# Does collaborative care help in the treatment of anxiety in primary health care?

O cuidado colaborativo auxilia no tratamento da ansiedade na atenção primária?

¿El cuidado colaborativo ayuda a tratar la ansiedad en la atención primaria?

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#### **Abstract**

Objective: Anxiety disorders represent an important part of mental health problems in primary care. This literature review seeks to find out whether collaborative care (called "matrix support" in Brazil) assists the treatment of anxiety disorders and/or anxiety symptoms. Methods: We performed a literature search with no time period restriction using PubMed, ISI, and LILACS PSYCINFO databases. The descriptors sought were "collaborative care", "shared care", "primary care", "anxiety", "generalized anxiety disorder", "panic disorder", "phobia", "social phobia", "post-traumatic stress disorder", "obsessive compulsive disorder" and "anxiety disorder, Not Otherwise Specified - NOS." Results: A total of 106 articles were found and after the application of exclusion criteria, seven articles were selected for the present analysis. Conclusion: Despite the different types of collaborative care used, results show greater improvement in anxiety symptoms in patients that received collaborative care compared with those in the control groups, who did not receive such intervention.

#### Resumo

Objetivo: Os transtornos de ansiedade representam uma parte importante dos problemas de saúde mental na atenção primária. Esta revisão bibliográfica pretende responder se o cuidado colaborativo (no Brasil chamado de "matriz de suporte") ajuda no tratamento dos transtornos de ansiedade e/ou sintomas de ansiedade. Métodos: Realizou-se uma busca bibliográfica, sem restrição de período, nas bases de dados PubMed, ISI, e LILACS PSYCINFO. Os descritores utilizados foram: "cuidado colaborativo"; "cuidado compartilhado"; "atenção primária"; "ansiedade"; "transtorno de ansiedade generalizada"; "transtorno de pânico"; "fobia"; "fobia social"; "transtorno de estresse pós-traumático"; "transtorno obsessivo-compulsivo"; e "transtorno de ansiedade NOS". Resultados: Foi encontrado um total de 106 artigos, sendo que sete foram selecionados após a aplicação dos critérios de exclusão. Conclusão: Apesar dos diferentes tipos de cuidado colaborativo utilizados, os resultados mostram uma melhora nos sintomas de ansiedade nos pacientes que receberam o cuidado colaborativo em comparação com os grupos controle sem tal intervenção.

### Resumen

Objetivo: Los trastornos de ansiedad representan una parte importante de los problemas de salud mental en la atención primaria. Esta revisión bibliográfica pretende responder si el cuidado colaborativo (llamado "matriz de soporte" en Brasil) ayuda en el tratamiento de los trastornos y/o síntomas de ansiedad. Métodos: Se realizó una búsqueda bibliográfica, sin restricción de período de tiempo, en las bases de datos PubMed, ISI, and LILACS PSYCINFO. Los descriptores utilizados fueron: "cuidado colaborativo", "cuidado compartido", "atención primaria", "ansiedad", "trastorno de ansiedad generalizada", "trastorno de pánico", "fobia social", "trastorno de estrés postraumático", "trastorno obsesivo-compulsivo" y "trastorno de ansiedad NOS". Resultados: Se encontraron 106 artículos, de los cuales se usaron siete después de la aplicación de los criterios de exclusión. Conclusión: A pesar de los diferentes tipos de cuidado colaborativo utilizados, los resultados muestran una mejoría en los síntomas de ansiedad en los pacientes que recibieron el cuidado colaborativo en comparación con los grupos control que no recibieron tal intervención.

#### Keywords:

Primary Health Care Anxiety Mental Health

#### Palavras-chave:

Atenção Primária à Saúde Ansiedade Saúde Mental

#### Palabras clave:

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## Introduction

Mental disorders are very common in Primary Health Care (PHC), with prevalence ranging from 20 to 30% in most epidemiological studies<sup>1-3</sup>. The presence of mental disorders increases the risk of non-psychiatric diseases and hinders adherence to preventive or curative appointments. When concomitant to a physical issue, psychiatric disorders cause more disability than each problem individually. However, less than 50% of cases of psychiatry at PHC are properly diagnosed and treated<sup>1,2</sup>. Therefore, according to the World Health Organization (WHO)<sup>1</sup>, efficient functioning of primary care in the management of these mental disorders is an important goal to be achieved in public health.

Over the past decades, Collaborative Care (CC) for the treatment of mental disorders has proven to be both effective in reducing psychiatric symptoms<sup>1,2,4,5</sup> and cost-effective (when total health costs - including in-patients - are included)<sup>6,7</sup>. The term CC was first described by Katon<sup>8</sup> as 'an intervention delivered by a general practitioner and a psychiatrist'. Nowadays, CC has a much broader spectrum. We could define it as an approach to integration in which primary care professionals and mental health consultants work together to deliver care and follow patients' progress. Collaborative Care must achieve the following goals: multi-professional care to the patient, defined management plan, multidisciplinary communication and scheduled follow-ups.

In Brazil, CC is mainly performed by teams of "matrix support" called Support Centre for Family Health (SCFH)9.

There are several studies in literature<sup>10,11</sup>, including reviews on Collaborative Care and depression<sup>4,5</sup>. However, there are not as many articles covering CC and Anxiety.

Anxiety, together with depression, represent the two most common mental health problems in PHC<sup>1-3</sup>. They are both marked by elevated rates of recurrence. Nearly 30 million people in the United States are affected with anxiety disorders and there is an estimated cost of US\$ 42 billion dollars per year<sup>12</sup>. The anxiety disorders that most affect general population are: generalized anxiety disorder, panic disorder, social anxiety disorder and post-traumatic stress disorder. Although very present in primary care, anxiety is only recognized in about 25% of all cases<sup>13</sup>.

The objective of this review is to evaluate whether collaborative care helps in the treatment of anxiety disorders in primary health care.

## **Methods**

We performed a literature search using the databases PubMed, ISI, and LILACS PSYCINFO of all articles that describe the impact of collaborative care in the treatment of anxiety disorders or anxiety symptoms. In this review there was no period limit, due to the fact the subject matter is relatively new.

The key words used were: "collaborative care" or "shared care" and "primary care" and "anxiety" or "generalized anxiety disorder" or "panic disorder" or "phobia" or "social phobia" or "post traumatic stress disorder "or" obsessive compulsive disorder "or" anxiety disorder (Not Otherwise Specified - NOS)." All items that were not exclusively of anxiety or anxiety disorders, all literature reviews and all items that were unrelated to the topic were excluded from this review. Articles about anxiety that did not measure the impact of collaborative care through structured instruments (scales and/or diagnostic interviews) were also excluded.

## **Results**

We found 106 articles and after exclusion criteria we selected a total of 7 articles (representing 5 distinct populations). The earliest work is from 2004<sup>14</sup> and the newest from 2011<sup>15</sup>. Two articles evaluated the impact of CC in anxiety symptoms<sup>14,16</sup> and the other five measured impact on specific anxiety disorders (generalized anxiety disorder, panic disorder, social phobia disorder and post traumatic stress disorder)<sup>6,12,15,17,18</sup>.

The total number of patients studied was 2239.

With the exception of the article by Bryan et al. 16, which follow-up was performed according to the number of sessions, all other studies had a longitudinal follow up with mental health scales ranging from 12 to 24 months (Table 1).

**Table 1.** Characteristics of selected studies.

Reference	Country	Disorder	Patients	Follow-up time	Number of practices
Bryan et al. (2009)16	USA	Anxiety Symptons	338	1 to 4 meetings	1
Vines et al. (2004)14	AUS	Anxiety Symptons	474	24 months	11
Rollman et al. (2005)12	USA	GAD and Panic Disorder	191	12 months	4
Roy-Byrne et al. (2005)17	USA	Panic Disorder	232	12 months	6
Katon et al. (2006) <sup>6</sup>	USA	Panic DIsorder	232	12 months	6
Roy-Byrne et al. (2010)18	USA	GAD/Panic Disorder/PTSD/Social Phobia	1004	18 months	17
Roy-Byrne et al. (2011)15	USA	GAD/Panic Disorder/PTSD/Social Phobia	1004	18 months	17

In this review all articles had the presence of case managers, varying only the formation of these professionals. Case manager (CM) is a health worker responsible to keep track of patients, specially paying attention to adherence of pharmacological treatment and clinical progress. They can also deliver psychological support when needed. Case managers must be in close contact with the primary care physician. Its function has broad spectrum, ranging from suggestions and recommendations to the primary care provider, monitoring through standardized scales to the use of cognitive behavioural techniques. Among the five populations studied in this review, different mental health professionals developed the role of Case Manager and three had supervision of a medical specialist in psychiatry (Table 2).

Table 2. Components of Intervention.

Strategies	Bryan et al.	Vines et al.	Rollman et al.	Katon et al.	Roy-Byrne et al.
	(2009)16	(2004)14	(2005)12	(2006)6	(2011, 2005, 2010)15,17,18
Case Manager:					
Social Worker					•
Nurse					•
Psychologist		•			•
Mental Health Practitioner	•				
Psychology Student			•		
Communication Specialist			•		
Professional w/ Masters or PhD				•	
Supervision:					
Psychiatrist			•	•	•
Senior Psychologist		•			

Despite the fact that CC strategies were different in the reviewed articles, all had the CM as key component for providing suggestions to the primary care provider and feedback about treatment and progress (Table 3).

Table 3. Characteristics of Collaborative Care.

Ohoshanian	Bryan et al.	Vines et al.	Rollman et al.	Katon et al.	Roy-Byrne et al.
Strategies	(2009)16	(2004)14	(2005)12	(2006) <sup>6</sup>	(2011, 2005, 2010) 15,17,18
Educational Strategies:					
Oral Presencial	•	•		•	•
Text or Audio-visual			•	•	
Education via phone			•	•	•
Behavioral Strategies:					
Phone Tracking			•	•	•
Health Care Clinic visit	•	•		•	•
CBT /Motivacional Interview	•			•	•
Strategies for the PCP**:					
Sugestions to the PCP about treatment	•	•	•	•	•
Medication Algorithm			•	•	•
CM* feedback over treatment and tracking	•	•	•	•	•
Psychiatrist opinion			•	•	•

<sup>\*</sup>CM: Case Manager; \*\*PCP: Primary Care Physician.

Although using different scales to measure anxiety (Table 4), all seven articles showed that CC reduced anxiety symptoms during the monitored period.

**Table 4.** Scales to measure anxiety symptoms.

	Scales used to measure anxiety / anxiety symptoms
Bryan et al.16	-
Vines et al.14	DASS: Depression, Anxiety and Stress Scales – Anxiety score
Rollman et al.12	PDSS: Panic Disorder Severity Scale
	SIGH-A: Hamilton Anxiety Rating Scale
Katon et al.6	ASI: Anxiety Sensitivity Index
Roy-Byrne et al. 15,17,18	ASI: Anxiety Sensitivity Index
	SF-36: 36-Item Short Form Health Survey
	GADSS; Generalized Anxiety Disorder Severity Scale
	PDSS: Panic Disorder Severity Scale
	SPIN: Social Phobia Inventory
	PCL-C: PTSD Checklist – Civilian Version

## **Discussion**

This review reinforces the effectiveness of the Collaborative Care strategy for the treatment of anxiety symptoms and anxiety disorders. However, some issues should be further discussed. For instance, all selected articles were conducted in developed countries, which make it questionable to extrapolate the results for developing countries.

The presence of a Case Manager in all studies also limits results for application to sites where there is no such professional. Furthermore, training of case managers varied enormously, depending on the population studied. They ranged from a social worker or a psychology student to a professional with PhD degree.

Two studies<sup>14,16</sup> did not have a consultant psychiatrist, once again showing the broad and diverse range of the CC strategy. However, we can still call it CC, due to the fact a CM was continuously following the studied patients.

Another point to be highlighted is the different scales used in the seven follow-up studies (Table 4) making it difficult to draw comparisons. Thus, it is necessary a meta-analysis in the future for further evaluation of the findings.

Two articles present some limitations: the study by Bryan et al.<sup>16</sup> does not have a control group and has only one professional (a case manager) delivering Collaborative Care. In the article by Vines et al.<sup>14</sup> the randomization was done by the PHC physician, which may have caused a bias, as the initial intervention group had higher anxiety scores than the control group (suggesting that patients selected for this group were more symptomatic individuals).

The article of Katon et al.<sup>6</sup> suggests that the cost of treating patients with anxiety disorders using the CC is higher than the traditional care. However, when total cost is analysed, including hospitalizations, CC proves to be cost-effective.

Finally, a recent study conducted in Brazil<sup>19</sup> analysed a mental health training intervention in primary care. Results showed that training primary care providers in a shared care model did not improve ability to identify or manage mental health problems. This outcome shows us that we still do not totally understand what specific aspects of collaborative care generate positive results. Maybe this negative result occurred because intervention was not made in a perennial process. Further research is needed.

## Conclusion

All articles showed that anxiety symptoms decreased with collaborative strategy for mental health in primary care. This review reinforces the effectiveness of Collaborative Care in the treatment of anxiety symptoms and anxiety disorders.

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