J van der (2004). De werkbelasting van huisartsen (The workload of general practitioners). Utrecht: NIVEL.
18. Whynes D, Baines D (1996). Predicting activity and workload in general practice from the demographic structure of the practice population. J Health Serv Res Policy, 1, 128-34.
19. Westert GP, Schellevis FG, Bakker DH de, Groenewegen PP, Bensing JM, Zee J van der (2005). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health, 15(1), 59-65.

20. Lamberts H, Wood M (1987). International Classification of Primary Care. Oxford: Oxford University Press.
21. McCranie E, Hornsby J, Calvert J (1982). Practice and career satisfaction among residency trained family physicians; a national survey. J Fam Pract, 14(6), 1107-14.
22. Schaufeli W, Dierendonck D van (2000). UBOS (Utrechtse Burnout Schaal). Handleiding. (Utrecht Burnout Scale. Manual). Lisse: Swets & Zeitlinger.
23. Maslach C, Jackson S, Leiter M (1996). Maslach Burnout Inventory Manual. Palo Alto, California: Consulting Psychologists Press.
24. Grol R (1983). Preventie van somatische fixatie en de attitude van de huisarts (Prevention of somatic fixation and the attitude of the general practitioner). Nijmegen: Nijmeegs Universitair Huisartsen Instituut.
25. Boerma WGW, Verhaak PFM (1999). The general practitioner as the first contacted health professional by patients with psychosocial problems: a European study. Psychol Med, 29(3), 689-96.
26. Howie J (1998). Comment: do minutes count for quality in the general practice consultation? J Health Serv Res Policy, 3(4), 213-4.
27. Bushnell J, The MaGPIe Research Group (2004). Frequency of consultations and general practitioner recognition of psychological symptoms. Br J Gen Pract, 54, 838-42.
28. Armstrong D, Earnshaw G (2004). What constructs do GPs use when diagnosing psychological problems? Br J Gen Pract, 54, 580-83.
29. Verhaak PFM (1995). Mental Disorder in the Community and in General Practice: Doctors' views and Patients' Demands. Avebury: Aldershot.
30. Roter DL, Hall JA, Kern DE, Randol Barker L, Cole KA, Roca RP (1995). Improving Physicians' Interviewing Skills and Reducing Patients' Emotional Distress. A randomized Clinical Trial. Arch Intern Med, 155, 1877-84.

Chapter 5

The workload of general practitioners does not affect their awareness of patients' psychological problems

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Abstract

Objective
To investigate if general practitioners (GPs) with a higher workload are less inclined to encourage their patients to disclose psychological problems, and are less aware of their patients' psychological problems.

Methods
Data from 2095 videotaped consultations from a representative selection of 142 Dutch GPs were used. Multilevel regression analyses were performed with the GP's awareness of the patient's psychological problems and their communication as outcome measures, the GP's workload as a predictor, and GP and patient characteristics as confounders.

Results
GPs' workload is not related to their awareness of psychological problems and hardly related to their communication, except for the finding that a GP with a subjective experience of a lack of time is less patient-centred. Showing eye contact or empathy and asking questions about psychological or social topics are associated with more awareness of patients' psychological problems.

Conclusion
Patients' feelings of distress are more important for GPs' communication and their awareness of patients' psychological problems than a long patient list or busy moment of the day. GPs who encourage the patient to disclose their psychological problems are more aware of psychological problems.

Practice implications
We recommend that attention is given to all the communication skills required to discuss psychological problems, both in the consulting room and in GPs' training. Additionally, attention for gender differences and stress management is recommended in GPs' training.

Introduction

Recognition of a patient's psychological problems by a general practitioner (GP) is important because it is the first critical step towards finding the appropriate care for the patient. The GP is the person assigned to provide integrated care for both patients' somatic problems and their psychological complaints, or psychological aspects of their somatic complaints. However, a lack of available time has been reported by GPs as an important barrier against involvement in patients' psychological problems[1,2]. It has been shown that patients with mental health problems contact their general practice more often than patients with physical problems[3]. Moreover, it has been demonstrated that consultations with patients who suffer from mental health problems take more time[4-9] and leave the GPs more often with the subjective experience of a lack of time[7].

Investing extra time in a patient's psychological problems can be a problem, because GPs already complain about their increasing workload[10-12]. One of the reasons for the GP's investing extra time is the entanglement of mental health problems with somatic problems[6,13] resulting in longer consultations covering more than one topic. Additionally, discussing a patient's mental health problems requires specific communication skills that encourage the patients to disclose their psychological problems[14,15]. This also requires extra time in the consultation.

Patients with psychological problems often offer cues that are indicative of their distress[15,16]. GPs can use their communication techniques to influence the rate at which their patients offer cues[15,17]. The more cues the patient offers, the greater the chance that the GP identifies the patient's psychological problems. It is demonstrated that if a GP adopts a more patient-centred style of consulting this will lead to the patient offering more cues[17] and in turn a greater tendency by the GP to identify the patient's problems as psychological[14,18].

A patient-centred consulting style is characterised by a GP paying attention to patients' problems, ideas, concerns and preferences. Other aspects of GPs' verbal communication that might contribute to patients offering more cues, and in turn more psychological evaluations by GPs are showing empathy[17,18], and asking questions about psychological issues[15,17,18]. Eye contact is an important non-verbal communication skill that is associated with GPs' identification of psychological problems[19,20].

Investing extra time in a patient's psychological problems will be a problem

especially at moments when the GP's workload is high. We expect that in order to gain time, busy GPs will be less inclined to encourage their patients to disclose their psychological problems. This can result in GPs being less aware of psychological aspects in their patients' complaints.
Our assumption is that a GP's workload is not constant over time. Workload can fluctuate during working days, but also within the working day. We differentiate therefore between 'overall' and 'situational' workload, following a study of Hutten[21]. The GPs' overall workload indicates how busy the GPs are in general, because of their practice size. Whereas the situational workload is the GPs' workload at a specific moment. We expect that GPs with a higher overall or situational workload will adapt their communication to elicit less patient disclosure regarding their psychological distress. These GPs will be less aware of their patients' psychological problems. It is further expected that the characteristics of both the GP and the patient can affect the GP's awareness of the patient's psychological problems, and the GP's communication. It is demonstrated that female[22,23] and younger GPs[5,24] are more inclined toward psychological assessment of patients' health problems. Additionally, it is known that women and older patients more often have psychological problems[5,24]. Communication patterns may also differ according to the age and the gender of GPs and their patients[25-28], suggesting more affective GP communication in female and younger GPs and female and older patients. Therefore the GP's and the patient's age and sex are included in this study.
The general question of this study is: How does the GPs' workload influence the GPs' awareness of a patient's mental distress? We will answer the following questions in more detail:

- Do GPs' workload and their communication style affect their awareness of patients' psychological problems?
- Does GPs' workload influence the GPs' communication that is visible in the medical consultation?

Method

Design

Secondary analyses were performed from data from the second Dutch National Survey of General Practice, a cross-sectional study conducted in the Netherlands in 2000-2002[29]. To this National Survey participated 195 GPs in 104 general practices participated. Data are derived from a video registration that

was part of the National Survey of General Practice. A sample of 142 of the 195 GPs gave permission to videotape consultations during one or more days. These 142 GPs were representative of the Dutch population of GPs with regard to their age, sex, education, length of residence, degree of urbanisation and number of working hours[27]. Informed consent to participate in the video recording was given by 88.1% of the visiting patients, while 11.9% of the patients refused to participate. Consultations of 2784 patients were recorded (20 per GP). Roughly 15 consultations per GP, in total 2095 consultations, were observed by trained observers. The first videotaped consultations of every GP were excluded, to avoid bias because of the camera. After each consultation the GP completed a registration form about the consultation. The patient completed a questionnaire about the consultation before and after the consultation.
GP characteristics were derived from two written questionnaires covering a wide range of topics that were sent to the GPs, with response rates of 96% and 87% respectively. Patient characteristics as age and sex were gathered from the practice administration.

Measures
In table 5.1 an overview of variables used in the analyses is given, including descriptive statistics. The variation between consultations and between GPs is expressed in coefficients of variation (standard deviation/mean* 100).
In table 5.1 is shown that more variation is found between consultations than between GPs. Seventy seven percent of the GPs were male, and 40% of the patients were men (not in table). We distinguish two levels in our data: individual data from every GP, and data about the consultations, including patient information. Because each patient is only represented once in the videotaped consultations, the patient level corresponds to the consultation level.

Table 5.1: Descriptive statistics of dependent and independent variables

	Level of measurement	N	Mean (sd) consultations	Coefficient of variation consultations (N=1160-2095)	Coefficient of variation GPs (N=140-142)
Dependent:					
- Awareness of psychological problems	Consultation	2059	2.48 (1.41)	56.85	22.18
Independent:					
- Busy practice	GP	2095	2456 (401)	16.33	16.38
- Busy moment	Consultation	2080	.91 (1.39)	152.75	126.37
- % eye contact	Consultation	2088	41% (19.87)	48.46	23.77
- Expressions of empathy	Consultation	2095	1.58 (2.44)	154.43	60.76
- Psychological/social questions	Consultation	2095	3.13 (3.81)	121.73	46.33
- Patient-centeredness	Consultation	2072	3.81 (0.65)	17.06	7.37
- Age GP	GP	2066	46 (6.22)	13.52	13.45
- Age patient	Consultation	2095	43 (21.95)	51.05	16.72
- Patient's feelings of distress	Consultation	1660	2.21 (1.24)	56.11	18.55

Sd = standard deviation

Dependent variable

The GPs registered after each consultation whether psychological aspects played a part in the patient's complaints. These were measured on a five point scale ranging from 1, 'psychological aspects play no part at all', to 5, 'psychological background'. This assessment is interpreted as the GP's awareness of psychological problems.

Independent variables

Workload

Two types of workload are distinguished: busy practices and busy moments. The GP's personal list size, expressed in 1000 patients, was used as a measure for a busy practice based on the overall workload. The GP's list size is calculated by distributing the total number of patients on the list of the practice over the GPs being employed according to their full time equivalents (FTEs) worked.

Secondly, a situational measure, which we call busy moments, was constructed by considering the number of preceding consultations in which the GP experienced a lack of time. After each consultation, the GP registered if the consultation time was sufficient. The total number of preceding consultations, assessed as insufficient with respect to the available time, is a measure of the GP's subjective workload on a specific moment of the day.

Communication

Aspects of GP communication were rated by trained observers. We focused on verbal and non verbal communication that is assumed to encourage the patient to offer cues about their mental health problems and discuss their mental health problems. The GP's eye contact is expressed in the percentage of total consultation time the GP shows eye contact with the patient. Verbal communication was rated by observers according to the Roter Interaction Analysis System (RIAS), a widely used and validated observation instrument for coding verbal communication in medical interactions[30-32]. The system is developed to code both doctor and patient communication. The unit of analysis is the smallest meaningful group of words. The RIAS that is used for the DNSG-2 distinguishes 8 categories of affective or social-emotional behaviour and 18 categories of instrumental or task-oriented behaviour (appendix C). All categories are mutually exclusive. From the group 'affective communication' we selected all the GP's utterances with respect to empathy, showing partnership and support, and legitimising, grouped together under the term 'empathy'. From the group entitled 'instrumental communication' we selected the variables 'asking psychological questions' and 'asking social questions'. Psychological questions include questions pertaining to the patient's psychological or emotional state. Social questions refer to the family and home situation, work or employment. Per consultation the total number of the GP's utterances in these categories are counted.

The degree to which the GP is patient-centred was determined by observers by three rating scales:

1) To what extent does the GP give room to the patient and encourages him or her to explain the reason for the visit in their own words?
2) To what extent does the GP give room to the patient and encourages him or her to decide together with the GP about the treatment, discussing preferences and concerns.
3) To what extent does the GP show openness toward the patient, for example listening to the patient and giving answers, adapted to the context.

These three items are integrated into an average score for the degree of being patient-centred ranging from 1 'not at all', to 5 'to a large degree', with Cronbach's alpha .74. The interrater reliability for GP communication expressed in Pearson's correlation coefficients varied between .72 and .95[27].

GP and patient characteristics

The GP's age and sex are derived from the GP questionnaire. The patient's age and sex were registered in the practice administration.

The patient's feelings of distress were indicated by one of the COOP/WONCA charts[33], which measures the patient's feelings during the last two weeks. Before the consultation, patients completed six 5-point scales, supported with illustrations, to measure functional health status. Patients registered on the chart 'feelings' to what extent they were bothered by emotional problems such as feeling anxious, depressed, irritable of downhearted and sad. These were rated from 1 'not at all', to 5, 'extremely'.

Analyses

The level of analysis in this study is the consultation. Descriptive statistics of all measures were calculated using SPSS 11.5 software. Several multilevel regression analyses were conducted using MlWin 2.0 software. Multilevel analysis was necessary due to the two-level frame of the data with level 1 being the consultation and level 2, the GP. These give rise to cluster effects within GPs. Firstly, multilevel regression analysis was performed with the GP's awareness of the patient's psychological problems as an outcome measure, using a normal distribution model. In step 1, the GP's workload was included as a predictor in the regression model, followed by step 2, the GP and patient characteristics, and step 3, the GP's communication. GP and patient characteristics were added as potential confounders, and the GP's

communication aspects were added finally to analyse if these predictors could explain the relationship between the GP's workload and the GP's awareness. For each step, explained variance was calculated on GP and consultation level. Secondly, we performed multilevel regression analyses with aspects of the GP's communication as outcome measures. The GP's workload and GP and patient characteristics were added as predictors. A normal distribution model was used for the outcome measures 'percentage of eye contact', and 'patient centeredness'. The GP's number of empathy utterances and psychological/ social questions were analysed using a Poisson regression model with extra Poisson variation to account for overdispersion. The Poisson models were fitted using second order Penalized Quasi-Likelihood (PQL) estimation. The Poisson model is adequate for estimating skewed outcome measures, such as count data. We adjusted in all models for clustering at the GP level by using a random intercept. Intraclass correlations (ICC's) were calculated for all outcome measures. ICC's in the Poisson models were estimated from the ICC's of the normal distribution model. Pearson's correlations between the predictors of the regression models were maxim .33; therefore it was possible to include all predictors in the regression models.

Results

In table 5.2 the results of multilevel regression analyses are presented with the GP's awareness of the patient's psychological problems as an outcome measure.

Table 5.2 shows that the GP's workload does not affect the GP's awareness of psychological problems (step 1-3). On the other hand, it is demonstrated that the GP's awareness of psychological problems is in particular predicted by the patient's feelings of distress. Subsequently it is shown that female GPs are more aware of psychological problems, but this effect disappeared when communication aspects were added to the regression model. The GP is more often aware of psychological problems in women than in male patients. Three of four communication aspects contribute significantly to the regression model. The percentage of eye contact, showing empathy and asking psychological or social questions correspond with more awareness of psychological aspects by the GP. From all aspects of communication, eye contact is the strongest predictor for a GP's awareness of psychological

problems. Being patient-centred is not significantly related to the GP's awareness of psychological aspects.

Table 5.2: Results of multilevel regression analysis on the GP's awareness of psychological problems (B-coefficients and standard error)

	Step 1 N=2059	Step 2 N=1606	Step 3 N=1581
Workload			
- Busy practice	-.17 (.11)	-.11 (.12)	-.13 (.12)
- Busy moment	-.05 (.03)	-.03 (.03)	-.02 (.03)
Communication			
- % eye contact	-	-	.02 (.00)**
- Empathy	-	-	.05 (.01)**
- Psychological/social questions	-	-	.08 (.01)**
- Patient-centeredness	-	-	.07 (.05)
GP and patient characteristics			
- Age GP	-	-.00 (.01)	.01 (.01)
- Male GP	-	-.27 (.12)*	-.16 (.11)
- Age patient	-	-.00 (.00)	.00 (.00)
- Male patient	-	-.14 (.07)*	-.15 (.06)*
- Patient's feelings of distress	-	.41 (.03)**	.27 (.03)**
Intraclass correlation 0-model	.09		
Explained variance consultation level	.00	.12	.28
Explained variance GP level	.03	.05	.15

* p<.05; ** p<.01

The intraclass correlation in table 5.2 shows substantial differences between GPs in their awareness of psychological aspects in patients' problems. Explained variances on both consultation as GP level increase when GP and patient characteristics, and communication aspects are added to the regression model.

To answer our second research question, we investigated if the GP's workload is related to the GP's communication during the consultation. In table 5.3, results of multilevel regression analyses are presented, with four aspects of GPs' communication as outcome measures.

Table 5.3: Results of multilevel regression analysis on the GP's communication (B-coefficients and standard error)

	% eye contact N=1618	Empathy N=1624	Psychol./ social questions N=1624	Patient-centeredness N=1604
Workload				
- Busy practice	.19 (2.11)	.10 (.13)	.02 (.10)	-.00 (.06)
- Busy moment	-.27 (.47)	.02 (.03)	-.04 (.02)	-.05 (.02)**
GP and patient characteristics				
- Age GP	-.45 (.14)**	-.01 (.01)	.00 (.01)	-.01 (.00)*
- Male GP	-2.16 (2.06)	-.49 (.12)**	-.05 (.09)	-.09 (.06)
- Age patient	.01 (.03)*	.01 (.00)**	-.01 (.00)**	-.00 (.00)
- Male patient	.58 (.94)	-.28 (.07)**	.07 (.05)	-.01 (.03)
- Patient's feelings of distress	3.74 (.37)**	.22 (.02)**	.22 (.02)**	.04 (.01)**
Intraclass correlation 0-model	.19	.09	.08	.13

* p<.05; ** p<.01

Results in table 5.3 show that the number of patients on the GP's patient list is not related to their communication. The only relationship between workload and communication we found is that GPs are less patient-centred in consultations during busy moments. On the other hand, the GP's communication is related to GP and patient characteristics. The strongest relationship was found between the patient's feelings of distress and the GP's communication:

In consultations with patients who feel distressed, GPs show more eye contact and empathy, GPs are more patient-centred, and ask more questions about psychological or social topics. Younger GPs are more patient-centred and have more eye contact with their patients. Female GPs show more empathy toward their patients. GPs have more eye contact and are more empathic to older patients, but they ask less questions about psychological or social subjects to older patients. And, finally, GPs are more empathic toward women compared to male patients.

Intraclass correlations in table 5.3 show that the use of the selected aspects of communication differs between GPs. Especially the percentage of eye contact differs strongly between GPs.

Discussion and conclusions

Discussion

Against our expectation, the GPs' workload is not related to their awareness of psychological aspects in the patient's complaints. GPs with a high workload, indicated by having a large list size or a subjective feeling of a lack of time at the moment of the consultation, are not less aware of psychological aspects in the patient's problems, compared to GPs with a lower workload. The presence and severity of a patient's mental distress are more important reasons for a GP to take psychological aspects into consideration.

The GPs' workload is also not correlated to the amount of eye contact, empathy, and questioning about psychological or social topics, aspects of communication that can encourage the patients to talk about their psychological problems. However, a GP who has a subjective experience of a shortage of time at the moment of the consultation, is less patient-centred in the consultation than a GP without such feelings. But the presence of feelings of distress in the patient is most strongly related to the GP's use of these communication techniques.

The GPs' awareness of their patients' psychological problems is, apart from the influence of the patient's feelings of distress, clearly related to the GP's communication. Showing eye contact or empathy and asking questions about psychological or social topics increase the GP's awareness of psychological problems. Being patient-centred alone is not enough for a GP to be aware of the patient's psychological problems. The association between the GP's communication and the awareness of the patient's psychological problems is also supported by other literature[14,15,18,19].

There are several possible explanations for the unexpected finding that the GPs' workload is not related to their awareness of psychological problems, and to all aspects of communication.

Firstly, GPs may have other ways to deal with workload than reducing their involvement in patients' psychological problems. For example, they spend less time in other aspects of their job, delegate tasks, or make follow-up appointments with patients when their workload is high, making it possible to pay attention to patients' mental health problems.

Another explanation for our findings is that we measured two aspects of the GPs' workload, list size - the overall measure of objective workload - and the subjective experience of a lack of time at the moment of the consultation or

'situational' workload, that presumably do not cover all aspects of GPs' workload. Maybe when other aspects of the GP's workload are taken into account, like the GP's overall subjective workload, or objective workload at the moment of the consultation, relationships between workload and the GP's awareness of psychological problems and their communication will be found.
The lack of relationship between the GP's workload and their awareness of the patient's psychological problems can also be attributed to our outcome measure. It may be that a GP is aware of a patient's psychological problems without spending time on them, because this awareness is not automatically translated into a psychological diagnosis or treatment. On the other hand, even though the GP's awareness of the presence of psychological problems may not automatically lead to a better recognition of mental health problems, and better outcomes for the patient, some relationships can be expected. Roter (1995) demonstrated that patients who were recognised by their GP as having psychological problems show a reduction in mental distress over time[34]. In other studies the beneficial effects of more frequent psychological evaluations or better recognition of mental health problems, in terms of treatment or a patient's recovery, are not or not unequivocally found[18,35]. Of course, a GP being aware of psychological problems alone is not enough. But the GP's awareness is certainly the first critical step in finding appropriate care for the patient.

Our results showed that GPs who experience a shortage of time at the moment of the consultation are less patient-centred than GPs without feelings of a lack of time. When a GP is less patient-centred in the consultation, there will be less room for the patient to explain the reason of their visit in their own words, there will be less shared decision making, and the GP will be less open toward the patient. As we found that the GP's subjective experience of a lack time is related to this patient-centred behaviour, it is useful to consider in future research if other aspects of the GP's subjective workload also affect their communication and possibly their awareness of psychological problems.

The GP's communication and awareness of psychological problems are related to GP and patient characteristics, according to previous studies. Our finding that female GPs are more aware of psychological aspects in their patients' problems, was also found in other studies[22,23]. We found that gender differences disappeared when communication aspects are taken into account, suggesting that gender differences are integrated in the GP's communication.

Also the increase of psychological evaluations when patients are older or women is supported by other authors[5,24].
Our findings that younger and female GPs show more communication that may encourage the patient to talk about psychological problems is also demonstrated by other authors[25,26]. Findings from previous studies that GPs show more affective communication with female and older patients are consistent with our findings[26,28], except for the finding that GPs ask less questions about psychological or social subjects to older patients.
There are two possible limitations of this study to mention. Firstly, the participating GPs in the video registration may not be completely representative of all GPs with respect to their communication. Seventy-three percent of the GPs participated in the video registration. Perhaps the participating GPs represent a selection of GPs who have a higher than average interest in communication, showing 'better' communication and noticing more psychological problems than other GPs. However, this is contradicted by how representative the GPs were of all Dutch GPs in several respects, as mentioned in the method section[27]. Specifically the GPs were representative with respect to their age, sex and education thus making a strong selection bias less plausible. Additionally, there is little evidence that video-recording influences the behaviour of either GPs or patients[36].
A second limitation of our study is that causal relationships could not be demonstrated, due to the cross-sectional design of the study. It remains unsure to what extent reverse causality plays a part. The GP's communication may affect the GP's evaluation of psychological aspects in their patients' problems, as we suggested, but a GP's awareness of psychological aspects may also influence the communication used in the consultation. These circular processes can exist alongside.

Conclusion
Long patient lists or busy periods of the day are not related to less awareness of patients' psychological problems by a GP. Neither is GPs' workload related to several aspects of their communication that are supposed to encourage patients to talk about their psychological problems, such as eye contact, empathy and asking questions about psychological or social problems. But a GP who experiences a lack of time is less patient-centred in the consultation than a GP without an experience of a shortage of time. On the other hand, the patient's feelings of distress trigger both the GP's awareness of the psychological character of the patient's problems as well as the GP's

communication style. These findings are encouraging for the patient with mental distress and for the quality of care. Additionally, the GP's communication is shown to be an important skill for increasing awareness of the patient's psychological problems. This study stresses the importance of the GP's eye contact, empathy and asking psychological or social questions, in order to become aware of the patient's mental distress.

Practice implications

We recommend that attention is given to the communication skills required for discussing mental distress in the consulting room. These skills should also be covered in GPs' (vocational) training, and other learning opportunities for GPs. Additionally, gender differences should be considered in GPs' training. As a GP's experience of a shortage of time is related to less patient-centred consultations, attention for stress management is also recommended. The fact that GPs differ in their use of communication skills and in their awareness of psychological aspects to the patients' complaints, makes it all the more important that all GPs should be competent to use the communication skills required to become aware of patients' mental distress. More awareness of psychological aspects to the patients' complaints increases the chance that a patient's mental distress is recognised by the GP. This is an essential first step in finding appropriate care for the patient.

References

1. Howe A (1996). "I know what to do, but it's not possible to do it"-general practitioners' perceptions of their ability to detect psychological distress. Fam Pract, 13, 127-32.
2. Telford R, Hutchinson A, Jones R, Rix S, Howe A (2002). Obstacles to effective treatment of depression: a general practice perspective. Fam Pract, 19, 45-52.
3. Zantinge EM, Verhaak PFM, Bensing JM (2005). The workload of GPs: patients with psychological and somatic problems compared. Fam Pract, 22, 293-7.
4. Deveugele M, Derese A, Brink-Muinen A van den, Bensing J, Maeseneer J de (2002). Consultation length in general practice: cross sectional study in six European countries. BMJ, 325, 472-7.
5. Carr-Hill R, Jenkins-Clarke S, Dixon P, Pringle M (1998). Do minutes count? Consultation lengths in general practice. J Health Serv Res Policy, 3, 207-13.
6. Cape J (2001). How general practice patients with emotional problems presenting with somatic or psychological symptoms explain their improvement. Br J Gen Pract, 51, 724-9.
7. Zantinge EM, Verhaak PFM, Kerssens JJ, Bensing JM (2005). The workload of GPs: consultations of patients with psychological or somatic problems compared. Br J Gen Pract, 55, 609-14.
8. Andersson SO, Ferry S, Mattson B (1993). Factors associated with consultation length and characteristics of short and long consultations. Scand J Prim Health Care, 11, 61-7.
9. Howie J, Porter A, Heaney D, Hopton J (1991). Long to short consultation ratio: a proxy measure of quality of care for general practice. Br J Gen Pract, 41, 48-54.
10. Morrison I, Smith R (2000). Hamster health care. BMJ, 321, 1541-2.
11. Burdi MD, Baker LC (1999). Physicians' perceptions of autonomy and satisfaction in California: Health Aff (Millwood), 18, 134-45.
12. Huby G, Gerry M, McKinstry B, Porter M, Shaw J, Wrate R (2002). Morale among general practitioners: qualitative study exploring relations between partnership arrangements, personal style, and workload. BMJ, 325(7356), 140-4.
13. Robinson JW, Roter DL (1999). Psychosocial problem disclosure by primary care patients. Soc Sci Med, 48, 1353-62.
14. Millar T, Goldberg DP (1991). Link between the ability to detect and manage emotional disorders: a study of general practitioner trainees. Br J Gen Pract, 41, 357-9.
15. Del Piccolo L, Saltini A, Zimmermann C, Dunn G (2000). Differences in verbal behaviours of patients with and without emotional distress during primary care consultations. Psychol Med, 30, 629-43.
16. Salmon P, Dowrick CF, Ring A, Humphris GM (2004). Voiced but unheard agendas: qualitative analysis of the psychosocial cues that patients with unexplained symptoms present to general practitioners. Br J Gen Pract, 54, 171-6.
17. Goldberg DP, Jenkins L, Millar T, Faragher EB (1993). The ability of trainee general practitioners to identify psychological distress among their patients. Psychol Med, 23, 185-93.
18. Pasch M van der, Verhaak PFM (1998). Communication in general practice: recognition and treatment of mental illness. Patient Educ Couns, 33, 97-112.
19. Bensing JM, Kerssens JJ, Pasch M van der (1995). Patient directed gaze as a tool for discovering and handling psychosocial problems in general practice. J Nonverbal Behav, 19, 223-42.

20. Giron M, Manjon-Arce P, Puerto-Barber J, Sanchez-Garcia E, Gomez-Beneyto M (1998). Clinical interview skills and identification of emotional disorders in primary care. Am J Psychiatry, 155, 530-5.
21. Hutten JBF (1998). Workload and provision of care in general practice. Utrecht: NIVEL.
22. Roter DL, Hall JA (2004). Physician gender and patient-centred communication: a critical review of empirical research. Annu Rev Public Health, 25, 497-519.
23. Howie J, Heany D, Maxwell M, Walker J, Freeman G, Rai H (1999). Quality of general practice consultations: cross sectional survey. BMJ, 319, 738-43.
24. Gulbrandsen P, Fugelli P, Sandvik L, Hjortdahl P (1998). Influence of social problems on management in general practice: multipractice questionnaire survey. BMJ, 317, 28-32.
25. Roter DL, Hall JA, Aoki Y (2002). Physician gender effects in medical communication: a meta-analytic review. JAMA, 288, 756-64.
26. Brink-Muinen A, Dulmen AM van, Messerli-Rohrbach V, Bensing J (2002). Do gender-dyads have different communication patterns? A comparative study in Western-European general practices. Patient Educ Couns, 48, 253-64.
27. Brink-Muinen A van den, Dulmen AM van den, Schellevis FG, Bensing, JM (2004). Tweede Nationale Studie naar ziekten en verrichtingen in de huisartspraktijk. Oog voor communicatie: huisarts-patiënt communicatie in Nederland (Second Dutch National Survey of General Practice. Focus on communication: doctor-patient communication in the Netherlands). Utrecht: NIVEL.
28. Deveugele M, Derese A, Maeseneer J de (2002). Is GP-patient communication related to their perceptions of illness severity, coping and social support? Soc Sci Med, 55, 1245-53.
29. Westert GP, Schellevis FG, Bakker DH de, Groenewegen PP, Bensing JM, Zee J van der (2005). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health, 15(1), 59-65.
30. Roter D, Larson S (2002). The Roter Interaction Analysis System (RIAS): utility and flexibility for analysis of medical interactions. Patient Educ Couns, 46, 243-51.
31. Ong LML, Visser MRM, Kruyver IPM, Bensing JM, Brink-Muinen A van den, Stouthard JML et al. (1998). The Roter Interaction Analysis System (RIAS) in oncological consultations: psychometric properties. Psycho-Oncology, 7, 387-401.
32. Roter DL (1991). The Roter Method of Interaction Process Analysis (RIAS Manual). Baltimore: The Johns Hopkins University.
33. Weel C van, Köning-Zahn C, Touw-Otten FWMM, Duijn NP van, Meyboom-de Jong B (1995). COOP/WONCA Charts. A manual. Groningen: Northern Centre of Health Care Research.
34. Roter DL, Hall JA, Kern DE, Randol Barker L, Cole KA, Roca RP (1995). Improving Physicians' Interviewing Skills and Reducing Patients' Emotional Distress. A randomized Clinical Trial. Arch Intern Med, 155, 1877-84.
35. Tiemens BG, Ormel J, Simon GE (1996). Occurrence, recognition, and outcome of psychological disorders in primary care. Am J Psychiatry, 153(5), 636-44.
36. Coleman T (2000). Using video-recorded consultations for research in primary care: advantages and limitations. Fam Pract, 17, 422-7.

Chapter 6

The role of general practitioners' burnout in their involvement in patients' mental health problems

This chapter is submitted as:
EM Zantinge, PFM Verhaak, DH de Bakker, K van der Meer, JM Bensing. The role of general practitioners' burnout in their involvement in patients' mental health problems.

Abstract

General practitioners' (GPs') feelings of burnout or dissatisfaction may affect their patient care negatively, but it is unknown if these negative feelings also affect their mental health care. GPs' available time, together with specific communication tools, are important conditions for providing mental health care. We investigated if GPs who feel burnt out or dissatisfied with the available time encourage their patients less strongly to disclose their distress, and have shorter consultations, in order to gain time and energy. This may result in less psychological evaluations of the patients' complaints.

We used 1890 videotaped consultations from a nationally representative sample of 126 Dutch GPs to analyse GPs' communication and consultation lengths. Burnout was subdivided into emotional exhaustion, depersonalisation and reduced accomplishment. Multilevel regression analyses were used to investigate which subgroups of GPs differed significantly.

Results show that GPs with feelings of exhaustion or dissatisfaction with the available time have longer consultations compared to GPs without these feelings. Exhausted GPs, and GPs with feelings of depersonalisation, talk more about psychological or social topics in their consultations. GPs with feelings of reduced accomplishment are an exception: they communicate less affectively, are less patient-centred and have less eye contact with their patients compared to GPs without reduced accomplishment. No relationships between GPs' feelings of burnout or dissatisfaction with the available time and their psychological evaluations are found.

Concluding, consultations from GPs with feelings of exhaustion, depersonalisation or dissatisfaction with the available time contain elements that are favourable for the patient with psychological problems. This might be attributed to GPs' greater investments in their patients. GPs' more intensive patient contacts may cause their feelings of burnout or dissatisfaction with the available time, in contrast to the opposite relationship that we expected. To reduce GPs' negative feelings, an attitude of 'detached concern' toward their patients is recommended.

Introduction

Feelings of job dissatisfaction and job stress are problems shared by general practitioners (GPs) in many countries[1-5]. GPs report a lack of time and heavy workload as the main causes for these feelings of discontent and stress[6-9]. These negative feelings may in the long term lead to burnout[10;11].
Burnout is 'a syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that can occur among individuals who work with people in some capacity'[12]. Emotional exhaustion is the key aspect of burnout, and refers to feelings of energy depletion. Emotional exhaustion can initiate the burnout syndrome: exhaustion may evoke depersonalisation and feelings of reduced accomplishment[13]. Depersonalisation is expressed in a negative, cynical and distant attitude towards others. Reduced personal accomplishment is a negative attitude to oneself, in relation to the job.

GPs' dissatisfaction and burnout do not only affect the GP's own well-being, but it may also have consequences for health policy and for patient care. Job dissatisfaction is a major cause of GP turnover[3;9] and it may add to a negative image of the profession. This can lead to shortages of GPs, a main concern for health policy makers. Moreover, doctors' feelings of discontent can affect the quality of patient care negatively[14;15]. Other studies showed that exhaustion and burnout are associated with more medical errors[15-17].

One of the perspectives to explain burnout is found in equity theory[18;19]. According to equity theory, people evaluate their relationships with others in terms of input (investments, job demands) and output (outcomes, rewards), compared to others around them. This principle can, except for interpersonal relationships, also be applied to explain burnout among general practitioners[10;13]. In work settings people compare their job demands and their investments with the rewards they receive. When job demands are high, or rewards are low, people may experience an inequity or imbalance. But "equity is in the eye of the beholder"[19]: the evaluation of the balance between job demands and rewards is dependent of personal factors.
According to equity theory, people who experience an imbalance are strongly motivated to restore this imbalance. People who experience an imbalance between their investments and rewards develop feelings of distress, and a long-lasting period of stress may eventually lead to burnout[10;11]. Solutions to dissolve the imbalance are found in decreasing the job demands, adjusting

one's expectations, or increasing the rewards. Decreasing the job demands is the most obvious solution, as it is demonstrated that high job demands are more strongly related to burnout than a lack of rewards[20].

Although little specific information is available about the reflection of GPs' negative feelings in their patient interactions, it is possible to imagine what happens when a GP is bothered with feelings of burnout or dissatisfaction. According to the perspective of equity theory, GPs with high levels of burnout experience an imbalance between their job demands and rewards, and will try to restore this imbalance. One can hypothesise that GPs who are exhausted and cynical toward their patients, and suffer from feelings of worthlessness, will invest less strongly in their patient contacts than other GPs. Especially their distant, cynical attitude that characterises burnout, will reduce their openness and affect their attitude toward their patients. Also GPs who are dissatisfied with their job and their available time, are expected to invest less strongly in their patients, and shorten their consultations, in order to gain time and energy, and restore the imbalance.

One of the aspects of a GP's job that demands extra time and energy, according to GPs themselves, are their patients' mental health problems[21;22]. The GP has an important position in this, as they are often the first contacted health professionals for patients with mental health problems[23]. GPs as generalists are the assigned persons to provide integrated care for both patients' somatic and psychological problems. Early identification of patients' mental health problems is important, because it is the first step in finding adequate care for the patient.
Time is an important condition for discussing psychological problems in the consultation. It is known that consultations that include psychological problems take more time[24;25], and doctors experience more frequently a lack of time[25]. GPs mentioned lack of time as obstacle for detecting and treating patients with psychological problems in the consultation[26;27]. Also patients themselves mention lack of time as one of the reasons for not presenting psychological problems in the consultation[28]. But time alone is not enough to provide adequate psychological care. Furthermore, specific communication tools are required to stimulate the patient to disclose their psychological problems[29;30]. Aspects of GPs' communication that are associated with an increase of psychological aspects in the consultation are GPs' affective

behaviour, as being patient-centred[31;32], asking questions about psychological or social issues[29;32], and showing eye contact with their patients[33;34].
Given the importance of time and specific communication tools for discussing mental health problems, and our presumption that burnout and dissatisfaction in particular affect their available time and affective approach in patient interactions, we expect the following:
GPs with burnout or dissatisfaction with the available time will, in order to restore the balance and gain time and energy, be less inclined to get involved in their patients' mental health problems compared to GPs with low levels of burnout, or GPs who are satisfied with the available time. We expect that GPs with high burnout levels, or dissatisfaction with the available time, will adapt their communication to elicit less patient disclosure with respect to their mental health problems. There will be less encouragement for their patients to discuss their mental health problems, resulting in less involvement of psychological aspects in the consultation.
Therefore, we investigate in this paper:
Do GPs with high levels of burnout, and GPs who are dissatisfied with the available time

- Have shorter consultations?
- Show less affective communication in their consultations?
- Talk less frequently about psychosocial issues?
- Make less psychological evaluations?

These questions will be answered by studying videotaped consultations of Dutch GPs, comparing consultations of GPs with high, versus low levels of dissatisfaction with the available time and burnout.

Methods

Design

Secondary analyses were performed on data from the second Dutch National Survey of General Practice (DNSGP-2), a cross-sectional study conducted in the Netherlands in 2000-2002[35]. 195 GPs in 104 general practices participated in this National Survey. Data are derived from a video registration that was part of the DNSGP-2. 142 of the 195 GPs gave permission to videotape consultations during one or more days, in order, principally, to determine a GP's style of communication. This sample of 142 GPs is representative of the Dutch population of GPs with regard to their age, sex, education, length of

residence, degree of urbanisation and number of working hours[36]. 88.1% of the visiting patients gave informed consent. After each consultation the GP completed a questionnaire about the patient and the consultation. 2095 videotaped consultations, roughly 15 per GP, were observed by trained observers. Information about a GP's burnout and job satisfaction was derived from a written questionnaire covering a wide range of topics that was sent to all the GPs participating in the DNSGP-2, with a response rate of 87%. Levels of burnout and job satisfaction were available for 126 of 142 GPs who participated in the video registration. In total 1890 videotaped consultations were available for analyses from these 126 GPs.

Measures

Burnout (independent)

GPs' levels of burnout were measured using the UBOS, Utrecht Burnout Scale[37] (appendix B), a Dutch version of the Maslach Burnout Inventory[12]. We made use of the UBOS-C, a variant of the UBOS that is developed for providers of human services, according to the MBI-Human Services Survey. The UBOS-C consists of 20 items that refer to feelings of emotional exhaustion (8 items), depersonalisation (5 items) or personal accomplishment (7 items), ranging from 0=never to 6=always. Mean scores for these three components of burnout are calculated for each GP, taking into account the maximum allowed number of missing items[12]. For each subscale, GPs were classified in three groups, referring to low, middle and high scores on the subscale. Cut off points for very low or very high levels of burnout on the subscales were derived from the group norms for Dutch primary care providers (n=1523), as published in the manual of the UBOS[37]. No differences were found in the levels of burnout between the GPs participating in the video registration (n=126) and all GPs that completed the UBOS (n=164).

Job satisfaction (independent)

GPs completed a job satisfaction scale in the GP questionnaire (appendix A), originally derived from McCranie (1982)[38]. According to a list of 16 working activities, the GPs recorded their satisfaction with that specific aspect of their job on a 5-point scale, ranging from 1=very dissatisfied, 2=dissatisfied, 3=partly satisfied and partly unsatisfied, 4=satisfied, to 5=very satisfied. A mean score on this scale was calculated to measure general job satisfaction, with a Cronbach's alpha of .83 (1 item deleted). The job satisfaction

questionnaire was subdivided into three factors, referring to different aspects of job satisfaction[39]. We made use of the sub-group 'satisfaction with the available time', with a Cronbach's alpha of .74. Three categories were constructed for the 'general job satisfaction' scale and for the 'satisfaction with the available time' scale: GPs with mean scores of 1 till 2.5 are indicated as dissatisfied; GPs scoring 2.5-3.5 are classified as moderately satisfied, and GPs with a mean scores of 3.5 and above are indicated as satisfied. The GPs participating in this study (n=126) are representative for their levels of job satisfaction compared to all GPs that completed the job satisfaction questionnaire (n=164).

GPs' communication (dependent)

The videotaped consultations were rated by trained observers for several aspects of GPs' communication. Verbal communication was rated according to the Roter Interaction Analysis System (RIAS), a widely used and validated observation instrument for coding verbal communication in medical interactions[40;41] (appendix D). The system is developed to code both doctor and patient communication. The unit of analysis is the smallest meaningful string of words. The version of the RIAS that is used for the DNSGP-2, distinguishes 8 categories of affective or social-emotional behaviour and 18 categories of instrumental or task-oriented behaviour. All categories are mutually exclusive. From the cluster 'affective communication', we selected GPs' utterances with respect to empathy, showing partnership and support and legitimising (further called: 'empathy'), and secondly, GPs' showing concern toward their patients. From the group 'instrumental communication' the following utterances are selected: 1) biomedical talk, referring to questions, information and counselling about biomedical subjects and, 2) psychosocial talk, referring to questions, information and counselling about psychological or social topics.

Other aspects of communication that are studied are GPs' patient-centeredness and the percentage of eye contact in the consultation. GPs' patient-centeredness was determined by observers by rating scales on three dimensions of patient-centeredness, coded from 1 (not at all) to 5 (to a great extent). These dimensions are: giving room to the patient, shared decision making, and showing openness[36]. Ratings on these dimensions are integrated in an average patient-centeredness scale ranging from 1 to 5, with Cronbach's alpha .74. Inter-rater reliability for GP communication, expressed in Pearson's correlation coefficients, varied between .72 and .95[36].

The GP's eye contact is indicated as the percentage of total consultation time the GP has eye contact with the patient.

The GP's psychological evaluations and consultation length

The GPs registered after each consultation, on a five point scale, if psychological aspects play a part in the patient's complaints, ranging from 1= 'psychological aspects play no part at all' to 5= 'psychological background'. This is interpreted as the GP's 'psychological evaluation'.

In each consultation, one or more diagnoses of the patients were coded by observers, according to the International Classification of Primary Care (ICPC)[42]. A distinction was made between consultations with one or more diagnoses in ICPC chapter P 'Psychological' or Z 'Social', and consultations with only somatic diagnoses.

Afterwards, observers measured consultation length in minutes to two decimal places. Interruptions, such as telephone calls, were subtracted from the total consultation time.

Analyses

Analyses are performed on the levels of the GP and the consultation. On the GP level, descriptive statistics, Pearson's correlation coefficients and Cronbach's alpha's, were calculated for the components of burnout and job satisfaction, making use of SPSS 11.5 software.

On the consultation level, multilevel regression analyses were performed, using MlWin 2.0 software. Multilevel analyses were necessary due to the two-level structure of the data with level 1 being the consultation, and level 2, the GP.

First, multilevel regression analyses were performed with, respectively, the GP's patient-centeredness, the percentage of eye contact, consultation length and the GP's psychological evaluation as dependent measures, using a normal distribution model. Predictors in all models were the GP's level of burnout and job satisfaction (low versus high), and the GPs' and patients' sex and age were included as potential confounders. Mean scores of the outcome measures were calculated. We adjusted for clustering at the GP level by using a random intercept.

Second, the GP's communication utterances were analysed using a Poisson distribution model, with extra Poisson variation to account for over-dispersion. The Poisson models were fitted using a second order Penalized Quasi-Likelihood estimation.

Finally, the presence or not of a psychological or social diagnosis was analysed using a binomial logit model.

Results

In table 6.1, descriptive statistics are presented for GPs' levels of burnout, general job satisfaction, and satisfaction with the available time. A **higher** score on emotional exhaustion and depersonalisation means that GPs have more feelings of exhaustion or depersonalisation. A **lower** level of personal accomplishment or satisfaction corresponds with reduced accomplishment or dissatisfaction. In the appendix of this chapter, GPs' mean scores on all items of the three burnout scales and the items of the scale 'dissatisfaction with the available time' are shown.

Table 6.1: Descriptive statistics for GPs' levels of burnout (range 0-6) and job satisfaction (range 1-5)

	All 126 GPs	GPs with high levels of burnout/ dissatisfaction	
	Mean (sd)	N (%)	Mean (sd)
Emotional exhaustion	1.58 (.79)	9 (7%)	3.33 (1.66)
Depersonalisation	1.32 (.72)	14 (11%)	2.67 (.64)
Personal accomplishment	4.27 (.77)	28 (22%)	3.23 (.35)
General job satisfaction	3.25 (.45)	6 (5%)	2.28 (.15)
Job satisfaction time	2.97 (.61)	33 (26%)	2.18 (.23)

Sd = standard deviation

Mean scores in table 6.1 show that GPs' feelings of emotional exhaustion, depersonalisation and reduced accomplishment are on average found 'seldom' or 'sometimes', according to the meaning of the scale points. Table 6.1 shows that 7% of the GPs reported high levels of exhaustion, 22% showed high levels of reduced personal accomplishment and 11% scored high on the depersonalisation scale.

Table 6.1 also shows that 5% of the GPs are not satisfied with their job. The number of GPs that are not satisfied with the available time is more than a quarter. In general, GPs are especially dissatisfied with their leisure time and time to manage their practice (see appendix). From all the items referring to

satisfaction with the available time, GPs are most satisfied with the available patient time.
Because there was only a small subgroup of six GPs with a low general job satisfaction, we answer the research questions by focusing this article on the GP's satisfaction with the available time.

In table 6.2, Pearson's correlations between the burnout subscales and job satisfaction with the available time are presented. On the diagonals, the internal consistency of each subscale, expressed in Cronbach's alpha's, is shown.

Table 6.2: Correlations and Cronbach's alpha's (diagonally) for burnout subscales and dissatisfaction with the available time (n=126)

	EE	DP	PA	JS time
Emotional exhaustion (EE)	(.88)	-	-	-
Depersonalisation (DP)	.56**	(.76)	-	-
Personal accomplishment (PA)	-.21*	-.32**	(.81)	-
Job satisfaction (JS) time	-.45**	-.20*	.12	(.74)

* p<.05; ** p<.01

GPs who are more exhausted, more often also have feelings of depersonalisation and reduced accomplishment. Additionally, exhausted GPs are less satisfied with the available time. GPs with higher depersonalisation levels more often have feelings of reduced accomplishment and are more often dissatisfied with the available time. No significant correlations were found between personal accomplishment and job satisfaction with the available time. Cronbach's alpha's show a satisfactory internal consistency of the burnout and satisfaction scales.

In table 6.3, by means of multilevel analyses, GPs with low and high levels of burnout and satisfaction with the available time, are compared with respect to their communication, eye contact, patient-centeredness, length of consultation and awareness of psychological problems. Estimated means presented in table 6.3 are corrected for the age and gender of the GPs and patients.

Table 6.3: Corrected[a] means for communication aspects and outcomes of the consultations from GPs with low and high levels of burnout and satisfaction with the available time

	Emotional exhaustion		Depersonalisation		Pers. accomplishment		Satisfaction time	
	Low N=786-795	High N=131-132	Low N=454-460	High N=207-208	Low N=406-411	High N=600-607	Low N=476-484	High N=396-400
Instrumental utterances	65.2	82.6**	69.1	74.9	64.9	73.6*	75.1	61.8**
from which:								
- biomedical talk	39.9	47.5*	42.7	42.9	38.2	45.2**	45.5	38.1**
- psychosocial talk:	6.6	12.0**	6.1	9.7**	7.0	7.7	7.8	6.2
• psychosocial questions	2.9	4.2**	2.7	3.9**	3.1	3.1	2.8	2.7
• psychosocial information	2.9	6.2**	3.2	4.8**	4.0	3.4	4.3	3.2
• psychosocial counselling	.6	1.2**	.6	.8	.6	.7	.7	.6
Affective utterances	44.4	47.9	47.0	47.8	42.3	49.8*	47.9	41.3
from which:								
- empathy	1.3	1.6	1.3	1.5	1.4	1.5	1.4	1.1
- showing concern	.2	.2	.2	.3	.2	.2	.1	.2
Other communication								
Patient-centeredness	3.8	3.7	3.8	3.8	3.8	3.9**	3.8	3.8
% eye contact	42%	42%	43%	39%	40%	44%*	39%	41%
Outcomes								
Consultation length	9.3	11.4**	9.8	10.7	9.4	10.2	10.7	8.9**
Psychological evaluation	2.5	2.6	2.7	2.7	2.5	2.6	2.6	2.5
Psychol/social diagnosis	9%	12%	9%	11%	9%	10%	9%	9%

[a] Corrected for the GPs' and patients' age and gender
* p<.05; ** p<.01

Table 6.3 shows that exhausted and dissatisfied GPs have consultations that are roughly two minutes longer compared to GPs who are not exhausted or dissatisfied. The longest consultations are consultations from GPs who reported feelings of exhaustion (on average 11.4 minutes). GPs who are satisfied with the available time have the shortest consultations: 8.9 minutes on average. GPs with feelings of exhaustion or dissatisfaction and GPs who feel competent, show more instrumental communication in their consultations. Exhausted GPs and GPs with feelings of depersonalisation talk more frequently about psychological or social issues than GPs without feelings of exhaustion or depersonalisation. They ask more questions about psychological or social topics, give more information, and exhausted GPs show also more psychosocial counselling in their consultations. The extra instrumental communication that dissatisfied GPs and GPs who feel competent show in their consultations is due to their biomedical utterances; no differences in psychosocial communication are found.

The number of GPs' affective utterances is only significantly higher in consultations from GPs who feel competent compared to GPs with feelings of low accomplishment. GPs who feel competent are also more patient-centred in their consultations and show more eye contact.

Table 6.3 shows that the GP's level of burnout or satisfaction with the available time, is not associated with differences in awareness of patients' psychological problems. GPs do not make more psychological evaluations or diagnoses in their consultations when they have feelings of burnout or are dissatisfied with their available time.

Discussion and conclusions

Main findings

Against the expectations, GPs with feelings of burnout or dissatisfaction do not have shorter consultations. Also the other expectations, suggesting that GPs with high levels of burnout or dissatisfaction would show less affective communication, talk less frequently about psychological and social issues and are less aware of psychological problems in their patients, are not confirmed.

On the contrary, our findings showed that exhausted GPs and GPs who are dissatisfied with the available time have longer consultations, and they show more communication in total in their consultations. This extra communication is expressed in more talking about psychological or social issues by exhausted

GPs, while unsatisfied GPs show more biomedical talk. GPs with high levels of depersonalisation do also have more psychosocial talk with their patients, compared to GPs with low depersonalisation.
But although the GP's higher levels of burnout or dissatisfaction are associated with more communication and longer consultations, this is not translated in more psychological evaluations of the patient's complaints.
One exception to the main conclusion is the result showing GPs who feel incompetent, scoring low on 'personal accomplishment'. They communicate in their consultations for the greater part as we expected: They show less affective communication, are less patient-centred and have less eye contact with their patients compared to GPs who feel competent.

Discussion
How can we explain the unexpected findings? Surprisingly, we found that GPs who are more exhausted and dissatisfied with the available time, have longer consultations with more communication utterances. GPs with more feelings of depersonalisation discuss more psychosocial topics. In other words, GPs with feelings of exhaustion, depersonalisation and dissatisfaction may have more intense patient contacts than GPs without these negative feelings. Intuitively, it is plausible to think that these more intense patient contacts cause GPs' negative feelings, instead of the opposite relationship that we focused on. Our idea was that GPs' negative feelings would affect the content of the consultations, but maybe in practice the intensity of the patient contacts determines GPs' negative feelings.
Secondly, it is known that people, who are most at risk of burnout, are impassioned people working hard. To demonstrate this by a quotation: 'In order to burn out, one has to be first 'on fire'[43]. GPs in our sample are the GPs who may have symptoms of burnout, but not so severe that they cannot work. The most serious cases suffering from burnout are sick at home and did not have the chance to participate in our study. The GPs in our study showing high levels of some of the burnout scales are possibly the hardworking GPs who are still 'on fire', but are most at risk of burnout. On the other hand, this group of GPs is specifically important to include in a study, because these GPs are the ones that have to take good quality care of their patients.
Thirdly, this study showed that GPs with high exhaustion and depersonalisation levels, talked more about psychological or social issues with their patients. An additional explanation for this finding is that maybe the GPs, who have

feelings of distress themselves, are more focused on psychological aspects in their patients because of their affinity with those kinds of problems.
Fourthly, an alternative explanation for the finding that consultations from GPs with feelings of burnout take longer, is that these GPs are less effectively in their consultations.
Fifthly, GPs who are dissatisfied with the available patient time have longer consultations containing more communication. It is known from earlier studies that GPs who are dissatisfied with their jobs are especially dissatisfied with the organisation and paperwork that their job brings with it[1;3;7], while their patient care contributes positively to their job satisfaction. Possibly, the dissatisfied GPs in our study do not try to limit their involvement in patient care, because they like that part of their job, but show less involvement in other aspects of their job. Moreover, our results showed that dissatisfaction with the available time is at least caused by dissatisfaction with the available patient time.
Finally, results in this study show that GPs' awareness of psychological problems in their patients is not dependent on their feelings of burnout or dissatisfaction. These results correspond with results from our previous study, in which it was demonstrated that the presence and severity of mental distress in the patient are more important reasons for a GP to take psychological aspects into consideration than their workload[44].

Methodological considerations
The number of GPs with high levels of burnout is under-represented compared to GPs without burnout symptoms. This is especially true for the number of GPs with high levels of exhaustion, the core component of burnout. The mean scores on the exhaustion components of burnout are low compared to other studies reported in the manuals of the UBOS and MBI[12;37]. In order to be sure that we identified GPs with strong feelings of burnout, we did not analyse the continuous scores on the subscales of burnout, but we used external norms for Dutch primary care providers to classify the GPs in high, middle and low levels of the burnout components. The dissatisfied group is classified according to the meaning of the scale points, instead of in terms of a percentage.
Secondly, the causes and effects of the studied relationships are unclear, due to the cross-sectional design of the study. It remains unclear if the GP's communication and consulting style is affected by their feelings of burnout or dissatisfaction with the available time, or if the GP's consulting style influences the presence of symptoms of burnout or dissatisfaction. Although

the results of this study make the latter explanation most plausible, the answer to these questions is that presumably both perspectives are partly right. In studying GP-patient interaction, it is plausible to think that both GPs as patients influence each other in an iterative and responsive process[45], and in studying just one single relationship, these responsive reactions would be ignored.
Finally, differences in communication and other aspects of the consultation between GPs with low and high burnout and job satisfaction levels, are presented after adjustment for GPs' and patients' age and sex. Significant differences might therefore be attributed to GPs' burnout or satisfaction, and not to the age or sex of the GP or the practice population. But it is useful to realise that combinations between GPs' or patients' age and sex and their levels of burnout or job satisfaction exist in 'real life'. These combinations might increase the differences between GPs with low and high burnout or job satisfaction.

Conclusion & implications for practice
First, we can conclude that GPs' feelings of burnout or dissatisfaction with the available time do not obstruct their diagnosis and awareness of patients' psychological problems.
Secondly, we found that consultations from GPs with high levels of exhaustion or depersonalisation, and from GPs who are dissatisfied with the available time, can be favourable from the perspective of the patient with mental health problems. GPs with feelings of exhaustion, or dissatisfaction with the available time, provide longer consultations. Patients with mental health problems will benefit from longer consultations, because time is an important condition for providing mental health care. Furthermore, GPs who have high levels of exhaustion or depersonalisation talk more about psychological or social problems in their consultations. This might also be favourable for patients with mental health problems, because discussing mental health problems with their doctor increases the chance that appropriate care will be found for these patients.
On the other hand, GPs providing more intense patient care are themselves more likely to retire, or risk burn out, because of their dissatisfaction. Therefore these GPs have to be supported by training and personal coaching to teach them to apply an attitude of 'detached concern'[46] in their consultations, by showing concern and affective behaviour toward their patients, accompanied with some professional distance.

Additionally, GPs with feelings of incompetence may benefit from training. These GPs create fewer conditions for patients with mental health problems to talk about their problems, by showing less affective communications, eye contact and patient-centeredness in their consultations. Attention to these aspects of communication in the training or personal coaching of medical students or practicing GPs, combined with an attitude of ‘detached concern’, may improve care for patients with mental health problems, and decrease the chance that the process of burnout will get out of hand.

References

1. Bailie R, Sibthorpe B, Douglas B, Broom D, Attewell R, McGuiness C (1998). Mixed feelings: satisfaction and disillusionment among Australian GPs. Fam Pract, 15, 58-66.
2. Burdi MD, Baker LC (1999). Physicians' perceptions of autonomy and satisfaction in California. Health Aff (Millwood), 18, 134-45.
3. Dowell AC, Hamilton S, McLeod DK (2000). Job satisfaction, psychological morbidity and job stress among New Zealand general practitioners. N Z Med J, 113, 269-72.
4. Kirwan MF, Armstrong D (1995). Investigation of burnout in a sample of British general practitioners. Br J Gen Pract, 45, 259-60.
5. Calnan M, Wainwright D, Forsythe M, Wall B, Almond S (2001). Mental health and stress in the workplace: the case of general practice in the UK. Soc Sci Med, 52, 499-507.
6. Appleton KF, House AF, Dowell A (1998). A survey of job satisfaction, sources of stress and psychological symptoms among general practitioners in Leeds. Br J Gen Pract, 48, 1059-63.
7. Huby G, Gerry M, McKinstry B, Porter M, Shaw J, Wrate R (2002). Morale among general practitioners: qualitative study exploring relations between partnership arrangements, personal style, and workload. BMJ, 325(7356), 140-4.
8. Dowell AC, Coster G, Maffey C (2002). Morale in general practice: crisis and solutions. N Z Med J, 115(1158), U102.
9. Sibbald B, Bojke C, Gravelle H (2003). National survey of job satisfaction and retirement intentions among general practitioners in England. BMJ, 326, 22-5.
10. Dierendonck D van, Schaufeli W, Sixma H (1994). Burnout among general practitioners: a perspective from equity theory. J Soc Clin Psychol, 13(1), 86-100.
11. Demerouti E, Bakker AB, Nachreiner F, Schaufeli W (2001). The Job Demands-Resources Model of Burnout. J Appl Psychol, 86, 499-512.
12. Maslach C, Jackson S, Leiter M (1996). Maslach Burnout Inventory Manual. Palo Alto, California: Consulting Psychologists Press.
13. Bakker A, Schaufeli W, Sixma H, Bosveld W, Dierendonck D van (2000). Patients demands, lack of reciprocity and burnout: a five year longitudinal study. J Organiz Behavior, 21, 425-41.
14. DeVoe J, Fryer Jr GE, Hargraves JL, Phillips RL, Green LA (2002). Does career dissatisfaction affect the ability of family physicians to deliver high-quality patient care? J Fam Pract, 51, 223-8.
15. Williams E, Manwell L, Konrad T, Linzer M (2007). The relationship of organizational culture, stress, satisfaction, and burnout with physician-reported error and suboptimal patient care: results from the MEMO study. Health Care Manage Rev, 32, 203-12.
16. Landrigan CP, Rothschild JM, Cronin JW, Kaushal R, Burdick E, Katz JT et al. (2004). Effect of reducing interns' work hours on serious medical errors in intensive care units. N Engl J Med, 351, 1838-48.
17. West CP, Huschka MM, Novotny PJ, Sloan JA, Kolars JC, Habermann TM et al. (2006). Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. JAMA, 296, 1071-8.
18. Adams J (1965). Inequity in social exchange. In Berkowitz L. Advances in Experimental Social Psychology, 2, 267-99. New York: Academic Press.
19. Walster E, Walster G, Berscheid E (1978). Equity: Theory and Research. Boston: Allyn & Bacon.

20. Schaufeli W, Bakker A (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. Journal Organiz Behavior, 25, 293-315.
21. Scott A, Wordsworth S (1999). The effects of shifts in the balance of care on general practice workload. Fam Pract, 16(1), 12-7.
22. Visscher A, Laurant M, Schattenberg G, Grol R (2002). De rol van de huisarts inzake geestelijke gezondheidszorg (GP's role in mental health care). Nijmegen: Centre for quality of care research, UMC St Radboud.
23. Boerma WGW, Verhaak PFM (1999). The general practitioner as the first contacted health professional by patients with psychosocial problems: a European study. Psychol Med, 29(3), 689-96.
24. Deveugele M, Derese A, Brink-Muinen A van den, Bensing J, Maeseneer J de (2002). Consultation length in general practice: cross sectional study in six European countries. BMJ, 325, 472-7.
25. Zantinge EM, Verhaak PFM, Kerssens JJ, Bensing JM (2005). The workload of GPs: consultations of patients with psychological or somatic problems compared. Br J Gen Pract, 55, 609-14.
26. Howe A (1996). "I know what to do, but it's not possible to do it"-general practitioners' perceptions of their ability to detect psychological distress. Fam Pract, 13, 127-32.
27. Telford R, Hutchinson A, Jones R, Rix S, Howe A (2002). Obstacles to effective treatment of depression: a general practice perspective. Fam Pract, 19, 45-52.
28. Cape J, McCulloch Y (1999). Patients' reasons for not presenting emotional problems in general practice consultations. Br J Gen Pract, 49, 875-9.
29. Del Piccolo L, Saltini A, Zimmermann C, Dunn G (2000). Differences in verbal behaviours of patients with and without emotional distress during primary care consultations. Psychol Med, 30, 629-43.
30. Howie JG, Hopton JL, Heaney DJ, Porter AM (1992). Attitudes to medical care, the organization of work, and stress among general practitioners. Br J Gen Pract, 42(358), 181-5.
31. Goldberg DP, Jenkins L, Millar T, Faragher EB (1993) The ability of trainee general practitioners to identify psychological distress among their patients. Psychol Med, 23, 185-93.
32. Pasch M van der, Verhaak PFM (1998). Communication in general practice: recognition and treatment of mental illness. Patient Educ Couns, 33, 97-112.
33. Bensing JM, Kerssens JJ, Pasch M van der (1995). Patient directed gaze as a tool for discovering and handling psychosocial problems in general practice. J Nonverb Behav, 19, 223-42.
34. Giron M, Manjon-Arce P, Puerto-Barber J, Sanchez-Garcia E, Gomez-Beneyto M (1998). Clinical interview skills and identification of emotional disorders in primary care. Am J Psychiatry, 155, 530-5.
35. Westert GP, Schellevis FG, Bakker DH de, Groenewegen PP, Bensing JM, Zee J van der. (2005). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health, 15(1), 59-65.
36. Brink-Muinen A van den, Dulmen AM, Schellevis FG, Bensing JM (2004). Tweede Nationale Studie naar ziekten en verrichtingen in de huisartspraktijk. Oog voor communicatie: huisarts-patiënt communicatie in Nederland (Second Dutch National Survey in General Practice. Focus on communication: doctor-patient communication in the Netherlands). Utrecht: NIVEL.
37. Schaufeli W, Dierendonck D van (2000). UBOS (Utrechtse Burnout Schaal). Handleiding. (Utrecht Burnout Scale. Manual). Lisse: Swets & Zeitlinger.

38. McCranie E, Hornsby J, Calvert J (1982). Practice and career satisfaction among residency trained family physicians; a national survey. J Fam Pract, 14(6), 1107-14.
39. Berg M van den, Kolthof E, Bakker D de et al. (2004). De werkbelasting van huisartsen (The workload of general practitioners). Utrecht: NIVEL.
40. Roter D, Larson S (2002). The Roter Interaction Analysis System (RIAS): utility and flexibility for analysis of medical interactions. Patient Educ Couns, 46, 243-51.
41. Ong LML, Visser MRM, Kruyver IPM, Bensing JM, Brink-Muinen A van den, Stouthard JML et al. (1998). The Roter Interaction Analysis System (RIAS) in oncological consultations: psychometric properties. Psycho-Oncology, 7, 387-401.
42. Lamberts H, Wood M (1987). International Classification of Primary Care. Oxford: Oxford University Press.
43. Pines A (1993). Burnout: An existential perspective. In Schaufeli W, Maslach C, Marek T. Professional Burnout: Recent Developments in Theory and Research, 33-51. Washington: Taylor & Francis.
44. Zantinge EM, Verhaak PFM, Bakker DH de, Meer K van der, Bensing JM (2007). The workload of general practitioners does not affect their awareness of patients' psychological problems. Patient Educ Couns, 67, 93-9.
45. Suchman AL (2006). A new theoretical foundation for relationship-centered care. Complex responsive processes of relating. J Gen Intern Med, 21 Suppl 1, S40-S44.
46. Rogers C (1951). Client-centred therapy. Boston: Houghton Mifflin.

Appendix

	Mean (sd)	N (%)	Mean (sd)
Emotional exhaustion	**1.58 (.79)**	**9 (7%)**	**3.33 (1.66)**
- I feel emotionally drained from my work	1.85 (1.12)	-	4.11 (.78)
- I feel used up at the end of the workday	2.04 (1.09)	-	3.89 (.93)
- I feel fatigued when I get up in the morning and have to face another day on the job	1.66 (1.13)	-	3.33 (1.23)
- Working with people all day is really a strain for me	1.53 (1.00)	-	3.00 (1.23)
- I feel burned out from my work	1.16 (1.10)	-	3.78 (.97)
- I feel frustrated by my job	1.01 (.98)	-	2.44 (.73)
- I feel I'm working too hard on my job	2.39 (1.30)	-	3.78 (1.09)
- I feel like I'm at the end of my rope	1.02 (1.00)	-	3.33 (1.66)
Depersonalisation	**1.32 (.72)**	**14 (11%)**	**2.67 (.64)**
- I feel I treat some patients as if they were impersonal objects	2.01 (1.05)	-	3.00 (1.04)
- I've become more callous toward people since I took this job	1.20 (1.22)	-	3.43 (1.09)
- I worry that this job is hardening me emotionally	.87 (.98)	-	2.50 (1.16)
- I don't really care what happens to some patients	1.22 (.88)	-	2.43 (1.02)
- I feel patients blame me for some of their problems	1.32 (.83)	-	2.00 (.96)
Personal accomplishment	**4.27 (.77)**	**28 (22%)**	**3.23 (.35)**
- I can easily understand how my patients feel about things	4.97 (.89)	-	4.21 (.88)
- I deal very effectively with the problems of my patients	4.59 (1.01)	-	3.61 (.83)
- I feel I'm positively influencing other people's lives through my work	3.85 (1.13)	-	2.96 (.69)
- I can easily create a relaxed atmosphere with my patients	4.90 (.95)	-	3.82 (1.02)

	Mean (sd)	N (%)	Mean (sd)
- I feel exhilarated after working closely with my patients	4.33 (1.10)	-	3.04 (.69)
- I have accomplished many worthwhile things in this job	3.99 (1.17)	-	2.89 (.92)
- In my work, I deal with emotional problems very calmly	3.16 (1.49)	-	2.11 (1.32)
JS time, from which satisfaction with:	**2.97 (.61)**	**33 (26%)**	**2.18 (.23)**
- available patient time	3.31 (.82)	23 (18%)	2.64 (.78)
- time to manage practice	2.77 (.86)	51 (41%)	2.00 (.56)
- time for education	3.24 (.93)	31 (25%)	2.36 (.90)
- time for family	2.89 (.93)	49 (39%)	1.97 (.59)
- leisure time	2.64 (.91)	57 (45%)	1.91 (.80)

JS = Job satisfaction

Chapter 7

Summary and discussion

Summary and discussion

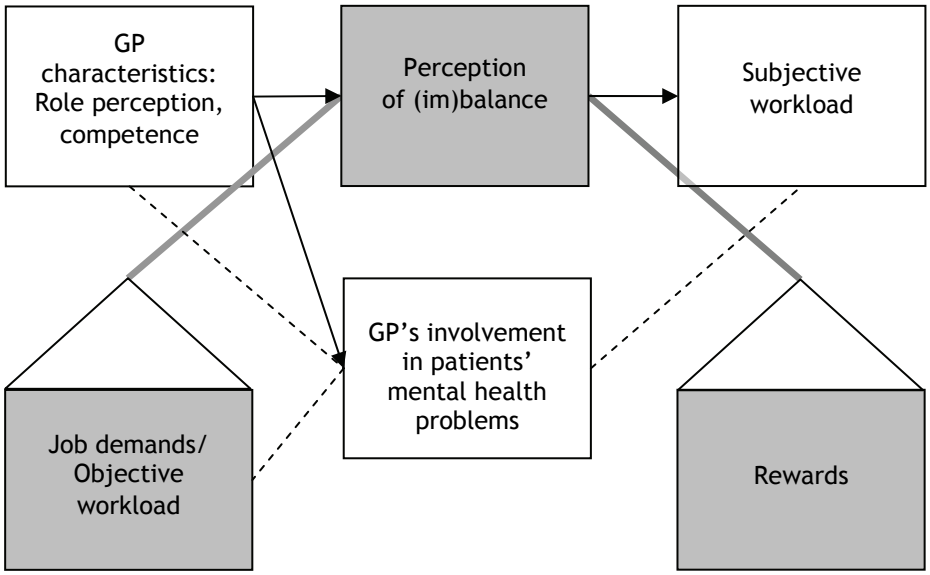
This chapter starts by summarising the aims, design, and the results of this thesis. We then reflect on methodological issues and the limitations of this study before discussing the results in the light of theories and earlier findings. Finally, recommendations for practice and future research are formulated.

Summary

Background, aims, and study design (chapter 1)
GPs have an important position in the identification of patients' mental health problems. The range of psychological problems that GPs have to deal with varies between mild psychological distress and serious psychopathology. As generalists, GPs are often the first health professionals contacted by patients with mental health problems and they are assigned to provide integrated care for both patients' somatic and psychological problems. Early recognition and diagnosis of patients' mental health problems are important because it may avoid the patients' complaints deterioration, relieve their burden, and increase the possibility of further support and treatment. But GPs are sometimes reluctant to get involved in their patients' mental health problems because these problems ask for extra time and energy. They mention lack of time and workload as obstacles in their involvement in patients' mental health problems. In this thesis the relationship between GPs' workload and their involvement in patients' mental health problems is explored.
Workload is subdivided into objective and subjective workload. Objective workload refers to the job demands: the work that is done, and the time that it takes. From the perspective of equity theory, people compare their job demands with the rewards they receive. When job demands are too high, or rewards too low, people experience an imbalance. This imbalance results in feelings of stress and this may eventually lead to burnout. Stress and burnout are aspects of subjective workload. A second clustering is the distinction between workload on a micro level versus overall workload. GPs' workload on a micro level is the workload at a specific moment, or workload with respect to a specific aspect of the job, while GPs' overall workload is indicated by the sum of their job demands, or their overall subjective workload.

This thesis aims to unravel the relationship between GPs' workload and their involvement in patients' mental health problems from two perspectives. In model 1, the main concepts that are investigated in this thesis are presented. The arrows between the concepts indicate the relationships that are already known. The dotted lines correspond to the relationships that are investigated in this study.

Model 1: Conceptual model



In chapter 2, 3 and 4 we study if GPs' involvement in their patients' mental health problems increases their workload, and we specify how this workload is manifested. Additionally, we investigate if GPs with a broader perception of their tasks with regard to mental health care, and who therefore pay more attention to psychological aspects, are more involved in patients' mental health problems resulting in a higher overall objective and subjective workload. These issues are relevant from the perspective of the organisation of general practice.

Secondly, we investigate in chapter 5 and 6 if GPs' higher workload affects their involvement in patients' mental health problems. The idea is that because GPs' involvement in their patients' mental health problems is supposed to demand more time and energy, this might be especially a problem when GPs' workload is already high. Therefore the expectation is that, in order to gain time and energy, GPs with a high workload are less inclined to get involved in their patients' mental health problems, compared to GPs with a low workload. We expect that GPs with a higher workload will adapt their communication and encourage their patients less strongly to disclose their mental health problems, resulting in psychological aspects playing a smaller part in the consultation. This is relevant from the perspective of the quality of care because if patients' mental health problems remain unaddressed, it is a missed opportunity to find adequate care for the patient.

To answer the research questions secondary analyses were made from the Second Dutch National Survey of General Practice, a cross-sectional survey that was carried out from April 2000 till January 2002. This National Survey was conducted in 104 Dutch general practices with 195 GPs, and a practice population of 385,461 patients. We made use of several sources of data from the National Survey:

- A medical record, in which the participating GPs coded their patients' health problems according to the International Classification of Primary Care (roughly 1.5 million contacts in total);
- A video observation of 2095 consultations from 142 GPs, mainly meant to determine GPs' communication;
- Two GP questionnaires among participating GPs about a variety of topics including their workload;
- A detailed log of GPs' use of time during a week among participating GPs;
- A census to determine patients' socio-demographic characteristics.

All data sources were interlinked by using unique identifiers. Data were analysed on the level of the GP, the patient, and the consultation, dependent on the research questions.

GPs' workload in cases of patients with mental health problems (chapter 2)
We investigated in this chapter if patients with mental health diagnoses make greater demands on the general practice compared to patients with only somatic diagnoses. Therefore all medical records from adult patients during a year were analysed. Patients diagnosed with one or more diagnoses in ICPC

chapter 'Psychological' or 'Social' (n=37,189) were compared to patients with only somatic diagnoses (n=189,731). Patients were compared with respect to their frequency of contact, number of diagnoses and episodes of illness. A subdivision was made between diagnoses of depression, anxiety, sleeping disorder, stress problems, problems related to work or partners, and 'other psychological or social problems'.

Patients in all categories of psychological or social problems had almost twice as many contacts with their general practice compared to patients with only somatic problems. They received more diagnoses from their GPs and more episodes of illness are shown. Patients with psychological or social diagnoses also contacted their general practice more often concerning their somatic problems compared to patients with only somatic problems. These findings are valid for all the subgroups of psychological and social problems. Patients with sleeping disorders contact their general practice most frequently, mainly caused by their somatic problems. Patients with depression and anxiety have the most contacts concerning their specific depression and anxiety diagnoses. Patients with stress or problems related to work or partners have the fewest contacts with their general practice. In conclusion, patients with mental health diagnoses make greater demands on general practice compared to patients with only somatic diagnoses.

GPs' workload in cases of consultations involving patients' mental health problems (chapter 3)

In this chapter we made use of video observations to analyse the doctor-patient contact on a micro level. We investigated if consultations involving patients' mental health problems are more time-consuming and demanding for the GP. Therefore three groups of consultations are compared:

1) Consultations in which a psychological or social diagnosis is made (n=138);
2) Consultations with a somatic diagnosis, in which the GP assessed the background of the patient's problems as psychological (n=309);
3) Consultations with a somatic diagnosis in which the patient's complaints have been attributed to somatic factors (n=945).

These consultations are compared with respect to the length of consultation, the number of diagnoses, and the GP's feelings of a lack of time after the consultation.

Consultations with a psychological or social diagnosis took, on average, 3.6 minutes longer compared to completely somatic consultations. Consultation time was also 2.4 minutes longer when a somatic diagnosis was made but psychological aspects played a part in the background. Patients received more diagnoses in total in consultations with psychological or social diagnoses. In consultations with a psychological diagnosis or psychological background, GPs assess consultation time more often as insufficient (respectively 14% and 11% of the consultations), compared to completely somatic consultations (4%). Specific analysis of the GP's assessment of insufficient consultation time showed that in consultations with a psychological or social diagnosis, GPs' assessment of a lack of time is significantly explained by the fact that the consultations take longer and contain more problems. Additionally, except for the influence of consultation length and the number of diagnoses, a somatic diagnosis, but psychological background, also contributes significantly to the GP's feelings of a lack of time, but a psychological or social diagnosis does not. This means that patients' somatic problems that have a psychological background induce the highest perceived burden on the GP.

Do GPs who pay more attention to psychological problems have a higher overall workload? (chapter 4)

As is demonstrated, dealing with patients' mental health problems puts extra demands on GPs, because patients have more contacts with their general practice (chapter 2), and consultations are more time-consuming and demanding (chapter 3). But it remains unclear if the GP's extra workload, when dealing frequently with patients' mental health problems on a micro level, is also translated into a higher workload overall. Therefore we analysed data from questionnaires, a time diary and medical record of the GPs participating in the National Survey (191 maxim) to answer the question: Does the attention GPs pay to their patients' mental health problems add to their overall workload? Two indicators were used to gauge GPs' attention to mental health problems: GPs' perception of their role in mental health care, and the percentage of contacts with a psychological or social diagnosis during a year. Objective workload is indicated as the GP's number of working hours and patient contacts per week, corrected for the FTEs the GP works in practice. Subjective workload measures are the GP's satisfaction with the available time, and the GP's emotional exhaustion, one of the subscales of burnout.

GPs with a broader perception of their role towards mental health care do not have more working hours or patient contacts than GPs with a more limited perception of their role. Neither are they more exhausted or dissatisfied with the available time. Also the percentage of patient contacts in which a psychological or social diagnosis is made is not related to the GP's objective or subjective workload.
GPs with a broader role perception with respect to mental health care, reach relatively more psychological and social diagnoses in their patient contacts than GPs with a narrower perception. Furthermore, we found that objective and subjective workload are substantially different concepts: no associations are found between GPs' objective workload and their feelings of dissatisfaction with the available time or exhaustion.
The main conclusion is that the greater attention a GP gives for mental health problems is not translated into a higher overall workload. One of the explanations is that the workload of GPs in itself, may be an important determinant in their attention for psychological problems instead of the opposite relationship that we studied. This perspective is further explored in chapters 5 and 6.

Does the GP's workload affect their awareness of patients' psychological problems? (chapter 5)
The fact that the involvement of patients' mental health problems in the consultation demands extra time, makes GPs sometimes reluctant to get involved in their patients' mental health problems. Discussing mental health problems requires specific communication tools to encourage the patient to talk about their problems. Our expectation is that in order to gain time, GPs with a high workload will be less inclined to encourage their patients to disclose their mental health problems, and will be less aware of psychological aspects playing a part in the consultation. To answer this question, 2095 videotaped consultations are analysed. Workload measures are a GP's subjective experience of a lack of time before the consultation starts, and a GP's personal list size. Communication tools that are supposed to stimulate patients into talking about their mental health problems are: showing empathy, eye contact, being patient-centred, and asking questions about psychological or social topics.

Results show that GPs' workload is not related to their awareness of patients' psychological problems, and hardly related to their communication. The only relationship we found is that GPs with feelings of a lack of time before the consultation starts are less patient-centred in the consultation, compared to GPs without these feelings. On the other hand, the presence and severity of a patient's mental distress are important reasons for a GP to take psychological aspects into consideration, and to show communication that may stimulate the patient to disclose their mental health problems. Additionally, GPs' empathy, eye contact and questioning about psychological or social topics correspond with more awareness by GPs of psychological aspects.

GPs' burnout and dissatisfaction with the available time reflected in their consultations (chapter 6)

In this chapter data from 2095 video observations were analysed to investigate if consultations from GPs experiencing high levels of burnout, and consultations from GPs who are dissatisfied with the available time, contain less psychological elements, compared to GPs without these negative feelings. Specifically, we investigated if GPs' burnout and dissatisfaction with the available time are associated with shorter consultations, less discussion of psychological topics, less affective communication and less awareness of psychological aspects. Burnout is here subdivided in three components: emotional exhaustion, depersonalisation and reduced accomplishment.

Against our expectations, results show that exhausted GPs, and GPs who are dissatisfied with the available time, have longer consultations. Exhausted GPs and GPs with feelings of depersonalisation, talk more about psychological or social issues in their consultations. It seems that the relationship has to be interpreted otherwise: GPs develop feelings of burnout, and are dissatisfied with the available time, because of their intensive patient contacts, instead of the opposite relationship that was the focus of this chapter.

Conforming to expectations, GPs with feelings of reduced accomplishment show less affective communication, are less patient-centred, and have less eye contact with their patients, compared to GPs who feel competent.

Both GPs' feelings of burnout as well as their dissatisfaction with the available time are not associated with more psychological evaluations by GPs.

Discussion

Main findings

Conforming to expectations, patients' mental health problems demand extra time and energy from the GP. Patients make greater demands on general practice and consultations are more demanding, especially when patients have somatic problems with psychological aspects playing a part in the background. But, surprisingly, GPs who pay more attention to their patients' psychological problems do not have a higher overall workload compared to GPs who are more focused on patients' somatic problems. Neither was our expectation confirmed that GPs with a high objective or subjective workload make less mental health assessments in their consultations in order to gain time and energy.

GPs with a high subjective workload, on the other hand, show different communication patterns compared to GPs with a lower subjective workload. On a micro level, when GPs experience a lack of time before the consultation starts, they are less patient-centred in the consultation. This is unfavourable for a patient with mental health problems. But, remarkably, when GPs are overall dissatisfied with the available time, or have feelings of burnout, they show more communication that may encourage the patient to disclose their mental distress, and their consultations take longer; this is favourable for the patient with mental health problems. These unexpected results are further discussed and interpreted according to a critical discussion of the methods and findings from theory and literature.

Methodological reflections

The second Dutch National Survey of General Practice is a comprehensive study[1;2]. The design of the National Survey makes it possible to connect all data on GP, patient, practice and consultation levels, because unique identifiers are used for GPs, patients and practices. All these levels, derived from different types of data collection, are integrated into this study.

The GP's medical registration of diagnoses is a good representation of morbidity in general practice and the population. ICPC coding is a standard method to code symptoms and diagnoses in general practice in the Netherlands. The GPs participating in the National Survey received manuals in ICPC coding, and a large group of GPs participated in training with respect to ICPC coding. To determine the variation in ICPC coding between GPs, a vignette study was performed among the GPs participating in the National

Survey (response 83%). 30 fictitious patient cases were ICPC coded by the GPs and four experts in ICPC coding. There was a high concordance, on average 81%, between GPs and the experts[3]. The videotaped consultations provide a view into 'real' consultations, and the Roter Interaction Analysis System is a validated instrument to study GP-patient communication in a structured and objective manner[4-6]. There is little evidence that video recording influences the behaviour of either GPs or patients[7]. Information from the GP questionnaire includes reliable measures of burnout, job satisfaction, and GPs' role perception with respect to mental health care[8-10]. And finally, the GPs and patients participating in the National Survey are representative of the Dutch population as a whole[1].

There are some limitations to this study which require further discussion. Firstly, the causes and effects of the relationships we studied are often unclear, due to the cross-sectional design of our study. This raises chicken-and-egg questions that are inevitable in this type of research. The two main questions are: Do patients' mental health problems increase the demand for care? Or, do patients disclose their mental health problems more easily when the GP takes more time for them? And secondly, is it a GP's pattern of communication that evokes patients' disclosure of mental health problems? Or, do GPs adapt their communication when they notice psychological aspects in their patients' complaints? Apparently, the answer to these questions is that both perspectives are partly right. In studying GP-patient interaction it is plausible to think that both GPs and patients influence each other in an iterative and responsive process[11;12]. Studying just one single relationship would ignore these responsive reactions during a doctor-patient contact. In this study the influences of both are considered.

A second limitation has to do with our measures of GPs' psychological evaluations. It is not clear if more psychological assessments are always better, because we did not compare GPs' assessments with any objective 'golden standard'. In Goldberg's & Huxley's terms, the fact that a GP has a high bias towards mental health problems, or greater tendency towards psychological assessments, does not necessarily correspond with greater accuracy, seen as the ability to make psychological assessments which are congruent with the patient's level of symptoms, as reported from standardised psychiatric or psychological interviews[13]. On the other hand, our assumption is that a GP's awareness of patients' mental health problems is always relevant,

because it is an important step in finding adequate care for the patient. Furthermore, we corrected as far as possible for characteristics of the patient population in order to exclude the influence of differences in the practice population.

Another limitation is that the context of general practice is not included in this study, as, for example, the existence of mental health facilities and referral possibilities in the neighbourhood. According to GPs themselves, a lack of facilities can be a barrier for their detection and involvement in patients' mental health problems[14;15]. It is therefore plausible to think that more mental health facilities are associated with more detection and GP involvement in mental health problems, because there are more possibilities for the GP to receive support. But there is also evidence that the opposite is true and more mental health facilities are associated with primary care providers who are less involved in mental health care[16]. These processes were not considered in this thesis.

Finally, in this study workload was categorised in objective versus subjective workload, and workload on a micro level, versus overall workload. Not all types of workload were represented completely and extensively. For example, we did not ask GPs if they felt stressed, but used more indirect measures such as burnout, which may be a consequence of chronic feelings of stress.

Theoretical reflections

Two findings in this study are unexpected: the finding that no relationships are found between GPs' mental health assessments and their overall workload; and that GPs with a high overall subjective workload show more communication that may encourage patient disclosure of mental health problems. These remarkable findings are discussed in the light of theory and earlier findings.

There are some explanations for the finding that GPs who pay more attention to patients' psychological problems, do not have a higher workload compared to other GPs. According to equity theory, people who experience an imbalance between their job demands and their rewards, are strongly motivated to restore this imbalance[17;18]. There are three possible solutions that may prevent or restore any imbalance: Changing the job demands, adjusting the expectations about the job, or increasing the outcomes. From this perspective,

a first explanation is that GPs possibly compensate their extra investments of time and energy, due to patients' mental health problems, in other aspects of the job. In this manner their total objective workload will not increase, and they will not experience feelings of imbalance and an increased subjective workload. A self-selection process of patients can play a part in this. Although most Dutch GPs have fixed patient lists, patients in group practices may self-select a GP dependent on their health problems. Maybe some GPs see more patients with mental health problems, while other GPs in the same practice are more often involved in other health problems, resulting in a similar workload for these GPs.

Another explanation from equity theory is that GPs who pay more attention to psychological problems, who have a broader perception of their role with respect to mental health care, are probably the GPs who feel comfortable and competent with respect to mental health problems. These GPs make more psychological assessments, but possibly without evaluating their involvement in mental health problems as demanding. In that case their subjective workload will not increase, and, probably because of their competence, their involvement in patients' mental health problems will take less time and energy, compared to other GPs.

A final explanation is that patients with mental health problems may be just as demanding and time consuming for a GP irrespective of whether the GP designates their problems as psychological/social or as somatic. Of all patients with mental health problems, the GP will on average diagnose around half of these patients as having mental health problems[19-21], and the other half will remain unaddressed. It is possible that psychological/social diagnoses versus somatic diagnoses, presumably with a psychological background, in patients with mental health problems, will result in a similar overall workload for GPs.
This idea is supported by our findings in chapter 3, that consultations concerning psychological problems, as well as somatic problems with a psychological background, both induce a higher workload compared to completely somatic consultations. It fits also with the finding from earlier research that patients with somatic problems, where psychological factors play a part, visit their GP very frequently, in the same way as patients with purely psychological problems[22]. From this point of view, diagnosing and discussing patients' mental health problems asks for extra time at that moment, but possibly prevents excessive consulting in the future, due to several somatic

problems, and will therefore not result in a higher workload overall. The possible long-term effect of GPs' mental health assessments is illustrated by just one trial: Roter (1995) demonstrated that patients with mental distress, who are recognised by their GP, visit their GP more often for a short period of time, but in the long run do not visit their GP more often[23].

The finding that GPs who already have a high workload do not make less mental health assessments, compared to GPs with a lower workload, contradicts GPs' and patients' claims that lack of time and workload are important barriers for a GP's engagement in their patients' mental health problems[14;24-26]. Our results show that a higher overall workload was not found to be a barrier in the second filter of Goldberg and Huxley's model in which a patient with mental health problems is recognised by the GP as having mental health problems. Obviously, GPs have other ways to deal with a high workload than limiting their involvement in patients' mental health problems. The presence and severity of patients' problems are more important reasons for a GP to assess patients' problems as psychological, irrespective of whether their workload is high or not.

A second surprising finding is that GPs' increased levels of exhaustion and depersonalisation are associated with more discussion of psychological or social issues in the consultations, and are therefore, unexpectedly, favourable for patients with mental health problems. The expectation was that GPs with negative feelings of subjective workload would try to gain time and energy by decreasing their involvement in patients' mental health problems and showing less communication that may encourage the patient to disclose their mental health problems, like discussion and questioning about psychological or social problems[27-30], and showing empathy[28;29], eye contact[30-32] or patient-centeredness[29;33].
Furthermore, we found that consultations with GPs who feel exhausted take longer and contain more communication in total, in the same way as consultations with GPs who are dissatisfied with the available time. Longer consultations are also more favourable for the patient with mental health problems.
Intuitively it seems that GPs' feelings of exhaustion, depersonalisation, and dissatisfaction with the available time are caused by their communication, instead of the opposite relationship that we assumed. GPs with high levels of exhaustion or depersonalisation, and GPs who are dissatisfied with the

available time, are the GPs who have the most intensive patient contacts resulting in longer consultations and more overall discussion. It is known that people who are most at risk from burnout are impassioned people who are working hard[34]. Probably GPs with high levels of exhaustion or depersonalisation and GPs who are dissatisfied with the available time, are engaged, hard-working GPs who invest a lot in their patient contacts but, as a result, risk burnout.

Implications for practice

Patients' mental health problems and somatic complaints are often entangled; a clear distinction between body and mind does not exist. Although it may demand more time and energy, the GP, as a generalist, is the person assigned to integrate patients' psychological, social and somatic problems, and to detect and diagnose patients' problems. This position is even stronger in countries where the GP has a gatekeeper function in relation to other health care providers and where GPs have fixed patient lists.

But there are several ways in which the GP can be supported in fulfilling their mental health role. Firstly GPs' job demands may decrease when they are supported by other mental health services within general practice, in primary care, and in secondary care. These mental health resources can reduce GPs' workload by offering the possibility of consultation and referral and taking on some of the GPs' mental health tasks. A promising development in the Netherlands is the employment of new mental health professionals within general practice. In the framework of a national health policy programme that is directed towards reinforcing primary mental health care[35], psychiatric nurses have been deployed in general practice since 2001 in order to substitute and complement GPs' mental health tasks. The large increase in psychiatric nurses in general practice over the years indicates that their contribution is useful for GPs, although it is not known if it reduces GPs' workload. In the future this development will continue with the deployment of a new primary care professional, a 'nurse practitioner mental health care', in general practice. Mental health care tasks for this nurse practitioner are: clarifying patients' mental health problems, giving advice to both patient and GP, and taking care of contacts with the mental health network[36]. The employment of a nurse practitioner for mental health problems may possibly reduce GPs' workload with respect to mental health problems. Furthermore, patients may benefit from the extra time and attention offered for their mental health problems by a practice nurse in an easily accessible primary care setting.

Nevertheless, although GPs may delegate tasks to a psychiatric nurse or to the mental health care nurse practitioner, GPs still have to detect and diagnose patients' mental health problems, monitor the overall picture of patients' complaints, and deal with the somatic problems of patients with mental health problems.

Another possibility for supporting the GP is found in GPs' vocational training and other learning opportunities during their career. Training should focus not only on psychosocial consulting skills itself, but especially on the limited time that is available for implementing those skills. Furthermore, we recommend special attention to problems in which patients' somatic and psychological complaints are entangled, as, for example, in medically unexplained symptoms, as these complex problems demand extra time and energy from the GP.
In general, GPs may benefit from an attitude of 'detached concern', by showing affective behaviour toward their patients, accompanied by some professional distance[37]. This attitude might decrease the risk of burn out.

GPs may also be supported in their mental health tasks by offering financial support for the extra time they spend on their patients' mental health problems. These extra rewards may compensate for their extra investment and will reduce GPs' negative feelings about these extra demands. The new remuneration system for GPs in the Netherlands contains a possibility of claiming twice for a consultation, when it lasts longer than 20 minutes. This possibility can be used to compensate for the extra time spent in mental health consultations. Another possibility is to develop a separate rate for mental health consultations, the 'psychosocial consultation', which fairly reflects GPs' efforts, and confirms that mental health care tasks belong to the GP's job. When GPs enjoy direct financial support in fulfilling extra mental health tasks, then this might contribute to the development of more mental health care in primary care and fewer referrals to secondary mental health care. This indeed conforms to the directions of Dutch health care policy. In an international context, it is demonstrated that self-employed GPs have a broader perception of their role as first contacted health professional for patients with mental health problems compared to salaried GPs[38]. Possibly financial rewards may broaden GPs' perception of their role with respect to mental health care and increase the chances of early detection of patients' mental health problems.

Finally, the patient can facilitate the process of detecting and diagnosing mental health problems by discussing their mental health problems directly with their GP. It is known that patients with mental health problems often present their problems somatically, or do not disclose their mental health problems at all[13;39-41]. This hinders the GP's detection of mental health problems. From the perspective of the GP, patients' direct disclosure of mental health problems may spare GPs' time and energy both during the consultation and in the future. Furthermore, general practices may encourage patients to discuss mental health problems with their GP by promoting mental health facilities in their practice to their patients.

Recommendations for future research

Firstly we recommend developing a clear international definition of workload. This would make it easier to compare different studies and monitor workload developments over time.

This study focused on some aspects of GPs' mental health care including their psychological evaluations and aspects of their communication that might stimulate the patient to disclose their mental health problems. It is relevant to investigate in future research to what extent a GP's workload is also related to a GP's management and treatment of patients' mental health problems as, for example, their prescription or referral rates.

Furthermore, we recommend to investigate in future research if a GP's workload has consequences for the quality of mental health evaluations. Therefore golden standard assessments of mental health problems may be used in which GPs' assessments are compared with reports from psychiatric or psychological interviews. This can also give insight into the cause and effect of the relationships studied. Other measures of quality also gain relevance as other aspects of GPs' mental health care, such as their treatment, are included in future research. For example, patient satisfaction with the GP's mental health care can be an indicator for the quality of care. GPs' mental health care can then also be compared with professional guidelines.

This discussion raised the idea that diagnosing mental health problems may prevent excessive future consultations due to other, possibly somatic, problems. To figure out how these mechanisms work, longitudinal research is needed to compare if there is a difference in the demand for care between

patients who are recognised as having mental health problems by the GP, versus patients whose mental health problems go unrecognised.
Another mechanism that needs further clarification is how GPs compensate for the extra time spent on patients' mental health problems. They may spend less time on other activities, but we don not know which activities.

Finally, a relevant addition to future research is to investigate how GPs can be supported in fulfilling their mental health tasks. It would be useful to study to what extent the context of mental health services has an impact on GPs' workload. This could include looking at the deployment of new mental health professions in primary care and exploring the optimal conditions. Additionally, we recommend monitoring the development of the new health care system in the Netherlands and to investigate, specifically, the impact of the possibility of claiming twice for mental health consultations. These changes in the organisation of general practice may be favourable to mental health care in primary care, but it is important to confirm this by findings from scientific research.

References

1. Westert GP, Schellevis FG, Bakker DH de, Groenewegen PP, Bensing JM, Zee J van der (2005). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health, 15(1), 59-65.
2. Westert G, Jabaaij L, Schellevis F (2006). Morbidity, performance, and quality in primary care. Oxford/Seattle: Radcliffe Publishing.
3. Linden MW van der, Westert GP, Bakker DH de, Schellevis FG (2004). Klachten en aandoeningen in de bevolking en de huisartspraktijk (Complaints and illnesses in the population and in general practice). Utrecht: NIVEL.
4. Roter D, Larson S (2002). The Roter Interaction Analysis System (RIAS): utility and flexibility for analysis of medical interactions. Patient Educ Couns, 46, 243-51.
5. Ong LML, Visser MRM, Kruyver IPM, Bensing JM, Brink-Muinen A van den, Stouthard JML et al. (1998). The Roter Interaction Analysis System (RIAS) in oncological consultations: psychometric properties. Psycho-Oncology, 7, 387-401.
6. Roter DL (1991). The Roter Method of Interaction Process Analysis (RIAS Manual). Baltimore: The Johns Hopkins University.
7. Coleman T (2000). Using video-recorded consultations for research in primary care: advantages and limitations. Fam Pract, 17, 422-7
8. Schaufeli W, Dierendonck D van (2000). UBOS (Utrechtse Burnout Schaal). Handleiding. (Utrecht Burnout Scale. Manual). Lisse: Swets & Zeitlinger.
9. Grol R (1983). Preventie van somatische fixatie en de attitude van de huisarts (Prevention of somatic fixation and the attitude of the general practitioner). Nijmegen: Nijmeegs Universitair Huisartsen Instituut.
10. McCranie E, Hornsby J, Calvert J (1982). Practice and career satisfaction among residency trained family physicians; a national survey. J Fam Pract, 14(6), 1107-14.
11 Suchman AL (2006). A new theoretical foundation for relationship-centered care. Complex responsive processes of relating. J Gen Intern Med, 21 Suppl 1, S40-S44.
12. Bensing J, Verheul W, van Dulmen A (2008). Patient anxiety in the medical encounter: a study of verbal and nonverbal communication in General Practice. Health Educ, in press.
13. Goldberg D, Huxley P (1980). Mental illness in the community. The Pathway to Psychiatric Care. London/New York: Tavistock Publications.
14. Telford R, Hutchinson A, Jones R, Rix S, Howe A (2002). Obstacles to effective treatment of depression: a general practice perspective. Fam Pract, 19, 45-52.
15. Dew K, Dowell A, McLeod D, Collings S, Bushnell J (2005). "This glorious twilight zone of uncertainty": mental health consultations in general practice in New Zealand. Soc Sci Med, 61, 1189-200.
16. Wissow L (2007). Empathy and efficiency. Patient Educ Couns, 67, 1-2.
17. Adams J (1965). Inequity in social exchange. In Berkowitz L. Advances in Experimental Social Psychology, 2, 267-99. New York: Academic Press.
18. Walster E, Walster G, Berscheid E (1978). Equity: Theory and Research. Boston: Allyn & Bacon.
19. Howe A (1996). Detecting psychological distress: can general practitioners improve their own performance? Br J Gen Pract, 46(408), 407-10.
20. Ormel J, Koeter M, Brink W van den, Willige G van de (1991). Recognition, management, and course of anxiety and depression in general practice. Arch Gen Psychiatry, 48, 700-6.

21. Stirling A, Wilson P, McConnachie A (2001). Deprivation, psychological distress, and consultation length in general practice. Br J Gen Pract, 51(467), 456-60.
22. Verhaak PFM, Tijhuis MA (1994). The somatizing patient in general practice. Int J Psychiatry Med, 24(2), 157-77.
23. Roter DL, Hall JA, Kern DE, Randol Barker L, Cole KA, Roca RP (1995). Improving Physicians' Interviewing Skills and Reducing Patients' Emotional Distress. A randomized Clinical Trial. Arch Intern Med, 155, 1877-84.
24. Bushnell J, McLeod D, Dowell A, Salmond C, Ramage S, Collings S et al. (2005). General practitioners' perceptions of barriers to their provision of mental healthcare: a report on Mental Health and General Practice Investigation (MaGPIe). N Z Med J, 1118(1222).
25. Howe A (1996). "I know what to do, but it's not possible to do it"--general practitioners' perceptions of their ability to detect psychological distress. Fam Pract, 13, 127-32.
26. Oöpik P, Aluoja A, Kalda R, Maaroos H (2006). Family doctors' problems and motivating factors in management of depression. BMC Fam Pract, 7, 64.
27. Del Piccolo L, Saltini A, Zimmermann C, Dunn G (2000). Differences in verbal behaviours of patients with and without emotional distress during primary care consultations. Psychol Med, 30, 629-43.
28. Goldberg DP, Jenkins L, Millar T, Faragher EB (1993). The ability of trainee general practitioners to identify psychological distress among their patients. Psychol Med, 23, 185-93.
29. Pasch M van der, Verhaak PFM (1998). Communication in general practice: recognition and treatment of mental illness. Patient Educ Couns, 33, 97-112.
30. Verhaak P, Bensing J, Brink-Muinen A van den (2007). GP mental health care in 10 European countries: patients' demands and GPs' responses. Eur J Psychiatry, 21, 7-16.
31. Bensing JM, Kerssens JJ, Pasch M van der (1995). Patient directed gaze as a tool for discovering and handling psychosocial problems in general practice. J Nonverbal Behav, 19, 223-42.
32. Giron M, Manjon-Arce P, Puerto-Barber J, Sanchez-Garcia E, Gomez-Beneyto M (1998). Clinical interview skills and identification of emotional disorders in primary care. Am J Psychiatry, 155, 530-5.
33. Millar T, Goldberg DP (1991). Link between the ability to detect and manage emotional disorders: a study of general practitioner trainees. Br J Gen Pract, 41, 357-9.
34. Hoogduin C, Schaufeli W, Schaap C, Bakker A (2001). Behandelingsstrategieën bij burnout (Burnout intervention strategies). Houten/Diegem: Bohn Stafleu van Loghum.
35. Dutch Ministry of Health, Welfare and Sport (1998). Beleidsvisie Geestelijke Gezondheids-zorg 1999 (Policy view Mental health care 1999). Den Haag: Elkerhout.
36. Have J ten (2007). Praktijkondersteuning GGZ in de eerstelijn (Nurse practitioners for mental health care in primary care). Utrecht: LVE.
37. Rogers C (1951). Client-centred therapy. Boston: Houghton Mifflin.
38. Boerma WGW, Verhaak PFM (1999). The general practitioner as the first contacted health professional by patients with psychosocial problems: a European study. Psychol Med, 29(3), 689-96.
39. Cape J (2001). How general practice patients with emotional problems presenting with somatic or psychological symptoms explain their improvement. Br J Gen Pract, 51, 724-9.
40. Gulbrandsen P, Fugelli P, Hjortdahl P (1998). Psychosocial problems presented by patients with somatic reasons for encounter: tip of the iceberg? Fam Pract, 15, 1-8.
41. Robinson JW, Roter DL (1999). Psychosocial problem disclosure by primary care patients. Soc Sci Med, 48, 1353-62.

References

References

Adams J (1965). Inequity in social exchange. In Berkowitz L. Advances in Experimental Social Psychology, 2, 267-99. New York: Academic Press.

Alonso J, Angermeyer M, Bernert S, Bruffaerts R, Brugha T, Bryson H et al. (2004). Disability and quality of life impact of mental disorders in Europe: results form the European Study of Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatr Scand Suppl, 420, 38-46.

Alonso J, Angermeyer M, Bernert S, Bruffaerts R, Brugha T, Bryson H et al. (2004). Use of mental health services in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatr Scand Suppl, 47-54.

Anderson R, Camacho F, Balkrishnan R (2007). Willing to wait?: The influence of patient wait time on satisfaction with primary care. BMC Health Serv Res, 7:31.

Andersson SO, Ferry S, Mattson B (1993). Factors associated with consultation length and characteristics of short and long consultations. Scand J Prim Health Care, 11, 61-7.

Appleton KF, House AF, Dowell A (1998). A survey of job satisfaction, sources of stress and psychological symptoms among general practitioners in Leeds. Br J Gen Pract, 48, 1059-63.

Armstrong D, Earnshaw G (2004). What constructs do GPs use when diagnosing psychological problems? Br J Gen Pract, 54, 580-83.

Association of American Medical Colleges (2005). The Physician Workforce: Position Statement. USA: Association of American Medical Colleges.

Australian Medical Workforce Advisory Commitee (2005). The general practice Workforce in Australia: Supply and requirements to 2013. Sydney: New South Wales Health Department.

Bailie R, Sibthorpe B, Douglas B, Broom D, Attewell R, McGuiness C (1998). Mixed feelings: satisfaction and disillusionment among Australian GPs. Fam Pract, 15, 58-66.

Bakker A, Schaufeli W, Sixma H, Bosveld W, Dierendonck D van (2000). Patients demands, lack of reciprocity and burnout: a five year longitudinal study. J Organiz Behavior, 21, 425-41.

Bakker D de, Polder J, Sluijs E, Treurniet H, Hoeymans N, Hingstman L et al. (2005). Op één lijn. Toekomstverkenning eerstelijnszorg 2020 (Public health forecast for primary care in the Netherlands in 2020). Utrecht/Bilthoven: NIVEL/RIVM.

Bensing J, Verheul W, Dulmen A van (2008). Patient anxiety in the medical encounter: a study of verbal and nonverbal communication in General Practice. Health Educ, in press.

Bensing JM, Brink-Muinen A van den, Bakker DH de (1993). Gender differences in practice style: a Dutch study of general practitioners. Med Care, 31(3), 219-29.

Bensing JM, Kerssens JJ, Pasch M van der (1995). Patient directed gaze as a tool for discovering and handling psychosocial problems in general practice. J Nonverb Behav, 19, 223-42.

Berg M van den, Kolthof E, Bakker D de, Zee J van der (2004). De werkbelasting van huisartsen (The workload of general practitioners). Utrecht: NIVEL.

Bijl D, Marwijk HWJ van, Haan M de, Tilburg W van, Beekman AJTF (2004). Effectiveness of disease management programmes for recognition, diagnosis and treatment of depression in primary care. A review. Eur J Gen Pract, 10, 6-12.

Bijl R, Ravelli A (2000). Psychiatric morbidity, service use and need for care in the general population: results of the Netherlands Mental Health Survey and Incidence Study. Am J Public Health, 602-7.

Bijl RV, Ravelli A (2000). Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). Psychol Med, 30, 657-68.

Bijl RV, Ravelli A, Zessen G van (1998). Prevalence of psychiatric disorder in the general population: results of The Netherlands Mental Health Survey and Incidence Study (NEMESIS). Soc Psychiatry Psychiatr Epidemiol, 33(12), 587-95.

Boerma WGW, Verhaak PFM (1999). The general practitioner as the first contacted health professional by patients with psychosocial problems: a European study. Psychol Med, 29(3), 689-96.

Boerma WGW, Zee J van der, Fleming D (1997). Service Profiles of general practitioners in Europe. B J Gen Pract, 47, 481-6.

Brink-Muinen A van den, Dulmen AM van, Schellevis FG, Bensing JM (2004). Tweede Nationale Studie naar ziekten en verrichtingen in de huisartspraktijk. Oog voor communicatie: huisarts-patiënt communicatie in Nederland (Second Dutch National Survey in General Practice. Focus on communication: doctor-patient communication in the Netherlands). Utrecht: NIVEL.

Brink-Muinen A, Dulmen AM van, Messerli-Rohrbach V, Bensing J (2002). Do gender-dyads have different communication patterns? A comparative study in Western-European general practices. Patient Educ Couns, 48, 253-64.

British Medical Association (2006). Health Committee Inquiry into Workforce Planning, British Medical Association Memorandum of Evidence. London: British Medical Association.

Bruijnzeels MA, Hoop T de, Swart W, Voorham AJJ (1999). Etnische herkomst van patiënten en werkbelasting van de huisarts (Ethnic background of patients and the burden of GPs). Huisarts Wet, 46, 254-8.

Burdi MD, Baker LC (1999). Physicians' perceptions of autonomy and satisfaction in California. Health Aff (Millwood), 18, 134-45.

Bushnell J, McLeod D, Dowell A, Salmond C, Ramage S, Collings S et al. (2006). The treatment of common mental health problems in general practice. Fam Pract, 23, 53-9.

Bushnell J, McLeod D, Dowell A, Salmond C, Ramage S, Collings S et al. (2005). General practitioners' perceptions of barriers to their provision of mental healthcare: a report on Mental Health and General Practice Investigation (MaGPIe). N Z Med J, 1118(1222).

Bushnell J, McLeod D, Dowell A, Salmond C, Ramage S, Collings S et al. (2005). Do patients want to disclose psychological problems to GPs? Fam Pract, 22(6), 631-7.

Bushnell J, The MaGPIe Research Group (2004). Frequency of consultations and general practitioner recognition of psychological symptoms. Br J Gen Pract, 54, 838-42.

Buunk BP, Schaufeli WB (1999). Reciprocity in interpersonal relationships: An evolutionary perspective on its importance for health and well-being. In Stroebe W, Hewstone M. Eur rev soc psychol (vol 10). Chichester: John Wiley.

Calnan M, Wainwright D, Forsythe M, Wall B, Almond S (2001). Mental health and stress in the workplace: the case of general practice in the UK. Soc Sci Med, 52, 499-507.

Campbell SM, Roland MO (1996). Why do people consult the doctor? Fam Pract, 13, 75-83.

Capaciteitsorgaan (2004). Ontwikkeling capaciteit huisartsenzorg 2000-2004-2012 (Development of capacity in general practice 2000-2004-2012). Utrecht: Capaciteitsorgaan.

Cape J (2001). How general practice patients with emotional problems presenting with somatic or psychological symptoms explain their improvement. Br J Gen Pract, 51, 724-9.

Cape J, McCulloch Y (1999). Patients' reasons for not presenting emotional problems in general practice consultations. Br J Gen Pract, 49, 875-9.

Cape, J (2002). Consultation length, patient-estimated consultation length, and satisfaction with the consultation. Br J Gen Pract, 52, 1004-6.

Cardol M, Dijk L van, Jong JD de, Bakker DH de, Westert GP (2004). Huisartsenzorg: Wat doet de poortwachter? (GP care: what does the gatekeeper do?) Utrecht: NIVEL.

Carr-Hill R, Jenkins-Clarke S, Dixon P, Pringle M (1998). Do minutes count? Consultation lengths in general practice. J Health Serv Res Policy, 3, 207-13.

Cochrane WG (1997). Sampling Techniques. New York: Wiley.

Coleman T (2000). Using video-recorded consultations for research in primary care: advantages and limitations. Fam Pract, 17, 422-7.

Del Piccolo L, Saltini A, Zimmermann C, Dunn G (2000). Differences in verbal behaviours of patients with and without emotional distress during primary care consultations. Psychol Med, 30, 629-43.

Demerouti E, Bakker AB, Nachreiner F, Schaufeli W (2001). The Job Demands-Resources Model of Burnout. J Appl Psychol, 86, 499-512.

Deveugele M, Derese A, Brink-Muinen A van den, Bensing JM, Maeseneer J de (2002). Consultation length in general practice: cross sectional study in six European countries. BMJ, 325, 472-3.

Deveugele M, Derese A, Maeseneer J de (2002). Is GP-patient communication related to their perceptions of illness severity, coping and social support? Soc Sci Med, 55, 1245-53.

DeVoe J, Fryer Jr GE, Hargraves JL, Phillips RL, Green LA (2002). Does career dissatisfaction affect the ability of family physicians to deliver high-quality patient care? J Fam Pract, 51, 223-8.

Dew K, Dowell A, McLeod D, Collings S, Bushnell J (2005). "This glorious twilight zone of uncertainty": mental health consultations in general practice in New Zealand. Soc Sci Med, 61, 1189-200.

Dierendonck D van, Schaufeli W, Sixma H (1994). Burnout among general practitioners: a perspective from equity theory. J Soc Clin Psychol, 13(1), 86-100.

Dowell AC, Coster G, Maffey C (2002). Morale in general practice: crisis and solutions. N Z Med J, 115(1158), U102.

Dowell AC, Hamilton S, McLeod DK (2000). Job satisfaction, psychological morbidity and job stress among New Zealand general practitioners. N Z Med J, 113, 269-72.

Dugdale DC, Epstein R, Pantilat SZ (1999). Time and the patient-physician relationship. J Gen Intern Med, 14 Suppl 1, S34-S40.

Dutch Ministry of Health, Welfare and Sport (1998). Beleidsvisie Geestelijke Gezondheidszorg 1999 (Policy view Mental health care 1999). Den Haag: Elkerhout.

Edwards N, Kornacki M, Silversin J (2002). Unhappy doctors: what are the causes and what can be done? BMJ, 324, 835-8.

Freeman GK, Horder JP, Howie JG, Hungin AP, Hill AP, Shah NC et al. (2002). Evolving general practice consultation in Britain: issues of length and context. BMJ, 324, 880-2.

Gilbody SM, House AO, Sheldon TA (2001). Routinely administered questionnaires for depression and anxiety: a systematic review. BMJ, 322, 406-9.

Giron M, Manjon-Arce P, Puerto-Barber J, Sanchez-Garcia E, Gomez-Beneyto M (1998). Clinical interview skills and identification of emotional disorders in primary care. Am J Psychiatry, 155, 530-5.

Goldberg D, Huxley P (1980). Mental illness in the community. The Pathway to Psychiatric Care. London/New York: Tavistock Publications.

Goldberg D, Huxley P (1992). Common mental disorders. A Bio-social Model. London: Routledge.

Goldberg DP, Jenkins L, Millar T, Faragher EB (1993). The ability of trainee general practitioners to identify psychological distress among their patients. Psychol Med, 23, 185-93.

Goldstein H (1995). Multilevel statistical models. New York: Halsted.

Groenewegen PP, Hutten JBF (1995). The influence of supply-related characteristics on general practitioners' workload. Soc Sci Med, 40(3), 349-58.

Groenewegen PP, Hutten JBF, Velden K van der (1992). List size, composition of practice and general practitioners' workload in The Netherlands. Soc Sci Med, 34(3), 263-70.

Grol R (1983). Preventie van somatische fixatie en de attitude van de huisarts (Prevention of somatic fixation and the attitude of the general practitioner). Nijmegen: Nijmeegs Universitair Huisartsen Instituut.

Grol R, Mokkink H, Smits A, Eijk J van, Beek M, Mesker P et al. (1985). Work satisfaction of general practitioners and the quality of patient care. Fam Pract, 2, 128-35.

Gulbrandsen P, Fugelli P, Hjortdahl P (1998). Psychosocial problems presented by patients with somatic reasons for encounter: tip of the iceberg? Fam Pract, 15, 1-8.

Gulbrandsen P, Fugelli P, Sandvik L, Hjortdahl P (1998). Influence of social problems on management in general practice: multipractice questionnaire survey. BMJ, 317, 28-32.

Gulbrandsen P, Hjortdahl P, Fugelli P (1997). General practitioners' knowledge of their patients' psychosocial problems: multipractice questionnaire survey. BMJ, 314, 1014-8.

Hansen J, Nuijen T, Hingstman L (2008). Monitor multidisciplinaire samenwerkingsverbanden in de eerste lijn. Utrecht: NIVEL.

Hansen MS, Fink P, Frydenberg M, Oxhoj M, Sondergaard L, Eriksen M (2001). Mental disorder in medical inpatients and the association to severity of illness, self rated physical disability and health perception. Psychosomatics, 42, 41-7.

Have J ten (2007). Praktijkondersteuning GGZ in de eerstelijn (Nurse practitioners for mental health care in primary care). Utrecht: LVE.

Hoogduin C, Schaufeli W, Schaap C, Bakker A (2001). Behandelingsstrategieën bij burnout (Burnout intervention strategies). Houten/Diegem: Bohn Stafleu van Loghum.

Hopton JL, Howie J, Porter AM (1993). The need for another look at the patient in general practice satisfaction surveys. Fam Pract, 10, 82-7.

Howe A (1996). "I know what to do, but it's not possible to do it"--general practitioners' perceptions of their ability to detect psychological distress. Fam Pract, 13, 127-32.

Howe A (1996). Detecting psychological distress: can general practitioners improve their own performance? Br J Gen Pract, 46(408), 407-10.

Howie J (1998). Comment: do minutes count for quality in the general practice consultation? J Health Serv Res Policy, 3(4), 213-4.

Howie J, Heany D, Maxwell M, Walker J, Freeman G, Rai H (1999). Quality of general practice consultations: cross sectional survey. BMJ, 319, 738-43.

Howie J, Porter A, Heaney D, Hopton J (1991). Long to short consultation ratio: a proxy measure of quality of care for general practice. Br J Gen Pract, 41, 48-54.

Howie JG, Hopton JL, Heaney DJ, Porter AM (1992). Attitudes to medical care, the organization of work, and stress among general practitioners. Br J Gen Pract, 42(358), 181-5.

Huby G, Gerry M, McKinstry B, Porter M, Shaw J, Wrate R (2002). Morale among general practitioners: qualitative study exploring relations between partnership arrangements, personal style, and workload. BMJ, 325(7356), 140-4.

Hutten JBF (1998). Workload and provision of care in general practice. Utrecht: NIVEL.

Hutton C, Gunn J (2007). Do longer consultations improve the management of psychological problems in general practice? A systematic literature review. BMC Health Serv Res, 7:31.

Kaplan MS, Adamek ME, Calderon A (1999). Managing depressed and suicidal geriatric patients: Differences among primary care physicians. Gerontologist, 39, 417-25.

Katon W, Sullivan M (1990). Depression and chronic medical illness. Clin Psychiatry, 51, 3-11.

Kerr M, Blizard R, Mann A (1995). General practitioners and psychiatrists: comparison of attitudes to depression using the depression attitude questionnaire. Br J Gen Pract, 45, 89-92.

Kersnik J, Svab I, Vegnuti M (2001). Frequent attenders in general practice: quality of life, patient satisfaction, use of medical services and GP characteristics. Scand J Prim Health Care, 19, 174-7.

Kessler R, Berglund P, Bruce M, Koch J, Laska E, Leaf P et al. (2001). The prevalence and correlates of untreated serious mental illness. Health Serv Res, 36, 987-1007.

Kirwan MF, Armstrong D (1995). Investigation of burnout in a sample of British general practitioners. Br J Gen Pract, 45, 259-60.

Koeter M, Ormel J (1991). General Health Questionnaire. Nederlandse Bewerking (Dutch version). Lisse: Swets & Zeitlinger.

Kolthof E, Zantinge E, Berg M van den, Bakker D de, Zee J van der (2004). Psychosociale zorg in de huisartspraktijk en werkbelasting (Psychosocial care in general practice and workload). In Berg M van den, Kolthof E, Bakker D de, Zee J van der. De werkbelasting van huisartsen (The workload of general practitioners). Utrecht: NIVEL.

Lamberts H, Wood M (1987). International Classification of Primary Care. Oxford: Oxford University Press.

Landrigan CP, Rothschild JM, Cronin JW, Kaushal R, Burdick E, Katz JT et al. (2004). Effect of reducing interns' work hours on serious medical errors in intensive care units. N Engl J Med, 351, 1838-48.

Linden MW van der, Westert GP, Bakker DH de, Schellevis FG (2004). Klachten en aandoeningen in de bevolking en de huisartspraktijk (Complaints and illnesses in the population and in general practice). Utrecht: NIVEL.

Marinus AMF (1993). Inter-doktervariatie in de huisartspraktijk (Inter-doctor variation in general practice). Amsterdam: University of Amsterdam.

Martini S, Arfken CL, Balon R (2006). Comparison of burnout among medical residents before and after the implementation of work hours limits. Acad Psychiatry, 30, 352-5.

Maslach C, Jackson S, Leiter M (1996). Maslach Burnout Inventory Manual. Palo Alto, California: Consulting Psychologists Press.

McCranie E, Hornsby J, Calvert J (1982). Practice and career satisfaction among residency trained family physicians; a national survey. J Fam Pract, 14(6), 1107-14.

McManus IC, Winder BC, Gordon D (2002). The causal links between stress and burnout in a longitudinal study of UK doctors. Lancet, 359, 2089-90.

Mechanic M (2001). How should hamsters run? Some observations about sufficient patient time in primary care. BMJ, 323, 266-8.

Medical Council of Canada (2006). Medical Workforce Policy-making in Canada: 1993-2003. Canada's Medical Workforce Policy Makers' Current Challenges. Two Responses to the Enrollment Cutbacks of the 1990's. Montreal: Medical Council of Canada.

Meer K van der (1994). Patiënten met psychische en sociale problemen in de huisartspraktijk (Patients with psychological and social problems in general practice). Lelystad: Meditekst.

Meijer S, Smit F, Schoemaker C, Cuijpers P (2006). Gezond verstand. Evidence-based preventie van psychische stoornissen (Common sense. Evidence-based prevention of mental disorders). Bilthoven: RIVM.

Meijer SA, Zantinge EM, Verhaak PFM, Scholten M, Pols J, Valenkamp MW et al. (2003). Evaluatie versterking eerstelijns GGZ. Tweede interim-rapportage. (Evaluation of the reinforcement of primary mental health care. Second interim-report). Utrecht: NIVEL.

Millar T, Goldberg DP (1991). Link between the ability to detect and manage emotional disorders: a study of general practitioner trainees. Br J Gen Pract, 41, 357-9.

Morrison I, Smith R (2000). Hamster health care. BMJ, 321(7276), 1541-42.

Narrow W, Regier D, Norquist G, Rae D, Kennedy C, Arons B (2000). Mental health service use by Americans with severe mental illnesses. Soc Psychiatry Psychiatr Epidemiol, 35, 147-55.

Neal RD, Heywood PL, Morley S, Clayden AD, Dowell AC (1998). Frequency of patients' consulting in general practice and workload generated by frequent attenders: comparisons between practices. Br J Gen Pract, 48, 895-8.

Ong LML, Visser MRM, Kruyver IPM, Bensing JM, Brink-Muinen A van den, Stouthard JML et al. (1998). The Roter Interaction Analysis System (RIAS) in oncological consultations: psychometric properties. Psycho-Oncology, 7, 387-401.

Oöpik P, Aluoja A, Kalda R, Maaroos H (2006). Family doctors' problems and motivating factors in management of depression. BMC Fam Pract 7:64.

Ormel J, Koeter M, Brink W van den, Willige G van de (1991). Recognition, management, and course of anxiety and depression in general practice. Arch Gen Psychiatry, 48, 700-6.

Ormel J, Brink W den, Koeter MW, Giel R, Meer K van der, Willige G van de et al. (1990). Recognition, management and outcome of psychological disorders in primary care: a naturalistic follow-up study. Psychol Med, 20(4), 909-23.

Ormel J, Von Korff M, Ustun T, Pini S, Korten A, Oldehinkel T (1994). Common mental disorders and disability across cultures. Results from the WHO collaborative study on psychological problems in general health care. JAMA, 272, 1741-8.

Pines A (1993). Burnout: An existential perspective. In Schaufeli W, Maslach C, Marek T. Professional Burnout: Recent Developments in Theory and Research, 33-51. Washington: Taylor & Francis, 33-51.

Post D, Calkhoven JE, Krol B, Dijkstra M, Groothoff JW (2002). Groeiend ongenoegen. Een onderzoek onder huisartsen (Increasing discontent. A study among GPs). Medisch Contact, 57(2), 63-5.

Rasbash J, Woodhouse G (1995). MLN Command Reference. London: Institute of Education, University of London.

Ridsdale L, Carruthers M, Morris R, Ridsdale J (1989). Study of the effect of time availability on the consultation. J R Coll Gen Pract, 39, 488-91.

Robinson JW, Roter DL (1999). Counseling by primary care physicians of patients who disclose psychosocial problems. J Fam Pract, 48, 698-705.

Robinson JW, Roter DL (1999). Psychosocial problem disclosure by primary care patients. Soc Sci Med, 48, 1353-62.

Rogers C (1951). Client-centred therapy. Boston: Houghton Mifflin.

Roland MO, Bartholomew J, Courtenay MJ, Morris RW, Morrell DC (1986). The "five minute" consultation: effect of time constraint on verbal communication. Br Med J (Clin Res Ed), 292, 874-6.

Ross S, Moffat K, McConnachie A, Gordon J, Wilson P (1999). Sex and attitude: a randomized vignette study of the management of depression by general practitioners. Br J Gen Pract, 49(438), 17-21.

Rost K, Humphrey J, Kelleher K (1994). Physician management preferences and barriers to care for rural patients with depression. Arch Fam Med, 3, 409-14.

Roter D, Larson S (2002). The Roter interaction analysis system (RIAS): utility and flexibility for analysis of medical interactions. Patient Educ Couns, 46, 243-51.

Roter DL (1991). The Roter Method of Interaction Process Analysis (RIAS Manual). Baltimore: The Johns Hopkins University.

Roter DL, Hall JA (2004). Physician gender and patient-centred communication: a critical review of empirical research. Annu Rev Public Health, 25, 497-519.

Roter DL, Hall JA, Aoki Y (2002). Physician gender effects in medical communication: a meta-analytic review. JAMA, 288, 756-64.

Roter DL, Hall JA, Kern DE, Randol Barker L, Cole KA, Roca RP (1995). Improving Physicians' Interviewing Skills and Reducing Patients' Emotional Distress. A randomized Clinical Trial. Arch Intern Med, 155, 1877-84.

Rout UF, Rout JK (1994). Job satisfaction, mental health and job stress among general practitioners before and after the new contract-a comparative study. Fam Pract, 11(3), 300-6.

Salmon P, Dowrick CF, Ring A, Humphris GM (2004). Voiced but unheard agendas: qualitative analysis of the psychosocial cues that patients with unexplained symptoms present to general practitioners. Br J Gen Pract, 54, 171-6.

Schaufeli W, Bakker A (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. Journal Organiz Behavior, 25, 293-315.

Schaufeli W, Dierendonck D van (2000). UBOS (Utrechtse Burnout Schaal). Handleiding. (Utrecht Burnout Scale. Manual). Lisse: Swets & Zeitlinger.

Schaufeli W, Enzman D (1998). The burnout companion to study & practice. A critical analysis. Londen: Taylor & Francis.

Schellevis F, Westert G (2006). The design of the second Dutch National Survey of General Practice. In Westert G, Jabaaij L, Schellevis F. Morbidity, performance, and quality in primary care, pp 10-8. Oxford/Seattle: Radcliffe Publishing.

Schulberg HC, McClelland M, Burns BJ (1987). Depression and physical illness: the prevalence, causation and diagnosis of comorbidity. Clin Psychol Rev, 7, 145-67.

Scott A, Vale L (1998). Increased general practice workload due to a primary care led National Health Service: the need for evidence to support rhetoric. Br J Gen Pract, 48, 1085-8.

Scott A, Wordsworth S (1999). The effects of shifts in the balance of care on general practice workload. Fam Pract, 16(1), 12-7.

Searle SR, Casella G, McGullogh CE (1992). Variance components. New York: Wiley.

Shanafelt TD, Bradley KA, Wipf JE, Back AL (2002). Burnout and self-reported patient care in an internal medicine residency program. Ann Intern Med, 136, 358-67.

Sibbald B, Bojke C, Gravelle H (2003). National survey of job satisfaction and retirement intentions among general practitioners in England. BMJ, 326, 22-5.

Sibbald B, Enzer I, Cooper C, Rout U, Sutherland V (2002). GP job satisfaction in 1987, 1990 and 1998: lessons for the future? Fam Pract, 17, 364-71.

Siegrist J (1996). Adverse health effects of high effort-low reward conditions. J Occup Health Psychol, 1, 27-41.

Stirling A, Wilson P, McConnachie A (2001). Deprivation, psychological distress, and consultation length in general practice. Br J Gen Pract, 51(467), 456-60.

Sturmberg JP (2002). General practice-specific care categories: a method to examine the impact of morbidity on general practice workload. Fam Pract, 19(1), 85-92.

Suchman AL (2006). A new theoretical foundation for relationship-centered care. Complex responsive processes of relating. J Gen Intern Med, 21 Suppl 1, S40-S44.

Telford R, Hutchinson A, Jones R, Rix S, Howe A (2002). Obstacles to effective treatment of depression: a general practice perspective. Fam Pract, 19, 45-52.

Tiemens B, Ormel J (1996). The capricious relationship between recognition and outcome of mental illness in primary care. Epidemiol Psichiatr Soc, 5, 160-3.

Tiemens BG, Ormel J, Simon GE (1996). Occurrence, recognition, and outcome of psychological disorders in primary care. Am J Psychiatry, 153(5), 636-44.

Pasch M van der, Verhaak PFM (1998). Communication in general practice: recognition and treatment of mental illness. Patient Educ Couns, 33, 97-112.

Verhaak P (1993). Analysis of referrals of mental health problems by general practitioners. Br J Gen Pract, 43, 203-8.

Verhaak P, Bensing J, Brink-Muinen A van den (2007). GP mental health care in 10 European countries: patients' demands and GPs' responses. Eur J Psychiatry, 21, 7-16.

Verhaak P, Groenendijk J, Zantinge E, Vonk E, Voordouw I, Veen C van der (2006). GGZ-consultaties aan de eerstelijnszorg. Eindrapportage (Mental health consultations to primary care. Final report). Utrecht: NIVEL.

Verhaak PFM (1995). Mental Disorder in the Community and in General Practice: Doctors' Views and Patients' Demands. Avebury: Aldershot.

Verhaak PFM, Brink-Muinen A van den, Bensing JM, Gask L (2004). Demand and supply for psychological help in general practice in different European countries: access to primary mental health care in six European countries. Eur J Public Health, 14(2), 134-40.

Verhaak PFM, Hoeymans N, Garssen AA, Westert GP (2005). Mental health in the population and in general practice: 1987-2001. Br J Gen Pract, 55(519), 770-5.

Verhaak PFM, Tijhuis MA (1994). The somatizing patient in general practice. Int J Psychiatry Med, 24(2), 157-77.

Verheij R, Te Brake J, Abrahamse H, Van den Hoogen H, Braspenning J, Jabaaij L et al. (2007). Landelijk Informatienetwerk Huisartsenzorg. Feiten en cijfers over huisartsenzorg in Nederland. (Netherlands Information Network of General Practice. Facts and figures about GP care in the Netherlands). Utrecht/Nijmegen: NIVEL/WOK.

Visscher A, Laurant M, Schattenberg G, Grol R (2002). De rol van de huisarts inzake geestelijke gezondheidszorg (GP's role in mental health care). Nijmegen: Centre for quality of care research, UMC St Radboud.

Vogelaar E (2005). Voorstel van Ella Vogelaar, onafhankelijk voorzitter van het overleg tussen LHV, VWS en ZN, aan genoemde partijen voor een Beleidsagenda en bekostigingssystematiek huisartsenzorg voor 2006 en 2007 (Proposal of Ella Vogelaar, independent chairman of the consultation between LHV, VWS and ZN, to the parties mentioned, with respect to a policy agenda and finance system for general practice care for 2006 and 2007).

Walster E, Walster G, Berscheid E (1978). Equity: Theory and Research. Boston: Allyn & Bacon.

Weel C van, Köning-Zahn C, Touw-Otten FWMM, Duijn NP van, Meyboom-de Jong B (1995). COOP/WONCA Charts. A manual. Groningen: Northern Centre of Health Care Research.

Wells KB, Golding JM, Burnam MA (1988). Psychiatric disorder in a sample of the general population with and without chronic medical conditions. Am J Psychiatry, 145, 976-81.

West CP, Huschka MM, Novotny PJ, Sloan JA, Kolars JC, Habermann TM et al. (2006). Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. JAMA, 296, 1071-8.

Westert G, Jabaaij L, Schellevis F (2006). Morbidity, performance, and quality in primary care. Oxford/Seattle: Radcliffe Publishing.

Westert G, Verkleij H (2006). Zorgbalans, de prestaties van de Nederlandse gezondheidszorg in 2004 (Dutch Health Care Performance Report in 2004). Bilthoven: RIVM.

Westert GP, Schellevis FG, Bakker DH de, Groenewegen PP, Bensing JM, Zee J van der (2005). Monitoring health inequalities through General Practice: the Second Dutch National Survey of General Practice. Eur J Public Health, 15(1), 59-65.

Whalley D, Bojke C, Gravelle H, Sibbald B (2006). GP job satisfaction in view of contract reform: a national survey. Br J Gen Pract, 56, 87-92.

Whynes D, Baines D (1996). Predicting activity and workload in general practice from the demographic structure of the practice population. J Health Serv Res Policy, 1, 128-34.

Williams E, Manwell L, Konrad T, Linzer M (2007). The relationship of organizational culture, stress, satisfaction, and burnout with physician-reported error and suboptimal patient care: results from the MEMO study. Health Care Manage Rev, 32, 203-12.

Wilson A, Childs S (2002). The relationship between consultation length, process and outcomes in general practice: a systematic review. Br J Gen Pract, 52, 1012-20.

Winefield H, Murrell T, Clifford J, Farmer E (1996). The search for reliable and valid measures of patient-centredness. Psychology & Health, 11, 811-24.

Wissow L (2007). Empathy and efficiency. Patient Educ Couns, 67, 1-2.

Wohlfarth TD, Brink W van den, Ormel J, Koeter MW, Oldehinkel AJ (1993). The relationship between social dysfunctioning and psychopathology among primary care attenders. Br J Psychiatry, 163, 37-44.

Zantinge EM, Verhaak PFM, Bakker DH de, Meer K van der, Bensing JM (2007). The workload of general practitioners does not affect their awareness of patients' psychological problems. Patient Educ Couns, 67, 93-9.

Zantinge EM, Verhaak PFM, Bensing JM (2004). The workload of GPs: patients with psychological and somatic problems compared. Fam Pract, 22, 293-7.

Zantinge EM, Verhaak PFM, Kerssens JJ, Bensing JM (2005). The workload of GPs: consultations of patients with psychological or somatic problems compared. Br J Gen Pract, 55, 609-14.

Samenvatting (Summary in Dutch)

Samenvatting

Dit proefschrift gaat over de rol van tijd en werklast van huisartsen in relatie tot hun betrokkenheid bij de psychische problemen van patiënten. In dit hoofdstuk wordt het proefschrift samengevat. Eerst beschrijven we de achtergrond, doelstellingen en onderzoeksopzet (hoofdstuk 1). Vervolgens worden de onderzoekshoofdstukken samengevat (hoofdstuk 2-6). Tenslotte volgen een discussie van de resultaten en aanbevelingen voor de praktijk en toekomstig onderzoek (hoofdstuk 7).

Inleiding (hoofdstuk 1)
Huisartsen hebben een belangrijke positie in het opsporen van psychische problemen van patiënten. Dit kan klein psychisch leed of zwaardere psychiatrische problematiek betreffen, alsook psychische aspecten die een rol spelen bij somatische problemen. Huisartsen zijn voor patiënten met psychische problemen vaak de eerste contactpersonen in de gezondheidszorg. Als generalisten zijn zij de aangewezen personen om geïntegreerde zorg voor zowel somatische als psychische problemen van patiënten te bieden. Een vroegtijdige herkenning en diagnostisering van psychische problemen van patiënten is belangrijk, omdat daarmee de mogelijkheden voor verdere hulp en behandeling groter worden. Daarmee zou een verslechtering van de problemen van de patiënt voorkomen kunnen worden en het leed van de patiënt zou kunnen verminderen. Toch voelen huisartsen zich soms geremd om aandacht te besteden aan de psychische problemen van patiënten omdat deze problemen extra tijd en energie van de huisarts vragen. Huisartsen geven aan dat tijdtekort en werklast hun betrokkenheid bij de psychische problemen van patiënten in de weg kunnen staan. In dit proefschrift staat de relatie tussen de werklast van huisartsen en hun betrokkenheid bij psychische problemen centraal.

Werklast kan worden onderverdeeld in objectieve en subjectieve werklast. Objectieve werklast betreft de eisen vanuit het werk: het werk dat verricht wordt en de tijd die dat kost. Subjectieve werklast is een persoonlijke ervaring van werklast.
Volgens de evenwichtstheorie vergelijken mensen de eisen vanuit hun werk met de opbrengsten die daar tegenover staan. Als de eisen vanuit het werk te

hoog zijn en/of de beloning te laag, ervaren mensen een disbalans. Deze disbalans brengt stressvolle gevoelens met zich mee en dit kan op de lange termijn tot burnout leiden. Stress en burnout zijn aspecten van subjectieve werklast.
Een tweede indeling is het onderscheid tussen werklast op microniveau en totale werklast. De werklast op microniveau is de werklast op een specifiek moment, terwijl de totale werklast alle eisen vanuit het werk betreft (objectief), of een algeheel gevoel van werkbelasting (subjectief).

Het doel van dit proefschrift is om de relatie tussen de werklast van huisartsen en hun betrokkenheid bij de psychische problemen van patiënten vanuit twee perspectieven in kaart te brengen. Ten eerste onderzoeken we in hoofdstuk 2, 3 en 4 of de betrokkenheid van de huisarts bij de psychische problemen van patiënten samengaat met een hogere werklast en we specificeren hoe deze werklast eruit ziet. Het is bekend dat huisartsen onderling sterk verschillen in hun betrokkenheid bij psychische problemen van patiënten. We onderzoeken daarom ook of huisartsen met een bredere taakopvatting met betrekking tot psychische zorg en huisartsen die meer aandacht hebben voor psychische problemen ook een hogere objectieve en subjectieve werklast hebben. Deze informatie is relevant voor discussies over de organisatie van de huisartsen-zorg.
Ten tweede onderzoeken we in hoofdstuk 5 en 6 of een hoge werklast van invloed is op de betrokkenheid van de huisarts bij de psychische problemen van patiënten. Gegeven de veronderstelling dat de betrokkenheid van de huisarts bij de psychische problemen van patiënten extra tijd en energie vraagt, verwachten we dat dit vooral een probleem is als de werklast van de huisarts al hoog is. De verwachting is dat huisartsen met een hoge werklast minder geneigd zijn om betrokken te raken bij psychische problemen van patiënten, vergeleken bij huisartsen met een lagere werklast, om daarmee tijd en energie te besparen. We verwachten dat huisartsen met een hoge werklast hun communicatie zullen aanpassen en de patiënt minder aanmoedigen om over hun psychische problemen te praten. Psychische aspecten zullen dan een minder grote rol spelen in het consult. Dit is relevante informatie vanuit het perspectief van de kwaliteit van de huisartsenzorg. Immers, als de psychische problemen van patiënten niet benoemd worden, is dit een gemiste kans om passende zorg voor de patiënt te vinden.

Om de onderzoeksvragen te beantwoorden zijn secundaire analyses verricht op

basis van de Tweede Nationale Studie naar ziekten en verrichtingen in de Huisartspraktijk, een cross-sectionele studie die is uitgevoerd tussen april 2000 en januari 2002. Deze Nationale Studie is uitgevoerd in 104 Nederlandse huisartspraktijken met in totaal 195 huisartsen en een praktijkpopulatie van 385.461 patiënten. In dit proefschrift gebruikten we verschillende gegevensbronnen van de Nationale Studie:

- Een contactregistratie, waarin deelnemende huisartsen de gezondheidsproblemen van patiënten diagnostiseerden volgens de ICPC (International Classification of Primary Care) codering (ongeveer 1.5 miljoen contacten);
- Video-observaties van 2095 consulten van 142 huisartsen, met name bedoeld om de communicatie van de huisarts in kaart te brengen;
- Twee vragenlijsten onder de deelnemende huisartsen met onder andere vragen over de werklast;
- Een gedetailleerd tijdschrijf-dagboek gedurende een week door deelnemende huisartsen;
- Een vragenlijst met sociaal-demografische kenmerken onder de praktijkpopulatie.

Alle gegevensbronnen waren onderling aan elkaar te koppelen door het gebruik van unieke codes. De gegevens zijn - afhankelijk van de onderzoeksvraag – geanalyseerd op het niveau van de huisarts, de patiënt, of het consult.

De werklast van huisartsen bij patiënten met psychische diagnoses (hoofdstuk 2)

In dit hoofdstuk onderzochten we of patiënten met psychische of sociale diagnoses een groter beroep doen op de huisartspraktijk vergeleken met patiënten met alleen somatische diagnoses. Daarvoor zijn alle patiëntencontacten van volwassen patiënten die huisartsen gedurende een jaar hebben geregistreerd geanalyseerd. Patiënten die gedurende een jaar één of meer diagnoses in ICPC-hoofdstuk P ‘Psychisch’ of Z ‘Sociaal’ (n=37.189) hebben gekregen zijn vergeleken met patiënten met alleen maar somatische diagnoses (n=189.731). De contactfrequenties, aantallen diagnoses en ziekte-episodes van beide groepen patiënten zijn vergeleken. Daarbij is gecorrigeerd op patiëntkenmerken die deze uitkomstmaten kunnen beïnvloeden. Er is in de analyses een onderscheid gemaakt tussen patiënten met de diagnoses depressie, angst, slaapproblemen, stress, werkgerelateerde problemen of relatieproblemen en ‘overige psychische of sociale problemen’.

Patiënten in alle subcategorieën van psychische of sociale problemen hadden bijna twee keer zo vaak contact met de huisartspraktijk in vergelijking met patiënten met alleen somatische diagnoses. Ook kregen zij meer diagnoses en hadden meer ziekte-episodes. Patiënten met psychische of sociale diagnoses hadden ook meer contact met hun huisartspraktijk over hun somatische problemen, in vergelijking met patiënten met alleen somatische diagnoses. Dit gold voor patiënten in alle subgroepen van psychische en sociale problemen. Patiënten met slaapproblemen hadden de meeste contacten met hun huisartspraktijk, maar vooral vanwege hun somatische problemen. Patiënten met de diagnoses angst of depressie hadden de meeste contacten vanwege hun specifieke angst- of depressieproblemen. Patiënten met stress, werkgerelateerde- of relatieproblemen hadden de minste contacten met de huisartspraktijk, vergeleken met patiënten met andere psychische of sociale diagnoses. Samengevat blijkt uit dit hoofdstuk dat patiënten met psychische of sociale problemen een groter beroep op de huisartspraktijk doen vergeleken met patiënten met alleen somatische diagnoses.

De werklast van huisartsen in consulten over psychische problemen van patiënten (hoofdstuk 3)

In dit hoofdstuk maakten we gebruik van video-observaties om het contact tussen een huisarts en patiënt op microniveau te kunnen analyseren. We bekeken of de consulten waar psychische problemen van patiënten aan de orde waren, de huisarts meer tijd en energie kosten. Daarvoor vergeleken we drie groepen consulten:

1) Consulten waarin een psychische of sociale diagnose is gesteld (n=138);
2) Consulten waarin een somatische diagnose is gesteld, maar de huisarts de achtergrond van de problemen van de patiënt als psychisch bestempelde (n=309);
3) Consulten met een somatische diagnose en somatische achtergrond (n=945).

Deze groepen consulten zijn onderling vergeleken wat betreft de consultduur, het aantal diagnoses en de aanwezigheid van een gevoel van tijdtekort bij de huisarts na afloop van het consult.

Consulten waarin een psychische of sociale diagnose was gesteld duurden gemiddeld 3,6 minuten langer dan consulten waarin alleen somatische problemen aan de orde waren. Consulten duurden ook 2,4 minuten langer wanneer de diagnose somatisch was, maar psychische aspecten een rol speelden

op de achtergrond. Patiënten kregen in totaal meer diagnoses in consulten waarin psychische of sociale diagnoses gesteld zijn dan in volledig somatische consulten. In consulten met een psychische diagnose of achtergrond ervaarde de huisarts vaker een gevoel van tijdtekort na afloop van het consult (respectievelijk 14% en 11% van de consulten) vergeleken met volledig somatische consulten (4% tijdtekort). Een specifieke analyse van het gevoel van tijdtekort van de huisarts liet zien dat in consulten waarin een psychische of sociale diagnose is gesteld, het gevoel van tijdtekort van de huisarts verklaard wordt door het feit dat de consulten langer duren en er meer problemen besproken worden. In het geval van somatische diagnoses met een psychische achtergrond werd het gevoel van tijdtekort van de huisarts niet alleen verklaard door het feit dat de consulten langer duren en meer problemen besproken worden, maar ook door de aard van de diagnose zelf (somatisch met een psychische achtergrond). Dat betekent dat somatische problemen met een psychische achtergrond de meeste invloed hebben op het gevoel van tijdtekort van de huisarts.

Hebben huisartsen die meer aandacht besteden aan psychische problemen een hogere werklast? (hoofdstuk 4)

In eerdere hoofdstukken is aangetoond dat het omgaan met psychische problemen van patiënten een extra beroep doet op de huisarts, omdat patiënten meer contacten met de huisartspraktijk hebben (hoofdstuk 2) en consulten tijdrovender en meer belastend zijn (hoofdstuk 3). Maar het blijft onduidelijk of de extra werkbelasting van huisartsen, wanneer zij op microniveau vaak te maken hebben met psychische problemen van patiënten, ook vertaald wordt in een hogere totale werklast. Daarom onderzochten we gegevens van vragenlijsten, een tijdschrijfdagboek en een contactregistratie van de deelnemende huisartsen aan de Nationale Studie (maximaal 191 huisartsen), om te bekijken of huisartsen die meer aandacht besteden aan psychische problemen een hogere werkbelasting hebben dan huisartsen die minder aandacht besteden aan psychische problematiek. Er zijn twee indicatoren gebruikt voor de aandacht voor psychische problemen van huisartsen: de taakopvatting van huisartsen over hun rol bij psychische zorg en het percentage contacten met een psychische of sociale diagnose gedurende een jaar. Objectieve werklast is uitgedrukt in het aantal gewerkte uren en patiëntencontacten per week, gecorrigeerd voor het aantal dagdelen dat de huisarts per week werkt. Subjectieve werklastmaten waren ten eerste de tevredenheid van de huisarts

met de beschikbare tijd en ten tweede een gevoel van uitputting, één van de subschalen van burnout.

Huisartsen met een bredere taakopvatting over hun rol bij psychische zorg bleken niet meer uren te werken en meer patiëntencontacten te hebben dan huisartsen met een smallere taakopvatting. Ook waren zij niet ontevredener met de beschikbare tijd, of meer uitgeput. Ook het percentage patiëntencontacten met een psychische of sociale diagnose hangt niet samen met de objectieve of subjectieve werklast van de huisarts.
Huisartsen met een bredere taakopvatting over hun rol bij psychische zorg stelden meer psychische of sociale diagnoses in hun patiëntencontacten dan huisartsen met een smallere taakopvatting. Verder bleken objectieve en subjectieve werklast substantieel andere begrippen te zijn: we vonden geen relaties tussen objectieve werklast van huisartsen en hun gevoelens van ontevredenheid met de beschikbare tijd of uitputting.
De belangrijkste conclusie van dit hoofdstuk is dat meer aandacht voor psychische of sociale problemen door huisartsen niet wordt vertaald in een hogere totale werklast. Eén van de verklaringen is dat de werklast van huisartsen zelf bepalend zou kunnen zijn voor de mate waarin zij aandacht besteden aan psychische problemen. Dit perspectief wordt verder uitgewerkt in de hoofdstukken 5 en 6.

Heeft de werklast van huisartsen invloed op hun bewustzijn van psychische problemen bij patiënten? (hoofdstuk 5)
Het feit dat de betrokkenheid bij psychische problemen van patiënten extra tijd vraagt van de huisarts, maakt dat huisartsen zich soms geremd voelen om betrokken te raken bij de psychische problemen van patiënten. Het bespreken van psychische problemen vereist specifieke communicatievaardigheden om de patiënten aan te moedigen om over hun problemen te praten. Onze verwachting was dat huisartsen met een hoge werklast - om tijd te besparen - minder geneigd zullen zijn om hun patiënten aan te moedigen om over psychische problemen te praten en zich daarom minder bewust zijn van psychische aspecten die een rol spelen in de problemen van de patiënten. Om dit te onderzoeken zijn 2095 consulten die op video zijn opgenomen geanalyseerd. Werklastmaten zijn ten eerste een gevoel van tijdtekort voordat het consult start en ten tweede het aantal patiënten op naam van de huisarts. Communicatieaspecten die patiënten kunnen stimuleren om over hun psychische problemen te praten zijn: het tonen van empathie en patiëntgerichtheid,

oogcontact maken en het stellen van vragen over psychische of sociale onderwerpen.

De werklast van huisartsen bleek niet gerelateerd te zijn aan hun bewustzijn van psychische aspecten in de problemen van patiënten en nauwelijks gerelateerd te zijn aan de communicatie van huisartsen. De aanwezigheid en ernst van psychisch onwelbevinden bij de patiënt bleken belangrijke redenen voor de huisarts om psychische aspecten in beschouwing te nemen en om communicatie te gebruiken die de patiënt kan stimuleren om psychische problemen te bespreken. De enige relatie die we vonden was dat huisartsen die voordat het consult begint tijdtekort ervaren, minder patiëntgericht zijn in het consult dan huisartsen die geen tijdtekort ervaren. Ook bleek dat huisartsen die meer empathie tonen en oogcontact maken, en huisartsen die meer vragen over psychische of sociale onderwerpen stellen, zich bewuster zijn van psychische aspecten in problemen van de patiënt.

Burnout bij huisartsen in relatie tot psychische patiëntenzorg (hoofdstuk 6)
In dit hoofdstuk zijn gegevens van video-observaties in 2095 consulten geanalyseerd om te onderzoeken of consulten van huisartsen met gevoelens van burnout en consulten van huisartsen die ontevreden zijn met de beschikbare tijd, minder psychische aspecten bevatten vergeleken met consulten van huisartsen zonder die negatieve gevoelens.
De verwachting was dat huisartsen die gevoelens van burnout en ontevredenheid met de beschikbare tijd ervaren, zullen proberen tijd en energie te besparen door patiënten minder aan te moedigen om over psychische aspecten te praten en door consulten in te korten. Dit kan ertoe leiden dat huisartsen minder psychische diagnoses stellen en zich minder bewust zijn van psychische aspecten in het consult. Specifiek onderzochten we of gevoelens van burnout en ontevredenheid met de beschikbare tijd bij huisartsen samenhangen met kortere consulten, minder discussie over psychische onderwerpen, minder affectieve communicatie van de huisarts, minder bewustzijn van psychische aspecten en minder psychische of sociale diagnoses. Drie componenten van burnout zijn onderzocht: emotionele uitputting, depersonalisatie en verminderde bekwaamheid.

Tegen de verwachting in hadden uitgeputte huisartsen en huisartsen die ontevreden zijn met de beschikbare tijd langere consulten. Uitgeputte huisartsen en huisartsen met gevoelens van depersonalisatie bleken meer over psychische

aspecten te praten in hun consulten. Het lijkt erop dat we de onderzochte relatie andersom moeten interpreteren: huisartsen ontwikkelen gevoelens van burnout en zijn ontevreden met de beschikbare tijd omdat zij intensieve patiëntencontacten hebben, in plaats van de omgekeerde relatie die centraal stond in dit hoofdstuk.
Conform de verwachting lieten huisartsen met gevoelens van verminderde bekwaamheid minder affectieve communicatie zien, waren minder patiëntgericht en hadden minder oogcontact met hun patiënten, vergeleken met huisartsen die zich competent voelden.
Huisartsen met gevoelens van burnout of ontevredenheid met de beschikbare tijd beoordeelden de problemen van patiënten even vaak als 'psychisch' als huisartsen zonder deze negatieve gevoelens.

Samenvatting en discussie (hoofdstuk 7)
Overeenkomstig de verwachtingen vragen psychische en sociale problemen van patiënten extra tijd en energie van de huisarts. Patiënten doen een groter beroep op de huisartspraktijk en consulten vragen meer tijd en zijn meer belastend voor de huisarts, vooral als patiënten somatische problemen hebben waarbij psychische aspecten een rol spelen op de achtergrond.
Verrassend is dat we geen samenhang vonden tussen de totale werklast van huisartsen en hun betrokkenheid bij psychische problemen van patiënten. Huisartsen die meer aandacht besteden aan psychische en sociale problemen van patiënten, blijken geen hogere totale werklast te hebben dan huisartsen die meer gericht zijn op somatische problemen van patiënten. Ook vonden we dat een hoge totale werklast niet bepalend is voor het al dan niet opmerken van psychische aspecten in de problemen van de patiënt. Er zijn verschillende verklaringen voor deze onverwachte bevindingen.

Een eerste verklaring ligt in de lijn van de evenwichtstheorie. Volgens de evenwichtstheorie zijn mensen die een disbalans ervaren tussen de eisen vanuit hun werk en dat wat het oplevert sterk gemotiveerd om dit evenwicht te herstellen. Dat kan op drie manieren: door de eisen vanuit het werk te reduceren, door de verwachtingen over het werk aan te passen of door de opbrengsten te vergroten. Een mogelijkheid is dat huisartsen hun extra tijdsinvesteringen wanneer zij vaak te maken hebben met psychische problemen van patiënten, compenseren door minder te investeren in andere aspecten van hun werk, zodat hun werklast gelijk blijft. Een andere mogelijkheid is dat huisartsen die meer aandacht besteden aan psychische zorg dit doen omdat ze het leuk

vinden en er goed in zijn. Wellicht kost het deze huisartsen minder tijd en energie. Een laatste verklaring is dat patiënten met psychische problemen mogelijk evenveel tijd en aandacht vragen van de huisarts als de huisarts hun problemen als 'psychisch' inschat, of als de huisarts de problemen als 'somatisch' beoordeelt. Wellicht dat patiënten met psychische problemen die niet herkend en besproken worden door de huisarts een groot beroep doen op de huisartspraktijk omdat zij de huisarts vaker bezoeken voor somatische problemen (die mogelijk een psychische achtergrond hebben).

De bevinding dat huisartsen die al een hoge werklast hebben evenveel betrokken zijn bij de psychische problemen van patiënten als huisartsen met een lagere werklast, geeft aan dat andere factoren, zoals de psychische gezondheid van de patiënt, bepalend zijn voor de betrokkenheid van de huisarts bij psychische problemen van patiënten. Huisartsen hebben blijkbaar andere manieren om met een hoge werklast om te gaan dan door te bezuinigen op psychische zorg.

Dit proefschrift laat zien dat huisartsen met een hoge subjectieve werklast op een andere manier communiceren met patiënten dan huisartsen met een lagere subjectieve werklast. Op *microniveau* blijken huisartsen die bij de start van het consult een gevoel van tijdtekort ervaren, in het consult minder patiëntgericht te communiceren. Dit is ongunstig voor een patiënt met psychische problemen. Een onverwachte bevinding is echter, dat als huisartsen *over de hele linie* ontevreden zijn met de beschikbare tijd of gevoelens van burnout hebben, juist langere consulten hebben en patiënten meer stimuleren om over hun psychische problemen te praten. Dit is gunstig vanuit het perspectief van de patiënt met psychische problemen. Deze bevindingen doen vermoeden dat huisartsen die het hardst werken en het meest investeren in hun patiëntencontacten, de huisartsen zijn die het hoogste risico op burnout hebben en het meest ontevreden zijn met de beschikbare tijd.

Vervolgens zijn in de discussie de voor- en nadelen van de gebruikte methode besproken. Eén van de voordelen is dat in dit proefschrift gebruik is gemaakt van diverse gegevensbronnen van de Tweede Nationale Studie in de Huisartspraktijk, die onderling gekoppeld konden worden op basis van unieke codes. De Tweede Nationale Studie is een omvangrijke studie die representatief is voor Nederlandse huisartsen, patiënten en huisartspraktijken. De Tweede

Nationale Studie geeft een goed beeld van morbiditeit en consultvoering in de huisartspraktijk.
Een nadeel is dat het design van deze studie cross-sectioneel is, waardoor oorzaken en gevolgen van de onderzochte relaties niet kunnen worden uitgesloten. Ook komen niet alle aspecten van werklast aan bod in de door ons gebruikte werklastmaten. Tenslotte is een nadeel dat de context van de huisartspraktijk, in termen van voorzieningen voor psychische zorg, niet is betrokken bij deze studie.

Tenslotte zijn aanbevelingen voor de praktijk en toekomstig onderzoek gedaan. Hoewel psychische patiëntenzorg extra tijd en energie vraagt van de huisarts, heeft de huisarts als generalist en poortwachter van de gezondheidszorg wel een belangrijke rol in het opsporen en diagnostiseren van psychische problemen en het integreren van psychische en somatische aspecten in de problemen van de patiënt. In Nederland is het beleid erop gericht om zoveel mogelijk psychische problemen in de eerstelijnszorg te behandelen om de tweedelijns geestelijke gezondheidszorg (GGZ) te ontlasten. Huisartsen kunnen op verschillende manieren ondersteund worden bij hun taken op het gebied van psychische zorg.
Ten eerste kunnen andere voorzieningen op het gebied van GGZ de werklast van de huisarts verminderen, omdat dit mogelijkheden voor verwijzing en advisering biedt en de huisarts taken kan delegeren. In Nederland is het de afgelopen jaren succesvol gebleken om sociaal psychiatrisch verpleegkundigen vanuit de tweedelijns GGZ in te zetten in de huisartspraktijk om de huisarts te ondersteunen bij psychische patiëntenzorg. In de toekomst zullen deze taken worden ondergebracht bij een praktijkondersteuner GGZ, een nieuwe eerstelijnsfunctie. Dit zou de werklast van de huisarts op het gebied van psychische zorg kunnen reduceren.
Ten tweede kunnen huisartsen ondersteund worden met training en opleiding. Speciale aandacht voor psychische consultvoering onder tijdsdruk en het omgaan met de complexiteit van problematiek waarin zowel psychische als somatische aspecten een rol spelen, kan huisartsen van pas komen. Ter voorkoming van burnoutklachten kunnen huisartsen baat hebben bij een betrokken en affectieve houding ten opzichte van patiënten, waarbij zij wel een professionele afstand behouden.
Ten derde zouden huisartsen ondersteund kunnen worden bij hun taken op het terrein van psychische patiëntenzorg door extra inspanningen op dit vlak te belonen. Het nieuwe zorgverzekeringsstelsel in Nederland biedt hier moge-

lijkheden toe, omdat huisartsen nu bij alle patiënten dubbele consulten kunnen declareren als een consult langer dan 20 minuten duurt. Een andere mogelijkheid is om een speciaal tarief voor 'psychische consulten' te introduceren, waarin tegemoet wordt gekomen aan de extra inspanningen van de huisarts. Bovendien laat dit zien dat psychische zorg tot de taken van de huisarts behoort.
Tenslotte raden we patiënten met psychische problemen aan om deze problemen zelf bij de huisarts aan te kaarten, zodat het proces van herkenning en diagnostisering makkelijker wordt voor de huisarts en er geen onnodige vertraging ontstaat bij het eventuele zoeken naar hulp. We bevelen huisartspraktijken aan om GGZ-faciliteiten in de praktijk, zoals de aanwezigheid van een praktijkondersteuner GGZ, duidelijk kenbaar te maken bij patiënten.

In vervolgonderzoek is het van belang om de invloed van werklast op de kwaliteit van psychische zorg te onderzoeken. Ook raden we aan om aandacht te besteden aan andere aspecten van werklast dan de door ons gebruikte werklastmaten. Het verdient aanbeveling om de bestaande ontwikkelingen in de huisartsenzorg, zoals de inzet van praktijkondersteuners GGZ en het nieuwe zorgverzekeringsstelsel in Nederland met de extra mogelijkheid om dubbele consulten te declareren, te monitoren en de invloed van deze ontwikkelingen op de werklast van huisartsen in kaart te brengen. Deze nieuwe ontwikkelingen kunnen gunstig zijn voor de psychische zorg in de huisartspraktijk, maar het is belangrijk om dit met onderzoek te onderbouwen.

Appendices

Appendix A: Job satisfaction scale

Wij willen u nu enkele vragen stellen over de mate waarin u tevreden bent over een aantal aspecten van uw werk als huisarts. Bij elk van de aspecten kunt u aangeven hoe tevreden u daarover bent.

Antwoordcategorieën:
1=zeer ontevreden; 2=ontevreden; 3=deels wel, deels niet tevreden; 4=tevreden; 5=zeer tevreden

	1	2	3	4	5
De hoeveelheid tijd die ik per patiënt beschikbaar heb	☐	☐	☐	☐	☐
De mogelijkheid voor professionele contacten met specialisten	☐	☐	☐	☐	☐
De mogelijkheid voor professionele contacten met andere huisartsen	☐	☐	☐	☐	☐
Mijn inkomen	☐	☐	☐	☐	☐
De uitrusting van mijn praktijk en de faciliteiten waarover ik beschik	☐	☐	☐	☐	☐
De hoeveelheid tijd die mijn praktijk kost	☐	☐	☐	☐	☐
De hoeveelheid tijd die ik aan nascholing kan besteden	☐	☐	☐	☐	☐
De hoeveelheid tijd die ik aan mijn gezin kan besteden	☐	☐	☐	☐	☐
De hoeveelheid vrije tijd waarover ik beschik	☐	☐	☐	☐	☐
De organisatie en het management van mijn praktijk	☐	☐	☐	☐	☐
De kosten om mijn praktijk draaiende te houden	☐	☐	☐	☐	☐
Het respect dat ik van mijn patiënten krijg	☐	☐	☐	☐	☐
De collegiale verhoudingen	☐	☐	☐	☐	☐
De incentives om zorg van hoge kwaliteit te leveren	☐	☐	☐	☐	☐
De organisatie van de diensten	☐	☐	☐	☐	☐
Mijn werk in het algemeen	☐	☐	☐	☐	☐

Appendix B: UBOS-C, Utrecht Burnout Scale

Hieronder staan 20 uitspraken die betrekking hebben op hoe U uw werk beleeft en hoe u zich daarbij voelt. Geef aan **hoe vaak** iedere uitspraak op u van toepassing is, door het best passende cijfer in te vullen. De betekenis van de cijfers is als volgt:

nooit	*sporadisch*	*af en toe*	*regelmatig*	*dikwijls*	*zeer dikwijls*	*altijd*
0	***1***	***2***	***3***	***4***	***5***	***6***
	een paar keer per jaar of minder	*eens per maand of minder*	*een paar keer per maand*	*eens per week*	*een paar keer per week*	*dagelijks*

1 _____ Ik voel me mentaal uitgeput door mijn werk

2 _____ Aan het einde van een werkdag voel ik me leeg

3 _____ Ik voel me vermoeid als ik 's morgens opsta en er weer een werkdag voor me ligt

4 _____ Ik kan me gemakkelijk inleven in de gevoelens van de cliënten

5 _____ Ik heb het gevoel dat ik sommigen van mijn cliënten te onpersoonlijk behandel

6 _____ De hele dag met mensen werken vormt een zware belasting voor mij

7 _____ Ik weet de problemen van mijn cliënten adequaat op te lossen

8 _____ Ik voel me 'opgebrand' door mijn werk

9 _____ Ik heb het gevoel dat ik het leven van andere mensen op een positieve manier beïnvloed door mijn werk

10 _____ Ik heb het idee dat ik onverschilliger geworden ben tegenover andere mensen, sinds ik dit werk heb

11 _____ Ik maak mij zorgen dat mijn werk mij gevoelsmatig afstompt

12 _____ Ik voel me gefrustreerd door mijn baan

13 _____ Ik denk dat ik me teveel inzet voor mijn werk

14 _____ Het kan me niet echt schelen wat er met sommige cliënten gebeurt

15 _____ Met mijn cliënten kan ik gemakkelijk een ontspannen sfeer scheppen

16 _____ Het werken met cliënten vrolijkt me op

17 _____ Ik heb in deze baan veel waardevolle dingen bereikt

18 _____ Ik voel me aan het einde van mijn Latijn

19 _____ In mijn werk ga ik heel rustig om met emotionele verwijten

20 _____ Ik heb het gevoel dat cliënten mij hun problemen verwijten

Appendix C: Role perception with respect to mental health care

Hieronder vindt u een lijst van activiteiten die gericht zijn op psychosociale hulpverlening of begeleiding, of op preventie.
Wilt u in de eerste tabel voor elk van deze activiteiten aangeven in hoeverre u vindt dat deze behoort tot de taak van de huisarts.

	Deze taak behoort . . . tot de taak van de huisarts				
	volledig	*groten-deels*	*enigs-zins*	*nauwe-lijks*	*totaal niet*
Adviseren bij opvoedingsmoeilijkheden	☐	☐	☐	☐	☐
Begeleiden van ex-psychiatrische patiënten	☐	☐	☐	☐	☐
Bespreken relatieproblemen	☐	☐	☐	☐	☐
Hulp bieden bij suïcidale neigingen	☐	☐	☐	☐	☐
Behandeling van lichte vorm van straatvrees	☐	☐	☐	☐	☐
Bespreken van langdurige problemen op het werk	☐	☐	☐	☐	☐
Ontspanningstherapie bij spanningsklachten	☐	☐	☐	☐	☐
Hulp bieden bij seksuele moeilijkheden	☐	☐	☐	☐	☐
Hulp bieden bij verslavingsproblematiek	☐	☐	☐	☐	☐
Behandelen van wanen	☐	☐	☐	☐	☐

Appendix D: Roter Interaction Analysis System (adapted version)

Categories Affective Behaviour

Personal remarks
- personal remarks
- social conversation
- tells jokes/laughs

Approval
- shows approval
- gives compliment

Agreement
- shows agreement or understanding

Paraphrase
- paraphrase, checks for understanding

Verbal attention
- empathy
- legitimizes
- shows partnership and support

Showing concern
- shows concern or worry

Reassurance
- reassures, encourages or shows optimism
- asks for reassurance

Disagreement
- shows disapproval
- shows criticism

Categories Instrumental Behaviour

Giving directions
- transition
- gives orientation, instructions

Bids for repetition

Asks for understanding

Asks for opinion

Request for services

Asks questions
- medical condition/therapeutic regimen
- social context
- psychosocial/feelings
- lifestyle

Gives information
- medical condition/therapeutic regimen
- social context
- psychosocial/feelings
- lifestyle

Counsels
- medical condition/therapeutic regimen
- social context
- psychosocial/feelings
- lifestyle

Other
- other utterances
- unintelligible utterances

Appendix E: Editorial 'Empathy and efficiency'

This Editorial is already published as:
L Wissow (2007). Empathy and efficiency. Patient Education and Counseling, 67, 1-2.

In this issue of Patient Education and Counseling, Zantinge et al.[1] investigate a perennially important subject – factors that promote integration of psychosocial concerns into general medical visits. While we frequently try to justify this concern by quantifying the proportion of visits where patients seek help primarily for emotional problems, one can argue that there are virtually no general medical visits where psychosocial concerns are completely off the table. Low mood, stress, and worry frequently burden people living with heart disease, asthma, diabetes, and other staples of the general practitioner's work.

''Patients'' (that is, all of us when our turn comes to need medical attention) partly determine whether psychosocial concerns are raised in medical visits. We routinely chose not to talk about our moods and worries[2,3]. The reasons are many: being depressed or anxious may not fit our self-image; we are afraid we might distract the doctor from handling our somatic needs; or we are afraid the doctor will suggest a treatment – often medication – that we do not feel is appropriate[4].

Some of the blame for patients' hesitancy rests in the larger cultural context. Studies of help-seeking for emotional concerns find that we generally first turn to family, friends, and other confidants before turning to doctors[5]. For many around the world, the causes of and solutions to emotional distress are found in one's spiritual life, conduct, or relationship with nature. But doctors themselves are some of the cause. Decades of studies demonstrate how doctors ''train'' patients not to raise psychosocial issues by ignoring them when they come up, offering perfunctory answers, or simply never raising them[6].

Why doctors do this has also been the subject of much study. Lack of interest has been widely hypothesized but seems often not to be the case. Despite the relative lack of emphasis on mental health in medical schools and in post-graduate training, generalists report feeling that much that is psychosocial is within their scope of practice[7]. There is evidence, however, that if

psychosocial concerns have to compete for attention in the limited time available in general medical visits, somatic concerns are given priority[8]. What continues to be explored is whether the time limits inherent in routine general medical visits represent an absolute barrier to addressing psychosocial concerns. Can general practitioners integrate somatic and psychosocial care into short visits if they want to, or if they have the right skills? Zantinge et al.'s study supports the belief that absolute workload is not an influence. Neither the size of the practitioners' practice (the number of patients she or he managed) nor the practitioners' subjective feeling of lack of time predicted knowledge of patients' concerns. However, when doctors felt they were too busy, observers rated them as less open toward their patients – less willing let patients express concerns and treatment preferences. These Dutch results are consistent with findings from a study in North America that found doctors who were more satisfied with their professional autonomy were seen as more participatory by their patients[9].

A strength of the Dutch survey is its size and scope – the ability to use direct observation of over 2000 visits collected nationally. One additional influence that could have been examined is the larger mental health or psychosocial support service context for each practice. Data suggest that the availability of these services can have a paradoxical effect on what generalists do. Contrary to the notion that having more services will be associated with willingness to find and refer individuals experiencing emotional distress, there is evidence that the better the available resources, the more generalists feel emotional concerns are not their problem. In the United States, rural pediatricians – who generally have fewer mental health resources at their disposal – report providing more mental health care than their better-supplied urban colleagues[10]. In a US study of pediatric primary care, medical providers' perception of the ease with which they could obtain psychosocial consultation was inversely related to the frequency with which they identified children in their practice as having a psychosocial problem[11].

The size of the Dutch survey might also make possible study of how the severity of patient concerns interacts with doctor burden to influence awareness of those concerns. In general, as Zantinge et al. show, more severe concerns generally produce greater doctor awareness. In their study, doctors' workload was not independently related to awareness. But in a smaller sample of US pediatric primary care providers, there was an interaction of doctors' feelings of being burdened by patients' psychosocial problems and their detection of children with those problems[11]. While overall the severity of

children's problems predicted provider detection, the rate of identification went down as providers' sense of burden increased.

Taken in this larger context, Zantinge et al.'s study suggests that one way to promote attention to patients' psychosocial concerns is to help practitioners remain receptive in the face of time pressure and the feeling that these concerns are particularly burdensome. Do communication training programs for generalists include skills that specifically target working in a very limited time frame? We teach skills for encouraging patients' expression of concern, but do we demonstrate how to do this efficiently? We want doctors to engage in shared decision-making, but do we help doctors provide scaffolding and direction as patients work through partially-formed thoughts about their preferences? When patients come to the office upset or demoralized, do we help doctors feel they can respond constructively but not need to extend the visit? Generalists increasing tell us they are interested in managing psychosocial concerns: let us continue to refine the set of tools we teach that will allow them to do so.

References

1. Zantinge EM, Verhaak PFM, Bakker DH de, Kerssens JJ, Meer K van der, Bensing JM (2007). The workload of general practitioners does not affect their awareness of patients' psychosocial problems. Patient Educ Couns, 67, 93–9.
2. Ellingson KD, Briggs-Gowan MJ, Carter AS, Horwitz SM (2004). Parent identification of early emerging child behavior problems: predictors of sharing parental concern with health providers. Arch Pediatr Adolesc Med, 158, 766–72.
3. Horwitz SM, Leaf PJ, Leventhal JM (1998). Identification of psychosocial problems in pediatric primary care: do family attitudes make a difference? Arch Pediatr Adolesc Med, 152, 367–71.
4. Rost K, Zhang M, Fortney J, Smith J, Coyne J, Smith GR (1998). Persistently poor outcomes of undetected major depression in primary care. Gen Hosp Psychiatry, 20, 12–20.
5. Stiffman AR, Pescosolido B, Cabassa LJ (2004). Building a model to understand youth service access: the gateway provider model. Ment Health Serv Res, 6(4), 189–98.
6. Wissow LS, Larson S, Anderson J, Hadjiisky E (2005). Pediatric residents' responses that discourage discussion of psychosocial problems in primary care. Pediatrics, 115, 1569–78.
7. Olson AL, Kelleher KJ, Kemper KJ, Zuckerman BS, Hammond CS, Dietrich AJ (2001). Primary care pediatricians' roles and perceived responsibilities in the identification and management of depression in children and adolescents. Ambul Pediatr, 1, 91–8.
8. Rost K, Nutting P, Smith J, Coyne JC, Cooper-Patrick L, Rubenstein L (2000). The role of competing demands in the treatment provided primary care patients with major depression. Arch Fam Med, 9, 150–4.

9. Kaplan SH, Greenfield S, Gandek B, Rogers WH, Ware Jr JE (1996). Characteristics of physicians with participatory decision-making styles. Ann Intern Med, 124, 497–504.
10. American Academy of Pediatrics. Periodic Survey #59: Executive Summary ‘‘Identification, Management and Referral for Patient Mental Health Problems and Maternal Depression’’. AAP Division of Health Policy Research; 2005 (accessed 4/10/06) http://www.aap.org/research/periodicsurvey/ps59exs.htm.
11. Brown JD, Riley AW, Wissow LS. Identification of youth psychosocial problems during pediatric primary care visits. Adm Policy Ment Health, in press.

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Else Zantinge, april 2008

Curriculum vitae

Curriculum Vitae

Else Marie Zantinge werd geboren op 2 januari 1975 in Vlaardingen. Zij groeide op in Velp en haalde in 1993 haar Gymnasium-bèta diploma op het Stedelijk Gymnasium in Arnhem. Datzelfde jaar ging zij Psychologie studeren aan de Universiteit Utrecht, met als specialisatie Psychologie van Arbeid, Gezondheid en Organisatie. Tijdens haar studie werkte zij als student-assistent bij de capaciteitsgroep Methodenleer & Statistiek en verzorgde onderwijs Statistiek voor eerstejaars studenten aan de faculteit Sociale Wetenschappen. Ook vervulde zij een jaar een bestuursfunctie bij Alcmaeon, de faculteitsvereniging van Sociale Wetenschappen. Vanaf 1997 werkte zij bij psychologisch adviesbureau ORGA, waar zij assessments begeleidde en selectiedagen coördineerde.
Na haar afstuderen in 1999 zette zij haar werkzaamheden bij ORGA voort en kreeg een 'Research & Development' functie. In 2000 en 2001 werkte Else als docent/gesprekstrainer in het UMC Utrecht bij de disciplinegroep Huisartsgeneeskunde en gaf cursussen 'arts-patiënt communicatie' aan geneeskundestudenten. Vanaf 2001 werkt zij als onderzoeker bij het NIVEL. Bij het NIVEL heeft zij dit proefschrift geschreven en aan diverse onderzoeksprojecten gewerkt, hoofdzakelijk op het gebied van geestelijke gezondheidszorg en huisartsenzorg. Op dit moment werkt zij bij het NIVEL binnen het themagebied 'arts-patiënt communicatie' aan een onderzoek naar de meerwaarde van groepsconsulten vergeleken met individuele medische consulten.
Else is getrouwd met Guido van de Wiel en samen hebben zij twee kinderen: Sterre (2005) en Bram (2007).