Research and Theory

Treatment of mental disorder in the primary care setting in the Netherlands in the light of the new reimbursement system: a challenge?

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Abstract

Introduction: Different professionals provide health care for mental disorder in the primary care setting. In view of the changing reimbursement system in the Netherlands, information is needed on their specific expertise.

Method: This study attempts to describe this by literature study, by assessment of expert opinions, and by consulting Associations of the relevant professions.

Results: There is no clear differentiation of expertise and tasks amongst these professionals in primary care. Notably, distinction between different psychotherapeutic treatment modes provided by psychologists is unclear.

Discussion: Research is needed to assess actual treatment modules in correlation with patient diagnostic classification for the different professions in primary care. An alternative way of classifying patients, that takes into account not only mental disorder or problems but especially the level of functioning, is proposed to discern which patients can be treated in primary care, and which patients should not. Integrated care models are promising, because many professionals can be involved in treatment of mental disorder in the primary care setting; especially for collaborative care models, evidence favours the treatment of common mental disorders in this setting.

Conclusion: Integrated care models, such as collaborative care, provide a basis for multidisciplinary care for mental disorder in the primary care setting. Professional responsibilities should be clearly differentiated in order to facilitate integrated care. The level of functioning of patients with mental disorder can be used as indication criterion for treatment in the primary care setting or in Mental Health Institutions. Research to establish the feasibility of this model is needed.

Keywords

mental disorder, primary care, collaborative care, professional responsibilities, integrated care

Introduction

Background

The highest burden of mental disorder lies in the primary care setting [1]. The prevalence of depressive disorder in primary care is 6–25% annually, and 10% in men, 20% in women on a lifetime basis [2]. Worldwide at least 10% of primary care mental problems are anxiety disorders [1]. ICPC incidence rates are

2–7 per 1000 for generalised anxiety disorder and panic disorder [3]. They are the most costly mental disorder in terms of societal impact [4] and can be treated effectively in the primary care setting [5–14]. Medical costs are highest for somatoform disorders and unrecognized or under treated depression [15–21].

In the Netherlands, mental disorder has long been treated in the mental health setting by secondary care

mental health specialists who could be accessed directly by patients in need, the so-called "American bypass" [22]. By the end of the 1990s, research showed that although the prevalence of mental illness in the primary care setting had remained unchanged in the last 30 years, General Practitioners (GPs) referred more patients to mental health settings and treated less patients in their own practice than before [23]. In 1999, the GPs became gatekeepers for mental illness by decree of the Ministry of Health and many consultation projects were started in order to support them in diagnosis and treatment of psychiatric patients [24]. Treatment reimbursement was automatically provided. Now, a change in reimbursement system is being effectuated in the Netherlands: as of January 2008, professionals treating patients for mental illness will be reimbursed based on the Diagnosis Treatment Combinations or DBCs. Evidence-based treatment is described for Depressive disorder, anxiety disorder and somatoform disorder in the Multidisciplinary Guideline for Depressive disorder [25], the NHG Standard for Depressive disorder [2], and the Multidisciplinary Guideline for anxiety disorder [26]. For somatoform disorder, a multidisciplinary guideline is currently being developed.

Problem statement

Insurance companies will provide reimbursement by buying so-called care arrangements from professionals when they are able to provide evidence that their treatment modes are evidence based and cost effective. This provides a challenge for these professionals: are they able to identify which patients they can treat by certain diagnostic categories? Are they sufficiently skilled to provide the required evidence-based treatments as described in the multidisciplinary Guidelines for treatment of common mental disorders? And what forms of multidisciplinary treatment for these disorders in the primary care setting exist? These questions were the subject of a survey by the Netherlands Institute of Mental Health and Addiction (NIMHA), based on literature, by interviews with the respective Associations of professionals, and by consulting independent experts in the field. The objectives were to identify which professional groups provide what kind of care in the field of primary mental health care, how this compares with the Guidelines, and how they could contribute to integrated care for mental disorder in the primary care setting.

Method

A stepwise approach was used: first, a literature search was performed. Second, a field study was

performed in which experts in the field and Associations of professionals were asked for advice, information and opinion.

In order to conduct the literature research we consulted not only two databases on scientific articles (Medline and Psychinfo) but also two databases which, in addition to scientific literature also contain so-called 'grey literature' on the matter (the Trimbos-institute catalogue and Nivel catalogue). Since the topic of the study is 'treatment of mental disorder in the primary care setting in the Netherlands' we searched mainly for literature concerning primary care in the Netherlands. We used the (Dutch equivalent of) Thesaurus terms for primary care, primary care psychologist, primary care psychology, social work, general practitioner and psychiatrist. We also included search terms based on interventions from the guidelines, that is: Diagnostic methods; Crisis intervention; Minimal interventions such as bibliotherapy, psycho-education, or self help; Practical and social interventions such as Problem Solving Therapy, practical help, and supportive treatment; Psychological interventions such as short treatment, Cognitive Behavioural Therapy (CBT), Behavioural Therapy (BT), Inter Personal Therapy (IPT), and combinations of treatments; Biological interventions such as medication or light therapy; Non-specific interventions; and Rehabilitation. As Diagnostic classification systems, DSM-IV [27] as well as ICD-PC [28] was taken into consideration. The searches conducted in the four databases resulted in more than 1000 hits. In order to select the relevant articles and reports two researchers selected records based on year of publication (1985 or more recent), the relevance to the current situation in the Netherlands and the specific topic of the publication. This last restriction meant that the topic had to state the actual care provided and not how it should be provided; this had the strongest effect in reducing the number of publications being included in the study. The researchers performed this qualitative analysis independently, but when in doubt, consensus had to be reached between them. This way, over 70 relevant publications were ultimately identified. These varied from national studies on disease and treatment in the family practice, to studies on professions such as the primary care psychologist to studies on the evaluation of projects on support of primary care psychiatry.

The second step in this study was a field study in which eight independent experts in the field, and six relevant Associations of professional groups, were presented the conclusions of the literature analysis, and asked for advice, information and opinion. In some cases, this led to more data about treatment modes in primary care. These data were added to the results

and described there. The opinions of the experts and Associations are integrated in the discussion of the data. Finally, the new description and conclusions were presented again to the experts and Associations and confirmed as a correct reflection of their input.

Results

Professionals in the primary care setting

The following groups of professionals in the primary care setting were identified: GPs, social workers, clinical psychologists, primary care psychologist, Psychiatric nurse working in the GPs practice, psychiatrist, and psychotherapists.

Restrictions of the literature study

Before presenting the results of the study of the literature the following observations should be taken into account: First of all the literature provides mostly descriptions of what professionals should do; what they actually do can hardly be found in the available literature. Secondly, professionals use different classification methods to describe their patients, such as the DSM-IV and the IC-PC. This makes the comparison of data difficult. Also, in the literature, results of screening are sometimes unduly presented as clinical diagnosis. Furthermore, all professionals except social workers claim to be able to perform the most sophisticated interventions, a proposition that is not always in line with their level of education or specialisation, and known logistic limitations such as time and setting. Finally, there remains the problem of missing data: some things are just not known. This makes interpretation of data sometimes difficult. This problem was dealt with by consulting the Associations and experts in the field.

Classification systems

In primary care, a broad range of mental problems as well as mental illness is encountered.

Therefore, not only mental disorders, but also mental problems or so-called psychosocial problems need to be classified. In both the IC-PC and the DSM-IV, options to do so are provided. In the IC-PC, both syndromes and symptoms can be classified [28]. GPs often use the symptom mode as this suits their way of treatment: expectative, patient-led agenda and process driven [29]. In the DSM-IV, syndromes can be classified, but psychosocial problems as well, by

means of the V-codes, such as educational problem, relationship problem, acculturation problem, etc. Therefore, we have chosen to report in DSM-IV classifications. The prevalences as reported by the various professionals in patients in primary care are shown in Table 1.

Diagnosis and treatment provided by the various professional groups is shown in Table 2.

General practitioners (GPs)

Prevalence of mental disorders in GP patients are shown in Table 1.

In the general population study NEMESIS it was found that one in four adults in the Dutch population had a mental disorder in the year preceding the assessment [30]. One in three of these sought help and 80% received treatment in the primary care setting, mostly from the GP. In a primary-care based study, Van der Linden et al. [31] assessed which part of the primary care practice patients has mental problems. On an annual basis, a GP sees 77% of his patients. The respondents of this survey were assessed by General Health Questionnaire 12 (GHQ12) [32] and 22.8% showed diminished mental well being. Apart from these self report data, registered symptoms were taken from the HIS (GP information system). On an annual basis, 125 out of 1000 patients reported mental problems to the GP. One in eight consultations was reported to concern mental problems. In Table 1, prevalence rates from these studies are mentioned. not corrected for co-morbidity.

GPs perform a great amount of care for mental disorders, especially common mental disorders, such as depressive disorder, anxiety disorder and somatoform disorder [33–39]. They do not consider themselves professionals of choice for severe mental disorders such as schizophrenia or bipolar disorders. It remains unclear to which amount GPs follow their own guidelines [40]. GPs feel the need for supportive care given by primary care psychologists and social workers and practice nurses in order to diagnose, treat and refer patients. They also feel the need for consultation by psychiatrists for cases that need diagnosis or that have a more complex treatment history. This is not only the case in the Netherlands but also on an international level [41–48].

Social workers

Prevalence of mental problems and disorders of patients of social workers are shown in Table 1. More than one problem can be scored per patient. Table 2

Table 1. Prevalence in % of mental problems and disorders of primary care patients as established by various professionals.

Mental disorder or mental problem	Prevalence by					
	GPs [30]	Social workers [49]	Primary care psychologists [56]	Clinical psychologists	Psychiatrist Consultation 71	Psychiatric Registered Nurse (SPV) [81]
Mental disorder						
Depressive disorder	2% annually	Unknown	24.3%	45%	23%	36%
Anxiety disorder	0.7% anually	Unknown	17.9%	26%	43%	24%
Somatoform disorder	0.06-0.65%	Unknown	Unknown	3%	14%	2%
Schizophrenia and other psychotic disorder	0.15% (0.06% schizophrenia 0.09% affective psychosis)	Unknown	I	1%	I	%6
Adjustment disorder	Unknown Surmenage in 0.8%	Unknown	12.8%	%21	I	
Addiction	Unknown	Unknown	%7.8	%08	I	
Personality disorder	0.14%	Unknown	%7.7	22%	20%	15%
Psychosocial problem						46%
Family problems	0.4%	%98	14.5% has relational problems	I		Unspecified
Problems in the social environment	0.1%	31%	Unknown	I		Unspecified
Educational problems	0.1%	1%	4%	ı		Unspecified
Work problems	0.4%	%9	%01	-		Unspecified
Housing problems	0.1%	%2	Unknown	-		Unspecified
Financial problems	0.03%	%11%	Unknown	-		Unspecified
Problems with access to care	0.06%	Unknown	Unknown	I		Unspecified
Problems with police	0.01%	Unknown	Unknown	ı		Unspecified
Other psychosocial problems	Unknown	Unknown	Unknown	I		Unspecified

Table 2. Interventions provided to primary care patients as established by various professionals

Type of intervention	Given by					
	GPs [30]	Social workers [49]	Primary care psychologists [57, 58]	Clinical Psychologists [65]	Psychiatrist Consultation [74, 78]	Psychiatric Registered Nurse (SPV) [80]
Diagnostic methods	Annually at least 2% of patients with depressive symptoms and at least 0.7% of patients with anxiety symptoms. Unknown for other mental problems or illness	Unknown	34.9–40%	1%	4.0–6.9% consultation by seeing the patient and providing the GP with a diagnosis and treatment plan	%02
Crisis intervention	Unknown	2%	Unknown	Unknown	-	24%
Minimal intervention	Unknown	15% (information and advising)	2.5% (psycho- education) Self help unknown	Unknown	-	75% psycho- education
Practical and social intervention	Unknown	72% (59% psychosocial treatment, 3% supportive treatment, 7% mediation, 7% social help)	15–28.2%	2%	-	13% one session
Psychological interventions	Unknown	1	80.5–83%	83% mostly CBT	_	28% five sessions
Biological interventions	In 68% of depressive episodes, and 41.8% of anxiety disorders. Unknown for other mental problems or illness	1	ı	16%, 15% in combination with CBT	_	1
Non-specific intervention	Unknown	1	1%	Unknown	1	I

shows that social workers deliver practical and social interventions in clients with psychosocial problems [49]. Social workers provide interventions aimed at improving the social system of the patient, financial, societal and emotional, with a focus of treatment at psychosocial problems [50–55].

Primary care psychologists

The results for primary care psychologists are shown in Table 1. In the patients with mental problems, possible mental disorder was not taken into account. The total prevalence of mental problems is at least 70.4%, but on top of that, mental disorder might exist.

Primary care psychologists seem to treat non-complex psychosocial problems and common mental disorders without co-morbidity, such as depressive disorder and anxiety disorders, by way of psychological interventions in 8–12 sessions. The interventions provided by the primary care psychologist should be relatively brief. Results of a survey among primary care psychologist show that the according to the psychologist an average of 15 sessions is needed [57–63].

Clinical psychologists

Clinical psychologists are generally trained as certified cognitive behavioural therapists (CBT) [64]. The prevalence of mental disorders in their patients is shown in Table 1.

Per patient more than one category can be fulfilled. Note that in this case, no mental problems are reported, only mental disorders. Especially common mental disorders are prevalent, and co-morbid personality disorder or other Axis I disorders is a frequent phenomenon in 30% of cases. Moreover, 43% had a history of treatment for mental disorder and 15% had co-morbid somatic illness.

Clinical psychologists treat mental disorders that cannot be treated by the formerly mentioned professionals, that is: phobias, obsessive compulsive disorders, and personality disorders, that in a substantial amount of cases coexist with other mental disorders. They need 19 sessions in 15% of their patients, 20–49 sessions in 40% of cases, and over 50 sessions in 44% of cases [66], in spite of the fact that a Health Council report indicates that longer term therapy might not be efficient [67]. Government attempts to limit reimbursement of longer term psychotherapy met a lot of resistance and did not succeed as planned.

Psychiatrists

Most psychiatrists in the Netherlands are not only medical specialists but also registered by BIG law as psychotherapist [68]. Psychiatrists who are active in the primary care setting do so mostly by delivering psychiatric consultations to GPs and, sometimes, to primary care psychologists or registered psychiatric nurses. GPs have become the gatekeeper for mental health care in 1999 and need support for this from Consultation-Liaison psychiatrists who can provide them with diagnostic and therapeutic interventions and treatment plans as well as referral advice for their patients [68]. This form of support can be delivered by a psychiatrist by means of a patient-centred case consultation [69]. Thereafter, the GP continues the treatment as primary caretaker [68]. The consultation models can differ according to the preferences and needs of the GP. In the classic consultation model. the psychiatrist consultant and the GP consultee see the patient together [22]. Two models have been evaluated: the DAC (Diagnosis Advice Centre) model [70] and the POCO (Poortwachter Consultation) model [71]. In the DAC-model the patient visits the psychiatrist once and the psychiatrist sends the GP a consultation letter with a diagnosis and treatment advice. In the POCO model, the psychiatrist sees the patient in the primary care setting together with the GP, and provides both with a diagnosis and treatment plan. The GP remains responsible for the treatment [72]. In the Netherlands, most primary care consultant psychiatrists have a private practice [73]. Brunenberg et al. [74] found that they spent 4% of their time delivering consultations. In the Nijmegen region, since 2002 a Diagnosis and Treatment Centre (DAC) exists that performs consultations for GPs. In the POCO project in Amsterdam, from 2000 until 2003 on an annual basis up to 250 consultations were performed in 25% of the Amsterdam region GPs [75, 76]. After that, consultations started to be regularly provided on a supra-regional level. The Dutch Association of Psychiatrists, the Order of Medical specialists and the NHG trained at least 350 psychiatrists with a private practice nationally in consultation techniques together with hundreds of GPs, and this method is being performed in all regions. Mental Health Institutions (MHIs) contributed as well [77].

The *Project Steunpunt Tussen de Lijnen* [Support Between the Lines] showed that of all nationally registered consultations in primary care, 6.9% were delivered by a psychiatrist [78].

A survey in 436 GPs in Amsterdam showed that they asked consultation for patients with common mental disorders [74]. In an RCT that evaluated the effective-

ness of the consultation model, depressive disorder (23%), anxiety disorder (43%) personality disorder (20%) and somatoform disorder (14%) led to a consultation request [71]. Psychiatrists can provide consultation to GPs aimed at diagnosis and indication for treatment, together with patient and GP. The focus of consultation is generally if and how the treatment can be provided in the primary care setting, and to instruct the GP accordingly, or otherwise to suggest adequate referral to the mental health care setting [79].

Registered psychiatric nurses

In the Netherlands, most of the registered psychiatric nurses are in fact mental health nurses who work in a Mental Health Institution but who also support GPs in their primary care practice. The work that they do in the primary care setting consists, for 70%, of a diagnostic intervention in the sense of distinguishing between mental problems and mental disorder, and motivating patients for treatment [80]. In 65% of cases they also treat the patients in the primary care setting in five sessions (28%), or one session (13%). In 75% of cases, psycho education was given to the patient. The prevalence of disorders or problems was 36% for depressive disorder, 46% for psychosocial problems, 9% schizophrenia, 24% anxiety disorder, 5% somatoform disorder, and 15% personality disorder [81]. In most cases however, the registered nurses function as an intermediary between primary care practice and mental health setting, and arrange the referrals, also to themselves; this way, they function as a gatekeeper instead of the GP [82].

Discussion

In this study, several limitations have been noted. First of all, the literature on what kind of care is provided by what kind of professionals in the primary care setting and for which patients has not yet been established as such in systematic research. Clearly, an observational study would be needed to establish this. However, aided by extensive literature and by consultation of the experts and Associations, quite a complete overview of the state of the art in primary care can be formulated.

A second limitation is that the professional Associations might have given information that would reflect their policy. However, only a minority of the persons consulted represented the professional organisations. Moreover, the advice and information offered was checked whenever possible against the opinions and information of the independent experts.

A third limitation of the literature is that it tended to focus on what should be done, not on actual practice, for patients in the primary care setting. However, despite these limitations, the available literature provides some answers as to which type of professional provides what kind of care for patients with psychological disorders and problems in the field of primary care.

A fourth limitation of this study is that different professional organisations use different classification systems for mental problems or mental disorder. However, most of them used the DSM-IV categories as well. DSM-IV categories can be applied for syndromes, but also for symptoms, as mentioned earlier. Although the IC-PC gives this possibility as well, this is not used by most other professionals and can be easily transmitted to DSM-IV codes. For uniformity, the DSM-IV classification system was therefore used. This way, we made it possible to compare between professionals, including GPs.

Despite these limitations, some outlines can be identified as to what the different mental health professionals actually do.

The GP has a complex role in the process of providing care for patients with psychological illnesses and problems. He functions as the gatekeeper and also provides care himself. GPs seem to consider the diagnostics and treatment of common mental disorders as part of their task; for severe mental disorders, such as schizophrenia or bipolar disorder, they tend to refer their patients to Mental Health Institutions. Although initially adherence of GPs to guidelines was a low 10%, indications exist that this percentage is rising [83].

The social worker mainly provides practical and social interventions for clients with psychosocial problems. The primary care psychologist treats psychosocial problems and common mental disorders mostly by means of psychological interventions. While they state that 15 sessions are needed for treatments, most are given in 8–12 sessions. The clinical psychologist also seems to treat patients with common mental disorders as well as a great number of patients with personality disorders. They provide psychological interventions, mostly cognitive behaviour therapy, in up to 16 sessions.

The psychiatrist offers consultation for the GP, in the primary care practice or in his own practice. The registered psychiatric nurse treats patients in the primary care setting and enhances referrals to the Mental Health Institution. To what extent these professionals follow the available guidelines and provide evidence based care is still largely unknown.

Primary care—a market place?

Due to the changing reimbursement system and the lack of clear definition of expertise and responsibilities of the various professionals, the primary care setting has become a marketplace where many different professionals claim to be able to offer every type of treatment. This motivation does not necessarily reflect the actual needs of the patients. There is a lack of knowledge about actual treatment provided by the different specialties in primary care as related to the mental problems or disorder that exists. A clear description of professional responsibility as related to the patient and a clear definition of who is responsible for what, in case of more than one collaborating professional in the field, is duly needed. This should be elaborated with the Associations of the relevant specialties and professionals. Most Associations feel that the GP should remain gatekeeper and should keep the responsibility for the treatment if more professionals are involved with the patient, for example in case a registered nurse from an MHI comes to see the patient in the primary care practice, or in case of a patient with somatoform disorder who is treated by a medical specialist and a primary care psychologist. As some GPs have felt the fact that registered nurses tended to operate more on account of the Mental Health Institutions than as a support for the gatekeeper role of the GP, they embrace the fact that the government supports them in hiring nurse practitioners instead of psychiatric nurses from MHIs. What this will mean in terms of involvement of MHIs in integrated care models remains to be seen.

Distinction of appropriate treatment setting by GAF score

If professionals treat patients in the primary care setting, a definition can be needed of a threshold above which treatment in the primary care setting is appropriate versus treatment in the mental health setting. Such a definition can best be driven by levels of functioning and a result of the expert consultation was that possibly the GAF code on Axis V of the DSM-IV might be used for that (see Box 1).

This GAF score might be of great use for the primary care setting as in this setting general functioning of

patients is very important as indication of severity of the disorder, need of treatment and treatment outcome. It could be a way to elaborate a division of treatment modes in the various settings along a spectrum of severity of mental disorders, as in a chain model or disease management model. However, the feasibility of this model should be evaluated in further research.

Disease management

Disease management is a chronic care model in which patients with a chronic and complex disease receive treatment in a chain model of care in which primary care, mental health care and other medical care are interrelated and in which a care manager oversees the treatment. In the chronic care model of Ed Wagner, the core is a productive interaction between a prepared, proactive team and an informed, activated patient, leading to improved outcomes at patient level [84, 85]. In a stepped care model, a continuous feedback loop on the primary care process is followed. The treatment is always started with the least invasive treatment as possible [86]. Such a model is, however, not always feasible, as some disorders require continuous invasive treatment, such as in case of Diabetes requiring insulin therapy. For such disorders, a matched care model, in which the invasiveness of the first step is dependent of the severity of the disorder, can be used [87]. In the USA, the collaborative stepped care model has been developed. This is a stepped care model in which a GP, a care manager (often a nurse) and a consultant psychiatrist work closely together [88–90]. In the Netherlands, a collaborative care model has been developed in which the patient plays an active role not only in the treatment, but also in the development of the treatment plan: the so-called contracting phase [91]. This treatment plan is evaluated regularly in order to improve adherence of patient and professionals to treatment [92]. Disease management goes even a step further: it includes collaborative stepped care in an organisational and research feedback loop, which can lead to a high societal impact.

Box 1. Use of GAF score as threshold for treatment in primary or secondary health care

If a patient suffers from a condition classified as a V code on Axis I, this is a psychosocial problem requiring treatment in the community or in the primary care setting, depending on the GAF code. In case of a GAF of >60 treatment could be provided in the community setting. This would be prevention and not primary care treatment by the GP. In case of a GAF score of 60–40, treatment should be provided by the GP in the primary care practice; in case of a score of <40, referral to the mental health setting for treatment should be effectuated. In case of Axis I codes other than V codes, treatment should be provided in primary care or mental health care dependent on the GAF scores.

Collaborative care: the preference of the patient

Depressive disorder is one of the most prevalent mental disorders that warrant treatment in disease management programmes. However, providing GPs and other professionals with guidelines and educational measures alone did not seem sufficient [93]. A collaborative care model [94, 95] has been proven to be the most effective so far [96]. Adherence to treatment by patients as well as GPs and care managers is of paramount importance for attaining remission of depression [97] and collaborative care is the most effective intervention model in terms of enhancing adherence [98]. Key predictors of depressive symptom outcomes in a collaborative care model included systematic identification of patients, professional background of care managers (CMs), method of specialist supervision of CMs and medication compliance [89, 90]. Establishing a stepwise screening method in order to identify high risk patients with depressive disorder and to offer those high risk patients treatment is essential [100]. In collaborative care, the opinion of the patient about his illness and the proposed treatment is a main focus. Compliance and adherence to treatment are prioritized. The choice of treatment is secondary, as all treatment options offered to the patient are derived from the multidisciplinary guideline and thus can be considered effective in principle. The underlying philosophy is that a motivated patient will adhere to treatment and thus the intervention will be more effective. In a collaborative care model, treatment is provided by at least two out of three of the following [11-13]: (1) the General Practitioner (GP), (2) a care manager (CM) and (3) a psychiatrist. They establish a treatment plan together with the patient, based on Guidelines for Depressive disorder, and they monitor the treatment following a stepped care procedure with the PHQ9 as indicator for monitoring [91, 92].

The challenge: how can integrated care be developed in the primary care setting?

As it is now, the evidence for effective treatment of common mental disorders is accumulated in the guidelines and professionals are available in the primary care setting. A rise in adherence to these guidelines can be seen, at least in GPs. However, the challenge is to treat 80% of mental disorders which can be treated in the primary care setting, and thus effectively provide a cure for them. This might be established by disease management programmes for the most prevalent disorders, that is: depressive disorder, anxiety

disorder, and somatoform disorder. These are all chronic and complex disorders with multiple co-morbidity. Then, insurance companies might be provided with clear-cut indications. More specifically, clearly described steps are needed for a collaborative care module in which it is clearly indicated which professional takes responsibility for what (part of) the treatment in a multidisciplinary team, and that also indicates who is finally responsible. Care management should be clearly defined as well as the overview task of the GP, in order to enhance integration of care. Clearly defined DBCs, specifically tailored for the primary care setting should be developed with definition of criteria for referral to mental health settings. Collaborative stepped care would require clear definition of evaluation points and psychiatric consultation for decision support. It would be to the benefit of the patients if screening for mental disorder would be performed by nurses, case definition and contracting by GPs, and care management by GP and care manager by whom psychologists could be hired to perform specific treatments. The consultant psychiatrist could provide advice in more complex cases or at scheduled evaluating points. The GAF could be used to indicate when a patient would better be treated in the MHI setting. The GP can, this way, remain gatekeeper of the referral path to mental health care, and remain responsible for treatment of mental disorder in the primary care setting of a multitude of patients, thus enhancing pathways of integrated care in the primary care setting.

Conclusion

Observational research investigating actual treatment modes for patients with mental disorder in the primary care setting is needed. There is no clear distinction of expertise and tasks between the various professionals in primary care. Notably, the distinction between different psychotherapeutic treatment modes provided by psychologists is hard to make. Different professionals use different classification systems, even though the DSM-IV can be used for both mental disorder and psychosocial problems. An alternative way of classifying patients, that takes into account not only mental disorder or problems but especially the level of functioning, is proposed and feasibility of this model should be explored in further research. However, the present situation, with many different professionals available to provide care, with access to guidelines for the most prevalent mental disorders, and with new possibilities for reimbursement, can facilitate development of integrated care models in which primary care and Mental Health Institutions provide care for patients together. Collaborative care models, including stepped care,

are recommended, including an explicit description of the delineation of tasks and expertise for different types of professionals in this setting, based on this adapted level of classification. Research is needed to assess the actual treatment modules in correlation with patient diagnostic classification for the different professions in primary care. Research is also needed to evaluate the feasibility of the GAF code as a means to determine if treatment should occur in the primary care setting or otherwise. In collaborative care models professional responsibilities should be clearly differentiated in order to facilitate integrated care in the primary care setting.

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References

- 1. Ormel J, Von Korff M, Ustun TB, Pini S, Korten A, Oldehinkel T. Common mental disorders and disability across cultures. Results from the WHO Collaborative Study on Psychological Problems in General Health Care. Journal of the American Medical Association 1994 Dec 14;272(22):1741–8.
- 2. Van Marwijk HWJ, Bijl D, Van Gelderen M, De Haan M. NHG-Standard Depressieve stoornis: eerste herziening [Dutch College of General Practitioners Guideline for Depression: first revision]. Huisarts & Wetenschap 2003;46(11):614–23. [In Dutch].
- 3. Tiemens BG, Ormel J, Simon GE. Occurrence, recognition, and outcome of psychological disorders in primary care. The American Journal of Psychiatry 1996 May;153(5):636–44.
- 4. Leon AC, Olfson M, Portera L. Service utilization and expenditures for the treatment of panic disorder. General Hospital Psychiatry 1997 Mar;19(2):82–8.
- 5. Roy-Byrne PP, Stein MB, Russo J, Kraske M, Katon W, Sullivan G, et al. Medical Illness and response to treatment in primary care panic disorder. General Hospital Psychiatry 2005 Jul-Aug;27(4):237–43.
- 6. Rollman BL, Belnap BH, Mazumdar S, Houck PR, Zhu F, Gardner W, et al. A randomized trial to improve the quality of treatment for generalized anxiety disorder and panic disorders in primary care. Archives of General Psychiatry 2005 Dec;62(12):1332–41.
- 7. Roy-Byrne PP, Katon W, Cowley DS, Russo J. A randomized effectiveness trial of collaborative care for patients with panic disorder in primary care. Archives of General Psychiatry 2001 Sep;58(9):869–76.
- 8. Katon W, Russo J, Sherbourne C, Stein MB, Craske M, Fan MY, et al. Incremental costeffectiveness of a collaborative care intervention for panic disorder. Psychological Medicine 2006 Mar;36(3):353–63.
- 9. Roy-Byrne PP, Craske MG, Stein MB, Sullivan G, Bystritsky A, Katon W, et al. A randomized effectiveness trial of cognitive-behavioral therapy and medication for primary care panic disorder. Archives of General Psychiatry 2005 Mar;62(3):290–8.
- 10. Katon WJ, Roy-Byrne P, Russo J, Cowley D. Cost-effectiveness and cost offset of a collaborative care intervention for primary care patients with panic disorder. Archives of General Psychiatry 2002 Dec;59(12):1098–104.
- 11. Katon W, Von Korff M, Lin E, Simon G, Bush T, Robinson P, et al. Collaborative management to achieve treatment guidelines: Impact on depression in primary care. Journal of the American Medical Association 1995 Apr 5;273(13):1026–31.
- 12. Katon W, Von Korff M, Simon G, Walker E, Unutzer J, Bush T, et al. Stepped collaborative care for primary care patients with persistent symptoms of depression: a randomized trial. Archives of General Psychiatry 1999 Dec;56(12):1109–15.
- 13. Katon W, Russo J, Von Korff M, Lin E, Simon G, Bush T, et al. Long-term effects of a collaborative care intervention in persistently depressed primary care patients. Journal of General Internal Medicine 2002 Oct;17(10):741–8.
- 14. King M, Davidson O, Taylor F, Haines A, Sharp D, Turner R. Effectiveness of teaching general practitioners skills in brief cognitive behaviour therapy to treat patients with depression: randomised controlled trial. British Medical Journal 2002 Apr 20;324(7343):947–50.

- 15. Katon W, Von Korff M, Lin E, Lipscomb P, Russo J, Wagner E, et al. Distressed high utilizers of medical care. DSM-III-R diagnoses and treatment needs. General Hospital Psychiatry 1990 Nov;12(6):355–62.
- 16. Katon W, Von Korff M, Lin E, Bush T, Russo J, Lipscomb P, Wagner E. A randomized trial of psychiatric consultation with distressed high utilizers. General Hospital Psychiatry 1992 Mar;14(2):86–98.
- 17. Reid S, Wessely S, Crayford T, Hotopf M. Frequent attenders with medically unexplained symptoms: service use and costs in secondary care. The British Journal of Psychiatry: The Journal of Mental Science 2002 Mar;180:248–53.
- 18. Sartorius N. Psychosomatic medicine and primary health care (PHC). Psychotherapy and Psychosomatics 1989;52 (1–3):5–9.
- 19. Smith GR, Monson RA Jr, Ray DC. Patients with multiple unexplained symptoms. Their characteristics, functional health, and health care utilization. Archives of Internal Medicine 1986 Jan;146(1):69–72.
- 20. Von Korff M, Ormel J, Katon W, Lin EH. Disability and depression among high utilizers of health care. A longitudinal analysis. Archives of General Psychiatry 1992 Feb;49(2):91–100.
- 21. Ormel J, Bartel M, Nolen WA. Onderbehandeling van depressie; oorzaken en aanbevelingen [Undertreatment of depression; causes and recommendations]. Nederlands Tijdschrift voor Geneeskunde 2003;147(21):1005–9.
- 22. Van der Feltz-Cornelis CM, Lyons JS, Huyse FJ, Campos R, Fink P, Slaets JP. Health services research on mental health in primary care. International Journal of Psychiatry in Medicine 1997;27(1):1–21.
- 23. Verhaak PFM, Hoeymans N, Garssen AA, Westert GP. Mental health in the Dutch population and in general practice: 1987–2001. British Journal of General Practice 2005 Oct;55(519):770–5.
- 24. Ministerie van Volksgezondheid, welzijn en Sport [Ministry of Health, Welfare and Sport]. Intentieverklaring Versterking eerstelijnsgezondheidszorg [Declaration of intent: strenghtening primary health care]. Den Haag: Ministerie VWS; 2004. Available from: http://www.minvws.nl/images/CZ-2511922B_tcm19-98069.pdf. [in Dutch]. (Kamerstuk; Sep 20, 2004).
- 25. Landelijke Stuurgroep Multidisciplinaire Richtlijnontwikkeling in de GGZ [National steering groep Multidisciplinary Guideline development for mental disorder]. Multidisciplinaire richtlijn depressie: richtlijn voor de diagnostiek en behandeling van volwassen clienten met een depressie 2005 [Multidisciplinary Guideline for Depression: Guideline for diagnosis and treatment of depressive disorder in adult patients 2005]. Utrecht: Trimbos-Instituut; 2005. Available from: http://www.cbo.nl/product/richtlijnen/folder20021023121843/rl_depressie_2005.pdf. [In Dutch].
- 26. Landelijke Stuurgroep Multidisciplinaire Richtlijnontwikkeling in de GGZ [National steering groep Multidisciplinary Guideline development for mental disorder]. Multidisciplinaire richtlijn angststoornissen 2003: richtlijn voor de diagnostiek, behandeling en begeleiding van volwassen clienten met een angststoornis [Multidisciplinary Guideline for Anxiety Disoder: Guideline for diagnosis and treatment of anxiety disorder in adult patients 2003.]. Utrecht: Trimbos-instituut; 2003. Available from: http://www.cbo.nl/product/richtlijnen/folder20021023121843/angst2004.pdf. [In Dutch].
- 27. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-IV. Washington: American Psychiatric Association; 1994.
- 28. Lamberts H, Magruder K, Kathol RG, Pincus HA, Okkes I. The classification of mental disorders in primary care: a guide through a difficult terrain. International Journal of Psychiatry in Medicine 1998;28(2):159–76.
- 29. Nutting PA, Rost K, Smith J, Werner JJ, Elliot C. Competing demands from physical problems: effect on initiating and completing depression care over 6 months. Archives of Family Medicine 2000 Nov–Dec;9(10):1059–64.
- 30. Vollebergh WAM, de Graaf R, ten Have M, Schoemaker CG, van Dorsselaer S, Spijker J, et al. Psychische stoornissen in Nederland: overzicht van de resultaten van NEMESIS [Mental disorder in the Netherlands: results of NEMESIS]. Utrecht: Trimbos-instituut; 2003. Available from: http://www.trimbos.nl/default211.html?productId=488&back=1. [In Dutch].
- 31. Van der Linden MW, Westert GP, de Bakker DH, Schellevis FG. Tweede nationale studie naar ziekten en verrichtingen in de huisartspraktijk. Klachten en aandoeningen in de bevolking en in de huisartspraktijk [Second National Study into disease and treatment in family practice. Symptoms and ailments in the population and in the family practice]. Utrecht/Bilthoven: NIVEL /RIVM; 2004. (Kernrapport1). Available from: http://www.nivel.nl/nationalestudie/. [In Dutch].
- 32. Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. Psychological Medicine 1979 Feb;9(1):139–45.
- 33. Visscher A, Laurant M, Schattenberg R, Grol R. De rol van de huisarts inzake geestelijke gezondheidszorg: de resultaten van een landelijke enquete [The role of the GP in mental health care: results of a national survey]. Nijmegen: Centre for Quality of Care Research (WOK); 2002. [In Dutch].
- 34. Cox MF, Van der Feltz-Cornelis CM, Terluin B. Somatisatie. Practicum huisartsgeneeskunde [Somatisation]. Maarssen: Elsevier Gezondheidszorg; 1999. [In Dutch].
- 35. Verhaak PF, Tijhuis MA. The somatizing patient in general practice. International Journal of Psychiatry in Medicine 1994;24(2):157–77.
- 36. Blankenstein AH, van der Horst HE, Schilte AF, de Vries D, Zaat JO, Knottnerus, AJ, et al. Development and feasibility of a modified reattribution model for somatising patients, applied by their own general practitioners. Patient Education and Counseling 2002 Jul;47(3):229–35.
- 37. Braspenning JCC, Schellevis FG, Grol RPTM, editors. Tweede nationale studie naar ziekten en verrichtingen in de huisartspraktijk. Kwaliteit huisartsenzorg belicht [Second National Study into disease and treatment in family practice.

- Quality of primary care]. Utrecht/Nijmegen: NIVEL/Centre for Quality of Care Research (WOK); 2004. (Kernrapport 4). Available from: http://www.nivel.nl/nationalestudie/. [In Dutch].
- 38. Cardol M, van Dijk L, de Jong JD, de Bakker DH, Westert GP. Tweede nationale studie naar ziekten en verrichtingen in de huisartspraktijk. Huisartsenzorg: wat doet de poortwachter? [Second National Study into disease and treatment in family practice. Family practitioner: what does the gatekeeper do?]. Utrecht/Bilthoven: NIVEL/RIVM; 2004. (Kernrapport 2). Available from: http://www.nivel.nl/nationalestudie/. [In Dutch].
- 39. Van der Feltz-Cornelis CM, Van der Horst H. Handboek somatisatie: lichamelijk onverklaarde klachten in de eerste en tweede lijn. [Handbook Somatisation: medically unexplained symptoms in primary and secondary care]. Utrecht: De Tijdstroom; 2003. [In Dutch].
- 40. Laurant M, van Lin N, Braspenning J, Grol RPTM. Geestelijke gezondheidszorg [Mental Health]. In: Braspenning JCC, Schellevis FG, Grol RPTM, editors. Tweede nationale studie naar ziekten en verrichtingen in de huisartspraktijk. Kwaliteit huisartsenzorg belicht [Second National Study into disease and treatment in family practice. Quality of primary care]. Utrecht/Nijmegen: NIVEL/Centre for Quality of Care Research (WOK); 2004. (Kernrapport 4). Available from: http://www.nivel.nl/nationalestudie/. p. 116–26. [In Dutch].
- 41. Verhaak PFM, Zantinge EM, Voordouw I, Berg JF. GGZ-consultaties aan de eerstelijnszorg (Registratie 2000–2002) [Mental Health consultations in primary care (Registration 2000–2002)]. Utrecht: NIVEL; 2003. Available from: http://www.nivel.nl/pdf/ggz-consultaties-2001–2002.pdf. [In Dutch].
- 42. Verhaak PFM, Zantinge EM, Berg JF, Voordouw I. Drie jaar ervaring met Consultatieregeling GGZ ten behoeve van de eerste lijn [Three years experience with mental health consultation in primary care]. Maandblad Geestelijke volksgezondheid 2003;58(6):547–58. [In Dutch].
- 43. Verhaak PFM, Groenendijk J, Zantinge EM, Vonk E, Voordouw I, van de Veen C. GGZ-consultaties aan de eerstelijnszorg (Registratie 2000–2004) [Mental Health consultations in primary care (Registration 2002–2004)]. Utrecht: NIVEL; 2005. Available from: http://www.nivel.nl/pdf/ggz-consultaties-aan-de-eerstelijnszorg-2005.pdf. [In Dutch].
- 44. Buis WMNJ. Onbegrepen lichamelijke klachten, een pact tussen huisarts en specialist: Psychiatrie op het grensvlak van eerste en tweede lijn [Medically Unexplained Symptoms, a pact between GP and specialist: Psychiatry at the interface of primary and secondary care]. Medisch Contact 2002;57(6):218–20. [in Dutch].
- 45. Bensing JM, Verhaak PFM. Psychische problemen in de huisartspraktijk veelvormiger en diffuser dan in de psychiatrie [Mental problems in family practice complexer and more diffuse than in psychiatry]. Nederlands Tijdschrift voor Geneeskunde 1994;138(3):130–5. [In Dutch].
- 46. Berardi D, Menchetti M, Dragani A, Fava C, Leggieri G, Ferrari G. The Bologna Primary Care Liaison Service: first year evaluation. Community Mental Health Journal 2002 Dec;38(6):439–45.
- 47. Van der Feltz-Cornelis CM, Wijkel D, Verhaak PFM, Collijn DH, Huyse FJ, Van Dyck R. Psychiatric consultation for somatizing patients in the family practice setting: a feasibility study. International Journal of Psychiatry in Medicine 1996;26(2):223–39.
- 48. Sartorius N. Psychosomatic medicine and primary health care (PHC). Psychotherapy and Psychosomatics 1989;52 (1–3):5–9.
- 49. Meijer SA, Zantinge EM, Verhaak PFM. Evaluatie versterking eerstelijns GGZ: een onderzoeksprogramma om het beleid ter versterking van de eerstelijns GGZ te evalueren: eindrapportage landelijk onderzoek [Evaluation of support of primary care psychiatry: a research programme evaluating the mental health policy in primary care: Final national report]. Utrecht: NIVEL; 2004. Available from: http://www.nivel.nl/pdf/evaluatie-versterking-eerstelijns-ggz.pdf. [In Dutch].
- 50. Verhaak P, De Bruin A, Bakker R, Maree J. Het algemeen maatschappelijk werk in de 1e-lijns GGZ: een onderzoek naar de bijdrage van het AMW aan de GGZ-poortwachtersfunctie sinds de decentralisatie [Social work in primary care]. Utrecht: NIVEL; 1997. Available from: http://www.nivel.nl/. [In Dutch].
- 51. Brunenberg W, Neijmeijer L, Hutschemaekers G. Beroep: maatschappelijk werker: een verkennend onderzoek naar persoon, werk en werkplek van maatschappelijk werkers in de gezondheidszorg [Profession: social worker]. Utrecht: Nederlands centrum Geestelijke volksgezondheid; 1996. [In Dutch].
- 52. Jagt L, Jagt N. Taakgerichte hulpverlening in het maatschappelijk werk [Performance centered care in social work]. Houten: Bohn Stafleu Van Loghum; 1990. [In Dutch].
- 53. Nederlandse Vereniging van Maatschappelijk Werkers [Dutch Association of Social Workers]. Beroepsprofiel van de maatschappelijk werker [Professional profile of the social worker]. Utrecht: NVMW; 2006. [In Dutch].
- 54. Potting J, Buitink JA. AMW in beeld 1990: jaarrapport 1990 [Social work in 1990]. Utrecht: VOG; 1990. [In Dutch].
- 55. Scholte M. Modulair aanbod AMW ten behoeve van de eerstelijns GGz [Modular treatment in social work in primary care]. Utrecht: NIZW; 2004. [In Dutch].
- 56. Meijer SA, Zantinge EM, Verhaak PFM, Scholten M, Pols J, Valenkamp MW. Evaluatie versterking eerstelijns GGZ: een onderzoeksprogramma om het beleid ter versterking van de eerstelijns GGZ te evalueren: tweede interim rapportage maart 2003 [Evaluation of support of primary care psychiatry: a research programme evaluating the mental health policy in primary care: Second interim report]. Utrecht: NIVEL; 2003. Available from: http://www.nivel.nl/pdf/evaluatie-versterking-eerstelijns-GGZ-maart-2003.pdf. [In Dutch].

- 57. Hutschemaekers G, van de Camp K, van Hattum M. Psychotherapie in getallen [Psychotherapy in figures]. Utrecht: Trimbos-instituut; 2001. [In Dutch].
- 58. Wentink M, van Hattum MJC, Hutschemaekers G. De eerstelijnspsycholoog gevolgd [Following the primary care psychologist]. Utrecht: Trimbos-instituut; 2002. [In Dutch].
- 59. Nederlands Instituut van Psychologen (NIP) [Dutch professional association of psychologists]. Kwalificatieregeling Eerstelijnspsychologie [Qualification for primary care psychology]. Amsterdam: NIP; 2005. Available from: http://www.psynip.nl/upload4/eerstelijns/kwalificatieregelingeerstelijn2005.pdf. [In Dutch].
- 60. Landelijke Vereniging van Eerstelijnspsychologen (LVE) [Dutch Association of Primary Care Psychologists]. Jaarbericht 2004 [Year report 2004]. Amsterdam: LVE; 2004. [In Dutch].
- 61. Landelijke Vereniging van Eerstelijnspsychologen (LVE) [Dutch Association of Primary Care Psychologists]. Profileren, positioneren en excelleren vanuit een nieuw perspectief: beleidsprogramma 2006–2010 [Policy programme 2006–2010]. Amsterdam: LVE; 2005. [In Dutch].
- 62. Landelijke Vereniging van Eerstelijnspsychologen (LVE) [Dutch Association of Primary Care Psychologists]. De LVE en de eerstelijnspsychologen: feiten en kwaliteitsbeleid 2005 [The Primary Care psychologists and their Association]. Amsterdam: LVE; 2005. [In Dutch].
- 63. Groen PN. Eerstelijnspsychologie: ontwikkeling en beleid [Primary care psychology: developments]. In: Derksen JJL, van de Staak CPF, editors. Behandelingsstrategieen voor de eerstelijnspsycholoog. Houten/Diegem: Bohn Stafleu Van Loghum; 2000. p. 1–15. [In Dutch].
- 64. van Hattum M, Hutschemaekers G. De klinisch psycholoog (NIP) gevolgd [Following the clinical psychologist]. Utrecht: Trimbos-instituut; 2001. [In Dutch].
- 65. Nederlands Instituut van Psychologen (NIP) [Dutch professional association of psychologists]. Jaarverslag 2005 [Year report 2005]. Amsterdam: NIP; 2005. [In Dutch].
- 66. Hutschemaekers G. Onder professionals: hulpverleners en clienten in de geestelijke gezondheidszorg [Between professionals: caretakers and clients in mental health care]. Nijmegen: SUN; 2001. [In Dutch].
- 67. Gezondheidsraad [The Health Council of the Netherlands]. Doelmatigheid van langdurige psychotherapie [Efficiency of longer term psychotherapy]. Den Haag: Gezondheidsraad; 2001. [In Dutch].
- 68. Van der Feltz-Cornelis CM. Eerstelijnspsychiatrie [Primary care psychiatry]. In: Schene AH, Boer F, Heeren TJ, Henselmans HWJ, Sabbe B, van Weeghel J, editors. Jaarboek voor psychiatrie en psychotherapie 2003–2004 [Yearbook for psychiatry and psychotherapy]. Houten/Mechelen: Bohn Stafleu Van Loghum; 2003. [In Dutch].
- 69. Caplan G. Types of mental health consultation. American Journal of Orthopsychiatry 1963 Apr;33:470-81.
- 70. Buis WMNJ. Psychiatrische diagnostiek en advies ten dienste van de huisarts [Psychiatric Diagnosis and Advice in support of the GP] [Thesis]. Amsterdam: Uitgeverij Thesis; 1990. [In Dutch].
- 71. Van der Feltz-Cornelis CM. Psychiatric consultation for patients with somatoform disorder in general practice. Amsterdam: VU; 2002.
- 72. Van der Feltz-Cornelis C, Van Oppen P, Ader H, Van Dyck R. Randomised controlled trial of collaborative care by psychiatric consultation for persistent medically unexplained symptoms in general practice. Psychotherapy and Psychosomatics 2006;75(5):282–9.
- 73. Landelijke Commissie Geestelijke Volksgezondheid [National Committee on Mental Health]. Zorg van velen: eindrapport van de Landelijke Commissie Geestelijke Volksgezondheid [Care of many: Final Report of the National Committee on Mental Health]. Den Haag: Landelijke Commissie Geestelijke Volksgezondheid; 2002. [In Dutch].
- 74. Brunenberg W, Rondez M, Hutschemaekers G. De psychiater gevolgd: een verkennend onderzoek naar psychiaters in de GGZ en de eigen praktijk [The psychiatrist followed: an exploration of psychiatrists in Mental Health Practice and in private practice]. Utrecht: Trimbos-instituut; 1998. [In Dutch].
- 75. Herbert C, Van der Feltz-Cornelis CM. Wat wil de huisarts? Inventarisatie van wensen van huisartsen ten aanzien van psychiatrische consulten in hun praktijk [What does the GP want? Inventarisation of GPs needs in terms of psychiatric consultation in their practice]. MGv: Maandblad Geestelijke volksgezondheid 2004;59(3):205–13. [In Dutch].
- 76. Herbert C, Van der Feltz-Cornelis CM. Psychiatrische consultatie door de huisarts. Antwoord op brief van WNMJ Buis [Psychiatric consultation by the GP. Reply to the letter of WNMJ Buis]. Maandblad Geestelijke volksgezondheid 2006; 59(6):483. [In Dutch].
- 77. De Jong ORW, Bruin DSR, Quack AWBM. Resultaatmeting Psychiater en Kwaliteit 2002–2004 [Result Assessment Psychiatrist and Quality 2002–2004]. Hoofddorp: TNO; 2004. [in Dutch].
- 78. Verhaak PFM, Voordouw I, Groenendijk J, Zantinge EM, Van de Veen C, Vonk E. GGZ-consultaties aan de Eerstelijnszorg: Eindrapportage [Mental Health Consultation in Primary Care: Final Report]. Utrecht: NIVEL; 2006. Available from: http://www.nivel.nl/pdf/GGZ-consultaties-aan-de-eerstelijnszorg-eindrapportage-2006.pdf. [In Dutch].
- 79. Nederlandse Vereniging voor Psychiatrie (NVvP) [Dutch association for Psychiatry]. Profielschets Psychiater [Profile of the psychiatrist]. Utrecht: NVvP; 2005. Available from: http://www.nvvp.net/upload/35437/profielschets_herziene_2005.pdf. [In Dutch].
- 80. Bosman M, De Lange J. De functie van de GGz-verpleegkundige in de huisartsenpraktijk [The function of the Psychiatric nurse in Primary Care]. Utrecht: Trimbos instituut; 2002. [In Dutch].

- 81. Nederlandse Vereniging van Sociaal Psychiatrisch Verpleegkundigen (NVSPV) [Dutch association for psychiatric nurses]. Profiel [Profile of the psychiatric nurse]. Utrecht: NVSPV; 1998. Available from: http://www.nvspv.nl/publicaties/publicatiespdf/profiel_spv-2edruk.pdf. [In Dutch].
- 82. Meijer SA, Zantinge EM, Verhaak PFM. Evaluatie versterking eerstelijns GGZ: een onderzoeksprogramma om het beleid ter versterking van de eerstelijns GGZ te evalueren: eerste interim rapportage: maart 2002 [Evaluation of support of primary care psychiatry: a research programme evaluating the mental health policy in primary care: First interim report]. Utrecht: NIVEL; 2002. [In Dutch].
- 83. Franx G, Spijker J, Huyser J, Van Doelder P. Daling in depressie: doorbraakmethode brengt afname in overbehandeling teweeg [Less Depression: breakthrough method induces decrease in overtreatment of depression] Medisch Contact 2006;61(40):1592–5. [In Dutch].
- 84. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. The Journal of the American Medical Association 2002 Oct 9;288(14):1775–9.
- 85. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. Journal of the American Medical Association 2002 Oct 16;288(15):1909–14.
- 86. Meeuwissen JAC, Donker MCH. Minder is meer. Stepped care in de geestelijke gezondheidszorg [Less is more. Stepped care in mental health]. Maandblad Geestelijke volksgezondheid 2004 Nov;59(11):904–915. [In Dutch].
- 87. Hutschemaekers GJM, Tiemens BG, De Winter M. Effects and side-effects of integrating care: the case of mental health care in the Netherlands. International Journal of Integrated Care [serical online] 2007 Aug 27;7. Available from: http://www.ijic.org.
- 88. Boudreau DM, Capoccia KL, Sullivan SD, Blough DK, Ellsworth AJ, Clark DL, et al. Collaborative care model to improve outcomes in major depression. The Annals of Pharmacotherapy 2002 Apr;36(4):585–91.
- 89. Gilbody S, Bower P, Fletcher J, Richards D, Sutton AJ. Collaborative care for depression: a cumulative meta-analysis and review of longer-term outcomes. Archives of Internal Medicine 2006 Nov 27;166(21):2314–21.
- 90. Bower P, Gilbody S, Richards D, Fletcher J, Sutton A. Collaborative care for depression in primary care. Making sense of a complex intervention: systematic review and meta-regression. The British Journal of Psychiatry 2006 Dec;189:484–93.
- 91. Van der Feltz-Cornelis CM, Van Oppen P, Ader H, Van Dyck R. Collaborative care voor lichamelijk onverklaarde klachten in de huisartsenpraktijk: Uitkomst en opbrengst voor de huisarts [Collaborative care for medically unexplained symptoms in primary care. Outcome and benefits for the GP]. Huisarts and Wetenschap 2006;49(7):34–9. [In Dutch].
- 92. Ijff MA, Huijbregts KM, Van Marwijk HW, Beekman ATF, Hakkaart-van Roijen L, Rutten FF, Unutzer J, Van der Feltz-Cornelis CM. Cost-effectiveness of collaborative care including PST and an antidepressant treatment algorithm for the treatment of major depressive disorder in primary care; a randomised clinical trial. BMC Health Services Research 2007 Mar 1;7:34.
- 93. Gilbody S, Whitty P, Grimshaw J, Thomas R. Improving the recognition and management of depression in primary care. Effective Health Care: Bulletin on the effectiveness of health service interventions for decision makers 2002;7(5). Available from: http://www.york.ac.uk/inst/crd/pdf/ehc75.pdf.
- 94. Unutzer J, Katon W, Callahan C, Walliams J, Hunkeler E, Harpole L, et al. Collaborative care management of late life depression in primary care: a randomised controlled trial. The Journal of the American Medical Association 2002 Dec 11;288(22):2836–45.
- 95. Unutzer J, Katon W, Williams JW, Callahan CM, Harpole L, Hunkeler EM, et al. Improving primary care for depression in late life: the design of a multicenter randomized trial. Medical Care 2001 Aug;39(8):785–99.
- 96. Richards DA, Lovell K, Gilbody S, Gask L, Torgerson D, Barkham M, et al. Collaborative care for depression in UK primary care: a randomized controlled trial. Psychological Medicine 2008 Feb;38(2):279–87. Epub 2007 Sep 6.
- 97. Kilbourne AM, Schulberg HC, Post EP, Rollman BL, Belnap BH, Pincus HA. Translating evidence-based depression management services to community-based primary care practices. Milbank Quarterly 2004;82(4):631–59.
- 98. Vergouwen AC, Bakker A, Katon WJ, Verheij TJ, Koerselman F. Improving adherence to antidepressants: a systematic review of interventions. Journal of Clinical Psychiatry 2003;64(12):1415–20.
- 99. Bower P, Gilbody S, Richards D, Fletcher J, Sutton A. Collaborative care for depression in primary care. Making sense of a complex intervention: systematic review and meta-regression. The British Journal of Psychiatry 2006 Dec;189:484–93.
- 100. Gilbody S, House AO, Sheldon TA. Screening and case finding instruments for depression. Cochrane Database of Systematic Reviews 2005 Oct 19;(4):CD002792.