General Practitioners' opinions on their practice in mental health and their collaboration with mental health professionals.

Nadia Younes, Isabelle Gasquet, Pierre Gaudebout, Marie-Pierre Chaillet, Viviane Kovess, Bruno Falissard, Marie-Christine Hardy Bayle

To cite this version:

Nadia Younes, Isabelle Gasquet, Pierre Gaudebout, Marie-Pierre Chaillet, Viviane Kovess, et al.. General Practitioners' opinions on their practice in mental health and their collaboration with mental health professionals.. BMC Family Practice, 2005, 6, pp.18. 10.1186/1471-2296-6-18 . inserm-00090852

HAL Id: inserm-00090852
https://www.hal.inserm.fr/inserm-00090852

Submitted on 5 Sep 2006

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

BMC Family Practice

BioMed Central

Research article

Open Access

General Practitioners' opinions on their practice in mental health and their collaboration with mental health professionals

Nadia Younes*[1,2], Isabelle Gasquet[2,3], Pierre Gaudebout[3], Marie-Pierre Chaillet[1], Viviane Kovess[4], Bruno Falissard[2] and Marie-Christine Hardy Bayle[1]

Address: [1]Academic Unit of Psychiatry, Centre Hospitalier de Versailles, 177 Rue de Versailles 78157 Le Chesnay Cedex. France, [2]National Institute of Health and Medical Research (INSERM-U669), Hôpital Cochin, Paris, France, [3]Direction of Medical Policy, Assistance Publique – Hôpitaux de Paris, paris, France and [4]MGEN, Mental Health Foundation, Paris, France

Email: Nadia Younes* - nadiayounes@wanadoo.fr; Isabelle Gasquet - isabelle.gasquet@sap.aphp.fr; Pierre Gaudebout - pierre.gaudebout@sap.aphp.fr; Marie-Pierre Chaillet - MCHAILLET@ch-versailles.fr; Viviane Kovess - vkovess@mgen.fr; Bruno Falissard - falissard_b@wanadoo.fr; Marie-Christine Hardy Bayle - MCHardyBayle@ch-versailles.fr

* Corresponding author

Published: 02 May 2005

BMC Family Practice 2005, **6**:18 doi:10.1186/1471-2296-6-18

Received: 28 November 2004
Accepted: 02 May 2005

This article is available from: http://www.biomedcentral.com/1471-2296/6/18

© 2005 Younes et al; licensee BioMed Central Ltd.
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

Background: Common mental health problems are mainly treated in primary care settings and collaboration with mental health services is needed. Prior to re-organisation of the mental health care offer in a geographical area, a study was organized: 1) to evaluate GPs' opinions on their day-to-day practice with Patients with Mental Health Problems (PMHP) and on relationships with Mental Health Professionals (MHPro); 2) to identify factors associated with perceived need for collaboration with MHPro and with actual collaboration.

Methods: All GPs in the South Yvelines area in France (n = 492) were informed of the implementation of a local mental health program. GPs interested in taking part (n = 180) were invited to complete a satisfaction questionnaire on their practice in the field of Mental Health and to include prospectively all PMHP consultants over an 8-day period (n = 1519). For each PMHP, data was collected on demographic and clinical profile, and on needs (met v. unmet) for collaboration with MHPro.

Results: A majority of GPs rated PMHP as requiring more care (83.4%), more time (92.3%), more frequent consultations (64.0%) and as being more difficult to refer (87.7%) than other patients. A minority of GPs had a satisfactory relationship with private psychiatrists (49.5%), public psychiatrists (35%) and social workers (27.8%). 53.9% had a less satisfactory relationship with MHPro than with other physicians.

Needs for collaboration with a MHPro were more often felt in caring for PMHP who were young, not in employment, with mental health problems lasting for more than one year, with a history of psychiatric hospitalization, and showing reluctance to talk of psychological problems and to consult a MHPro.

Needs for collaboration were more often met among PMHP with past psychiatric consultation or hospitalization and when the patient was not reluctant to consult a MHPro. Where needs were not met, GP would opt for the classic procedure of mental health referral for only 31.3% of their PMHP.

Conclusion: GPs need targeted collaboration with MHPro to support their management of PMHP, whom they are willing to care for without systematic referral to specialists as the major therapeutic option.

Background

In developed countries, mental health problems, especially anxious and depressive disorders, are frequent and a leading cause of disability [1-4]. Since they are potentially remediable when adequately treated, they represent a major public health challenge [5,6]. A major obstacle to the instatement of adequate care is that when people do seek help, generally from their General Practitioner (GP), most of these problems are not recognized or not appropriately treated [4,7-9]. GPs have thus received special attention to improve mental health care because of their unique position [10]. Educational interventions have been proposed but have shown some limitations: temporary effect, no improvement in recognition of depression nor in patient recovery. They seem effective only when accompanied by organizational interventions [10-13]. Organizational interventions, based on the interaction between primary and secondary care, have been developed in several countries through local initiatives or national mental health reforms for improving depression care: in US [13,14], in UK [15], in Australia [16,17], in Canada [18,19]. They focus on the key role of GPs and on different forms of collaboration with mental health professionals (education, communication, on-site collaboration, collaborative care, stepped collaborative care, quality improvement, case management...). In France, collaboration is also encouraged by national government policies ("plan santé mentale" 2001 and 2005–2008). However collaboration of this sort requires pragmatic definition in clinical practice: for which patients with mental health problems (PMHP) do GPs need assistance from Mental Health Professionals (MHPro)? What sort of assistance? Why has this assistance not been organized up till now, i.e. what are the barriers to collaboration? Defining these issues is important before the development of quality improvement programs, considering some disappointing instances of collaboration between GPs and psychiatrists, where GPs have made limited use of opportunities for collaborative care with psychiatrists in spite of GP-reported perceived needs [20].

To design effective quality improvement programs based on targeted strategies among professionals and adapted to professional needs in the pilot area of South Yvelines, a survey was organized to gather information on some of these questions, with two objectives.

First, to evaluate satisfaction with mental health practice, exploring GPs' opinions on their patients with mental health problems (PMHP) and on relationships with Mental Health Professionals (MHPro).

Second, to measure factors associated with GPs' needs for collaboration with MHPro, with collaboration actually occurring, and with instances where needs are not met.

Methods

Population

All the 492 GPs of the area of "South Yvelines" (600 000 inhabitants) were approached by post in spring 2000 to recruit for the survey with a postage-paid reply envelope if they agreed to take part in this local area mental health program.

GPs were asked to include prospectively over an 8-day period all consulting patients over 15 years old "for whom a Mental Health Problem was the main current problem".

Data collected

GPs completed two questionnaires requiring approximately 30 minutes to complete:

First a questionnaire on their overall practice in the field of mental health, including data on their opinions on their PMHP compared to other patients, and on relationships with MHPro compared to other physicians.

A second questionnaire was completed for each PMHP included. Data was collected on demographic profile, clinical status, care provision and needs for collaboration with MHPro (met or unmet). To be feasible in daily practice, diagnoses were established using a classification developed by a working group of GPs and psychiatrists, secondarily translated into CIM-10 main diagnostic groups by 2 physicians independent from the study (a psychiatrist and a GP).

Statistical analysis

Descriptive and comparative analyses were performed with SAS 8.2. Three groups of PMHP were considered: no need for collaboration with MHPro expressed by the GP ("No need"); need for collaboration with MHPro but no actual collaboration ("Need Unmet") and need for collaboration with MHPro and actual collaboration ("Need Met"). Factors leading to a need for collaboration ("Need") and to actual collaboration ("Need met") were determined using two multivariate logistic regressions. The patients' demographic and clinical variables were entered into the regressions where chi-square tests (for categorical variables) and ANOVA tests (for continuous variables) produced a 5% level of significance. The "need" multivariate logistic regression, obtaining a non-significant result on the Hosmer and Lemeshow Goodness-of-Fit Test ($p = 0.95$), concerned 1007 patients. The "need met" multivariate logistic regression also producing a non-significant result on the Hosmer and Lemeshow Goodness-of-Fit Test ($p = 0.87$), concerned 532 patients.

Table 1: Characteristics of GPs responding to the survey (N = 180)

	Respondents N = 182	Yvelines GPs N = 492	P
Male (%)	69.4	78.4	ns (0.3)
Age in years (%)			
25 to 34	9.4	7.7	
35 to 44	40.6	45.1	
45 to 54	43.9	37.0	0.05
55 to 64	5.6	8.7	
65 and over	0.6	1.6	
Time in current practice (%)			
< 5 years	15.0	na	
5 to 10	18.9	na	
> 10	66.1	na	
Type of practice (%)			
Private practice exclusively	79.4	na	
Private and public practice	20.6	na	
Mean working hours per week (sd)	51.5(15)	na	

na Data not available

Results

Characteristics of participating GPs and patients enrolled

One hundred and eighty GPs volunteered to participate to the mental health program (36.6% of local area GPs). They were predominantly male (69.4%), experienced providers (66.1% had been working for more than 10 years) and most were exclusively in private practice (79.4%). Compared to local area GPs, they were younger (p = 0.05) but did not differ for gender (Table 1).

The GPs enrolled 1519 MHP patients, representing 15.0 % of the overall number of consultations. Each participating GP saw 8 MHP patients on average (range 0–35). A majority of MHP patients were female (68.2%), mean age was 46.9 years (sd = 15.9). 61.4% had a current professional activity, 25.5% were living alone and 13.7% had a national disability allowance. The most frequent diagnoses were anxious and depressive disorders (33.7% and 31.3%). The disorders had lasted on average for 6.7 years (sd = 8.1). 18.3% of patients had a history of psychiatric hospitalization, 51% a history of care by psychiatrists. 71.6% had been managed by GPs for more than 2 years. Consultations lasted on average 23.2 minutes (sd = 8.9). According to the GPs, for 70.8% it was easy to talk about "psychological problems" but it was less easy to talk about a psychiatric consultation (proving easy for only 43.4%).

GPs' opinions on Patients with Mental Health Problems and on relationships with Mental Health Professionals

Four GPs out of five considered that patients with MHP have more expectations regarding care (83.4%), require more consultation time (92.3%) and are more difficult to refer to a specialist (87.7%) than other patients. A majority of GPs (64.2%) regretted having so many patients with MHP. 46.6% considered that PMHP expectations in terms of medical results are greater than among other patients. Few GPs complained about non-punctuality or unreliability of PMHP with regard to appointments (14.4%) (Table 2).

While 78.4% of GPs were 'very' or 'mostly' satisfied with their relationships with other GPs, only 49.5% rated the same level of satisfaction for relationships with private psychiatrists, 35.0% for public psychiatrists and 27.8% for social workers. None of the GPs was 'very' satisfied with the information given by mental health professionals, and only 23.9% were mostly satisfied (Table 3).

Factors associated with GPs' needs for collaboration with Mental Health Professionals and with these needs being met

GPs felt a need for collaboration with a MHPro for 43.3% of their MHP patients. Within this group only 35.3% felt that their need was met (15.3% of the overall PMHP group).

Where needs were not met, for 64.1% of their patients GPs do not know what type of collaboration to seek, and for 31.3% they considered there was a need for care by MHPro, and for occasional advice for 4.6%. They would like to be able to refer mainly because they lack confidence with this type of care (48.3 %) but also because it

Table 2: GPs' opinion on their Patients with Mental Health Problems compared to their other patients (N = 182)

%	Fully agree	Rather agree	Rather disagree	Completely disagree	No opinion
Have more expectations for care	30.0	53.4	10.5	1.1	5,0
Have more expectations for results	9.4	37.2	45.6	2.8	5,0
Expect more frequent consultations	22.2	42.8	26.1	3.3	5.6
Require more time	58.9	33.4	4.4	1.1	2.2
Are more difficult to refer	53.3	34.4	6.7	3.9	1.7
Are less punctual/ reliable on appointments	7.7	6.7	27.8	51.7	6.1

Table 3: GPs' satisfaction of quality of exchanges with Health Professionals (N = 182)

%	Very satisfied	Fairly Satisfied	Fairly Unsatisfied	Very unsatisfied	No opinion
Relationship with					
...private psychiatrists	6.7	42.8	36.1	11.7	2.8
...public psychiatrists	3.5	31.5	21.8	8.1	35.1
...with social workers	1.1	26.7	37.8	10.6	23.8
...other primary physicians	17.8	60.6	16.7	1.7	3.3
...health professionals in general	9.5	73.9	14.4	1.7	0.6
Information received from mental health professionals in case of collaboration for a patient	0.0	23.9	42.8	28.9	4.4
	Much better	Better	Same	Worse	Much worse
Relationship with mental health professionals in comparison with other health colleagues	0.6	4.5	41.0	40.4	13.5

requires too much time (17.8%). 70.5% cited a psychiatrist as the desired collaborator, and 22.7% a psychologist.

The need for collaboration with a MHPro (whether met or unmet) was more often felt by GPs for PMHP who were young ($p < .0001$), not in employment ($p = .002$), with mental health problems lasting for more than 1 year ($p = .003$) and past psychiatric hospitalization ($p < .0001$). GPs' needs for collaboration were more frequent when the patient was reluctant to consult a MHPro. Further to this, GPs seem to be rather more comfortable with patients suffering from anxiety than with other diagnoses. Finally, where a need for collaboration was felt, consultations were shorter (Table 4, ' [see Additional file 1]').

The need for collaboration was more often met in case of past psychiatric consultation ($p = .0002$) or hospitalization ($p = .0004$) and when the patient showed no reluctance to consult a MHPro (Table 4, ' [see Additional file 1]').

The more emphasis GPs put on collaboration, the more positive they evaluated their relationships with mental health professionals to be. 57.5% considered relationships with MHPro as less satisfactory than those with other health professionals when no need for collaboration was felt, 55.9% in case of unmet need and 48.1% when need was met ($p = 0.004$).

Discussion

Limitations

More than one third of GPs contacted volunteered for the local area mental health program and participated in the study. Results may reflect a particular population of GPs, younger than the average and probably already more involved in mental health care in their ordinary practice than non-respondents (who were however not contacted). It is likely that mental health actions targeting GPs can reach only a certain proportion. It has indeed been shown that the willingness to collaborate is greater among physicians under the age of 50 [21].

Caution is also required in the interpretation of this study on account of a second limitation. This resides in the fact that the results are based on GPs' reports on patients that they identified as PMHP. This use of assessment by the GPs could involve a recruitment bias, with a selection of the most severe patients. Indeed, external audits among general practice attendees have shown high unmet needs of mental health treatments but also PMHP as having less severe, less chronic and more readily treatable disorders [22-25]. The study option was to approach GPs' day to day practice with such patients and their subjective perceptions. The focus is on their attitudes towards patients they identify as PMHP and their attitudes towards the relevant specialist services, the aim being to adapt the mental health program to these particular attitudes.

GPs' opinions on their Patients with Mental Health Problems

In the study, PMHP identified by primary care respondents presented mainly anxious and depressive disorders. GPs have rather negative attitudes towards them. Previous papers have noted that complicated depressive symptoms are frequently encountered in primary care [26-28] and PMHP are time-consuming and require particular skills [29]. But as shown in our study, managing PMHP is a key part of a GP's job, and a part they are willing to take on if sufficient support and expertise are available.

GPs' collaboration with Mental Health Professionals

In the survey, GPs' needs for collaboration with MHPro have been reported to apply to half of their MHP patients. No publication on this point was found in the literature. Other studies conducted in ordinary practice have been focused on actual referrals from GPs to MHPro, or on actual utilization of mental health specialists, without reporting on GPs' perceived needs as is the case here [26,28,30,31]. Referral percentages have been estimated to be between 4 to 23% of primary care patients, and utilization of mental health specialists at 38% of depressed patients [26,30,31]. GPs' perceived needs for collaboration with MHPro are greater than needs for referral, probably because most patients are reluctant to consult a mental health professional [32].

This study sheds new light on factors related to GPs' collaboration with MHPro. According to a previous study on primary care patients with depressive symptoms, the best predictors of referral and utilization of mental health specialists were: more severe depressive symptoms, more long-standing problems (more than 1 year), prior visits to a mental health specialist, more years of education, being in the younger age groups, and being female [31]. The influence of the "psychiatric label" has been shown [33]. The present results on perceived needs for collaboration with MHPro may well apply to all mental pathologies encountered in primary care. Some of the above variables already reported to be related to perceived need (young age, prior mental health care) have been confirmed in the present study, and in addition this work has pinpointed the variable of not being in employment (which could correlate with disease severity). As has already been shown, GPs view patient-centered barriers as the most influential barrier to collaboration, more so than physician-centered barriers or system barriers [26,28-30,34,35]. But these patient-centered barriers could be associated with physician centered barriers, given GPs' dissatisfaction with relationships with mental health professionals. The dissatisfaction is greater than with other health professionals, and dissatisfaction is known to be associated with less frequent use of mental health services [30]. It is noteworthy that when needs are not met, only a third of GPs would opt for a referral to MHPro, suggesting that it is not a major therapeutic option for GPs. The classic pattern of referral to specialists as the major therapeutic option is often not relevant since it does not readily occur in day-to-day practice. The solution could be to develop other forms of collaboration between GPs and mental health professionals. Many MHP patients could be managed entirely by their GPs or treated in primary care if sufficient expertise is available (prompt psychiatric consultation, collaborative care) without actual referral [10,13,25]. To reinforce this notion, our results have shown that when there is actual collaboration, GPs' negative opinions on relationships with mental health professionals are less marked.

Conclusion

GPs are a key factor in the care of the commoner mental health problems. They are willing to care for this type of

patient if they have more support for this job than they do at present. There is a need for collaboration, not in the form of the classic referral to specialists as the major therapeutic option, but in the form of emphasis on collaborative relationships with mental health specialists, to improve quality of the care provided in commoner mental health disorders[36]. Results from this survey have been integrated into the "South Yvelines Mental Health Network" created in June 2001, by promoting this type of collaborative relationships in the area. Further evaluations are underway.

List of abbreviations

GPs (General Practitioners). MHP (Mental health problems). PMHP (Patients with Mental Health Problems). MHPro (Mental Health Professionals).

Competing interests

The author(s) declare that they have no competing interests.

Authors' contributions

Study concept and design : Gasquet, Kovess, Hardy-Bayle. Acquisition of data, study supervision : Chaillet. Analysis and interpretation: Younès, Gasquet. Drafting of the manuscript : Younès. Statistical expertise : Younès, Gaudebout, Falissard. Critical revision : Gasquet, Younès, Falissard, Kovess, Hardy-Bayle

Additional material

Additional File 1

Table 4 : Primary care patients' factors associated with Needs, Needs met and Needs unmet for collaboration with Mental Health Professionals. Univariate analysis and logistic regressions for demographic profile, clinical profile, modality of primary care, past psychiatric care, patient's attitude towards psychological problems.
Click here for file
[http://www.biomedcentral.com/content/supplementary/1471-2296-6-18-S1.doc]

Acknowledgements

All the professionals of the Réseau Santé Mentale Yvelines Sud and this survey was made possible through funding from local hospitals and by an unrestricted grant by Eli Lilly and Company, France.

References

1. Murray CJ, Lopez AD: **Global mortality, disability, and the contribution of risk factors: Global Burden of Disease Study.** *Lancet* 1997, **349:**1436-1442.
2. Ustun TB, Ayuso-Mateos JL, Chatterji S, Mathers C, Murray CJ: **Global burden of depressive disorders in the year 2000.** *Br J Psychiatry* 2004, **184:**386-392.
3. Alonso J, Angermeyer MC, Bernert S, Bruffaerts R, Brugha TS, Bryson H, Girolamo G, Graaf R, Demyttenaere K, Gasquet I, Haro JM, Katz SJ, Kessler RC, Kovess V, Lepine JP, Ormel J, Polidori G, Russo LJ, Vilagut G, Almansa J, Arbabzadeh-Bouchez S, Autonell J, Bernal M, Buist-Bouwman MA, Codony M, Domingo-Salvany A, Ferrer M, Joo SS, Martinez-Alonso M, Matschinger H, Mazzi F, Morgan Z, Morosini P, Palacin C, Romera B, Taub N, Vollebergh WA: **Prevalence of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project.** *Acta Psychiatr Scand Suppl* 2004:21-27.
4. Regier DA, Narrow WE, Rae DS, Manderscheid RW, Locke BZ, Goodwin FK: **The de facto US mental and addictive disorders service system. Epidemiologic catchment area prospective 1-year prevalence rates of disorders and services.** *Arch Gen Psychiatry* 1993, **50:**85-94.
5. Coulehan JL, Schulberg HC, Block MR, Madonia MJ, Rodriguez E: **Treating depressed primary care patients improves their physical, mental, and social functioning.** *Arch Intern Med* 1997, **157:**1113-1120.
6. Ballenger JC: **Clinical guidelines for establishing remission in patients with depression and anxiety.** *J Clin Psychiatry* 1999, **60 Suppl 22:**29-34.
7. Lepine JP, Gastpar M, Mendlewicz J, Tylee A: **Depression in the community: the first pan-European study DEPRES (Depression Research in European Society).** *Int Clin Psychopharmacol* 1997, **12:**19-29.
8. Andrews G, Henderson S, Hall W: **Prevalence, comorbidity, disability and service utilisation. Overview of the Australian National Mental Health Survey.** *Br J Psychiatry* 2001, **178:**145-153.
9. Alonso J, Angermeyer MC, Bernert S, Bruffaerts R, Brugha TS, Bryson H, Girolamo G, Graaf R, Demyttenaere K, Gasquet I, Haro JM, Katz SJ, Kessler RC, Kovess V, Lepine JP, Ormel J, Polidori G, Russo LJ, Vilagut G, Almansa J, Arbabzadeh-Bouchez S, Autonell J, Bernal M, Buist-Bouwman MA, Codony M, Domingo-Salvany A, Ferrer M, Joo SS, Martinez-Alonso M, Matschinger H, Mazzi F, Morgan Z, Morosini P, Palacin C, Romera B, Taub N, Vollebergh WA: **Use of mental health services in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project.** *Acta Psychiatr Scand Suppl* 2004:47-54.
10. Gilbody S, Whitty P, Grimshaw J, Thomas R: **Educational and organizational interventions to improve the management of depression in primary care: a systematic review.** *Jama* 2003, **289:**3145-3151.
11. Thompson C, Kinmonth AL, Stevens L, Peveler RC, Stevens A, Ostler KJ, Pickering RM, Baker NG, Henson A, Preece J, Cooper D, Campbell MJ: **Effects of a clinical-practice guideline and practice-based education on detection and outcome of depression in primary care: Hampshire Depression Project randomised controlled trial.** *Lancet* 2000, **355:**185-191.
12. Katon W, Von Korff M, Lin E, Simon G, Walker E, Bush T, Ludman E: **Collaborative management to achieve depression treatment guidelines.** *J Clin Psychiatry* 1997, **58 Suppl 1:**20-23.
13. Von Korff M, Katon W, Unutzer J, Wells K, Wagner EH: **Improving depression care: barriers, solutions, and research needs.** *J Fam Pract* 2001, **50:**E1.
14. Rubenstein LV, Jackson-Triche M, Unutzer J, Miranda J, Minnium K, Pearson ML, Wells KB: **Evidence-based care for depression in managed primary care practices.** *Health Aff (Millwood)* 1999, **18:**89-105.
15. Meadows GN: **Establishing a collaborative service model for primary mental health care.** *Med J Aust* 1998, **168:**162-165.
16. Hickie IB, Davenport TA, Naismith SL, Scott EM: **SPHERE: a national depression project. SPHERE National Secretariat.** *Med J Aust* 2001, **175 Suppl:**S4-5.
17. Ellis PM, Smith DA: **Treating depression: the beyondblue guidelines for treating depression in primary care. "Not so much what you do but that you keep doing it".** *Med J Aust* 2002, **176 Suppl:**S77-83.
18. Kates N, Craven MA, Crustolo AM, Nikolaou L, Allen C, Farrar S: **Sharing care: the psychiatrist in the family physician's office.** *Can J Psychiatry* 1997, **42:**960-965.
19. Kates N: **Sharing mental health care. Training psychiatry residents to work with primary care physicians.** *Psychosomatics* 2000, **41:**53-57.
20. Ungar TE, Jarmain S: **Shared mental healthcare: a collaborative consultation relationship. The North York General Hospital experience.** *Hosp Q* 1999, **3:**34-40.
21. Lucena RJ, Lesage A, Elie R, Lamontagne Y, Corbiere M: **Strategies of collaboration between general practitioners and psychia-**

trists: a survey of practitioners' opinions and characteristics. *Can J Psychiatry* 2002, **47:**750-758.
22. Hickie IB, Davenport TA, Naismith SL, Scott EM: **Conclusions about the assessment and management of common mental disorders in Australian general practice. SPHERE National Secretariat.** *Med J Aust* 2001, **175 Suppl:**S52-5.
23. Hickie IB, Davenport TA, Scott EM, Hadzi-Pavlovic D, Naismith SL, Koschera A: **Unmet need for recognition of common mental disorders in Australian general practice.** *Med J Aust* 2001, **175 Suppl:**S18-24.
24. Hickie IB, Davenport TA, Naismith SL, Scott EM, Hadzi-Pavlovic D, Koschera A: **Treatment of common mental disorders in Australian general practice.** *Med J Aust* 2001, **175 Suppl:**S25-30.
25. Boardman J, Henshaw C, Willmott S: **Needs for mental health treatment among general practice attenders.** *Br J Psychiatry* 2004, **185:**318-327.
26. Orleans CT, George LK, Houpt JL, Brodie HK: **How primary care physicians treat psychiatric disorders: a national survey of family practitioners.** *Am J Psychiatry* 1985, **142:**52-57.
27. Klinkman MS, Schwenk TL, Coyne JC: **Depression in primary care--more like asthma than appendicitis: the Michigan Depression Project.** *Can J Psychiatry* 1997, **42:**966-973.
28. Sorgaard KW, Sandanger I, Sorensen T, Ingebrigtsen G, Dalgard OS: **Mental disorders and referrals to mental health specialists by general practitioners.** *Soc Psychiatry Psychiatr Epidemiol* 1999, **34:**128-135.
29. Phongsavan P, Ward JE, Oldenburg BF, Gordon JJ: **Mental health care practices and educational needs of general practitioners.** *Med J Aust* 1995, **162:**139-142.
30. Williams JWJ, Rost K, Dietrich AJ, Ciotti MC, Zyzanski SJ, Cornell J: **Primary care physicians' approach to depressive disorders. Effects of physician specialty and practice structure.** *Arch Fam Med* 1999, **8:**58-67.
31. Grembowski DE, Martin D, Patrick DL, Diehr P, Katon W, Williams B, Engelberg R, Novak L, Dickstein D, Deyo R, Goldberg HI: **Managed care, access to mental health specialists, and outcomes among primary care patients with depressive symptoms.** *J Gen Intern Med* 2002, **17:**258-269.
32. Jorm AF: **Mental health literacy. Public knowledge and beliefs about mental disorders.** *Br J Psychiatry* 2000, **177:**396-401.
33. Farmer AE, Griffiths H: **Labelling and illness in primary care: comparing factors influencing general practitioners' and psychiatrists' decisions regarding patient referral to mental illness services.** *Psychol Med* 1992, **22:**717-723.
34. Telford R, Hutchinson A, Jones R, Rix S, Howe A: **Obstacles to effective treatment of depression: a general practice perspective.** *Fam Pract* 2002, **19:**45-52.
35. Nutting PA, Rost K, Dickinson M, Werner JJ, Dickinson P, Smith JL, Gallovic B: **Barriers to initiating depression treatment in primary care practice.** *J Gen Intern Med* 2002, **17:**103-111.
36. Von Korff M, Tiemens B: **Individualized stepped care of chronic illness.** *West J Med* 2000, **172:**133-137.

Pre-publication history

The pre-publication history for this paper can be accessed here:

http://www.biomedcentral.com/1471-2296/6/18/prepub

Publish with **BioMed Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- yours — you keep the copyright

Submit your manuscript here:
http://www.biomedcentral.com/info/publishing_adv.asp