Research

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Long-term antidepressant use:

a qualitative study on perspectives of patients and GPs in primary care

Abstract

Background

Antidepressant use is often prolonged in patients with anxiety and/or depressive disorder(s) compared with recommendations in treatment guidelines to discontinue after sustained remission.

To unravel the motivations of patients and GPs causing long-term antidepressant use and to gain insight into possibilities to prevent unnecessary long-term use.

Design and setting

Qualitative study using semi-structured, in-depth interviews with patients and GPs in the Netherlands.

Method

Patients with anxiety and/or depressive disorder(s) (n = 38) and GPs (n = 26) were interviewed. Innovatively, the interplay between patients and their GPs was also investigated by means of patient-GP dyads (n = 20).

The motives and barriers of patients and GPs to continue or discontinue antidepressants were related to the availability of supportive guidance during discontinuation, the personal circumstances of the patient, and considerations of the patient or GP. Importantly, dyads indicated a large variation in policies of general practices around long-term use and continuation or discontinuation of antidepressants. Dyads further indicated that patients and GPs seemed unaware of each other's (mismatching) expectations regarding responsibility to initiate discussing continuation or discontinuation

Conclusion

Although motives and barriers to antidepressant continuation or discontinuation were related to the same themes for patients. and GPs, dyads indicated discrepancies between them. Discussion between patients and GPs about antidepressant use and continuation or discontinuation may help clarify mutual expectations and opinions. Agreements between a patient and their GP can be included in a patient-tailored treatment plan.

Keywords

antidepressants; anxiety disorder; continuation; depressive disorder; discontinuation; general practitioners; long-term use; patient perspective.

INTRODUCTION

About two-thirds of outpatients with current anxiety and/or depressive disorder(s) receive psychopharmacological treatment, most notably antidepressants.1 Often, antidepressant use is long term. For example, in the Netherlands approximately 30% of patients taking antidepressants take them for >1 year.² Similarly, in the UK nearly half of the patients taking antidepressants take them for >2 years,3,4 and in the US this is true for approximately two-thirds of relevant patients.5,6

Moreover, only 10% of such patients discontinue antidepressants each year.⁷ This is contrary to the consensus-based advice of the international and UK guidelines, which recommend discussing discontinuation of antidepressants 6-18 months after remission for anxiety disorders8-11 and 4-12 months for depressive disorders. 12-15 Long-term use is advised only in case of chronicity or for patients who have experienced high recurrence rates.8,12,14

Patients need tailored treatment plans based on these guidelines. Unnecessary continuation of antidepressants may result in long-term side effects¹⁶ and substantial healthcare costs. 17,18

Comparatively little is known about the motivations of patients to continue or discontinue antidepressants. Research indicates that patients tend to experience their long-term use as problematic, but also foresee problems with discontinuation (for example, withdrawal or relapse). 19,20 Furthermore, some GPs antidepressant continuation with patients, but also fear the consequences of discontinuation.21

To gain insight into possibilities to prevent unnecessary long-term antidepressant use, the motivations and barriers of patients and GPs to continue or discontinue antidepressants were assessed. In-depth interviews were conducted with patients with anxiety and/or depressive disorder(s) who had been using antidepressants for >6 months, and with their GPs.

Extending previous research, the interplay between patients and their GPs (dyads) was investigated regarding longterm antidepressant use.

METHOD

Sampling and recruitment

Recruited participants were patients with anxiety and/or depressive disorder(s) and

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How this fits in

Contrary to guidelines, long-term use of antidepressants is common in patients with anxiety and/or depressive disorder(s). This study provides insight into the motives and barriers of patients and GPs to antidepressant continuation and discontinuation. Additionally, patient-GP dyads provide insight into the interplay between them and their mismatching expectations. This study highlights the importance of discussion on antidepressant use between patients and GPs to clarify mutual expectations and determine longterm treatment plans.

GPs. To examine patient-GP dyads, part of the sample included patients (n = 30 out of 38) with their own GP (n = 20 out of 26).

GPs were approached by telephone and e-mail via the recruited patients or via the GP network affiliated with the VU University Medical Center Amsterdam (VUmc) and University Medical Center Groningen, in the Netherlands. When GPs agreed to participate, they were asked to contact one to two eligible patients.

Patients were recruited via websites of patient associations for anxiety and depression (Fonds Psychische Gezondheid [the Netherlands Foundation for Mental Health] and Depressie Vereniging [Depression Association]]: and via participating GPs. Inclusion criteria were:

- having an antidepressant prescribed for anxiety and/or depressive disorder(s). This was based on the self-report of the patient, but wherever possible the diagnosis was verified with the GP;
- antidepressant use for >6 months;
- antidepressant prescriptions by the GP;
- · patient is in remission from their anxiety and/or depressive disorder(s) (although not formally checked with a diagnostic interview, patients were asked about remaining symptoms and GPs were asked to only contact patients in remission);
- age ≥18 years; and
- sufficiently fluent in Dutch.

The research team contacted interested patients and GPs, and provided them with additional information.

Data collection and analysis

In-depth, semi-structured interviews were conducted between October 2014 and June 2015. All patients were interviewed at home, except one patient who was interviewed at the GP's practice. Patients were never present during the GP interviews and vice versa. Dyads were discussed depending on the focus of the interview and available time. Four master students conducted the interviews, they studied clinical psychology or medicine and received interview training and supervision from one of the study authors. They were unrelated to the participants.

Interviews with patients had a mean duration of 49 ± 17 minutes (range 24-106 minutes) and with GPs 45 ± 10 minutes (range 28–90 minutes). Interviews were audiotaped and transcribed verbatim. Participants did not comment on the transcripts and no repeat interviews were conducted. A topic list guided the interviews (Appendices 1 and 2). This list was based on themes extracted from the literature; listed phone enquiries made by patients at patient associations for anxiety and depression; and discussions by the research team based on their multidisciplinary clinical experience.

Analysis was based on the constant comparative method,²² implying an iterative process of data analysis and planning of interviews. This allows for updating the topic list in the light of emerging themes (Appendices 1 and 2) and maximises knowledge about participants' considerations. By searching for new topics and testing predetermined topics, this method is both inductive and deductive, and fits with an instrumental-pragmatic approach.²³

Interviews were analysed in Dutch using MAXQDA software for qualitative data analysis (version 10); the authors translated the quotes into English. Two interviewers coded the first two interviews independently, codes were then compared, and consensus was reached about an initial framework. Analysis was continued by updating the coding framework after every two interviews and at research group meetings. Data collection ended when data were saturated: that is, the information was repeating itself and no new information was added based on four new interviews. To analyse dyads, interview parts in which the patient spoke about their GP and vice versa were coded separately, specifically focusing on the patient-GP interplay. Dyads were analysed in R (version 3.2.0) using the RQDA package (version 0.2-7). This method was checked using the COREQ checklist.²⁴

RESULTS

Demographics

Demographic and clinical characteristics of the patients (n = 38) and GPs (n = 26) are

provided in Table 1. This sample contained 30 patient-GP dyads. In 10 dyads, either the patient or the GP did not mention the other person, thus 20 dyads could be analysed, including 20 patients and 14 GPs.

Dyads

Dyads showed that, although GPs consider themselves suitable to provide supportive guidance during discontinuation, patients did not necessarily agree. In the perception of patients, GPs sometimes lacked knowledge and time, and had many competing demands:

'I think that the GP knows a lot, but only little bits. They only have basic knowledge about many areas. I do not blame them for that, but I do have more faith in the experts. I think that the GP should refer me sooner to specialised care, because they cannot know everything. (Patient, female, 44 years)

'I think that I am capable of providing

Table 1. Demographic and clinical characteristics of patients' and GPs' total sample, and for patient-GP dyads separately

	Total, <i>n</i>		Dyads, <i>n</i>	
	Patient (<i>n</i> = 38)	GP (n=26)	Patient (n = 20)	GP (<i>n</i> = 14)
Age range, years	30-68	30-64	30-68	30-59
30–39	8	3	4	2
40–49	8	8	5	4
50–59	15	11	7	8
≥60	7	4	4	0
Sex				
Female	28	15	15	8
Male	10	11	5	6
Area				
Rural	18	8	8	5
Urban	20	18	12	9
Ethnic group		NA		NA
West European	37		19	
Non-West European	1		1	
Diagnosis		na		na
Anxiety disorder	11		8	
Depressive disorder	21		10	
Anxiety and depressive disorder	6		2	
Antidepressant		na		na
SSRI ^a	26		11	
SNRI ^b	10		8	
TCA	2		1	
Experience with discontinuation? ^c		na		na
Yes, but restarted because of relapse/recurrence	29		16	
Yes, but never completely discontinued because of relapse/recurrence	3		1	
No	6		3	
Duration of antidepressant treatment, years ^d		na		na
1–4	7		3	
5–9	8		6	
10–14	7		2	
15–19	10		7	
>19	6		2	
Recruited via				
GP	20	na	12	na
Patient association	18	na	8	na
Patient	na	10	na	8
GP network	na	16	na	6

^aWith the addition of an atypical antipsychotic (n = 1), methylphenidate (n = 1), or a noradrenergic and specific serotonergic antidepressant (n = 1). ^bWith the addition of lithium (n = 1). 'Available information regarding relapse/recurrence of episodes is insufficiently detailed to differentiate between relapse and recurrence. d Most patients using antidepressants for 1-4 years continuously used antidepressants, whereas patients using antidepressants for ≥5 years mostly attempted to discontinue, or discontinued and restarted. na = not applicable. NA = not available. SNRI = serotonin norepinephrine reuptake inhibitor. SSRI = selective serotonin reuptake inhibitor. TCA = tricyclic antidepressant.

supportive guidance to patients who are discontinuing antidepressants.' (GP, male, 49 years)

Dyads also indicated discrepancies between the patient's need of care and the GP's options to meet this. Some patients indicated that they need at least 1 hour a week of support during discontinuation, whereas their GP suggested that a consultation lasting 10-20 minutes once a week or once every fortnight would be sufficient. In the Netherlands a consultation covered by health insurance has a duration of 10 minutes, but if there is a need a consultation can be extended to a 'double consultation', lasting 20 minutes. Consultations with a duration of >20 minutes are not covered by health insurance. The mean duration of a GP consultation in the Netherlands is 13 minutes.²⁵

Moreover, dyads showed that, although most patients and GPs had contact about antidepressant use, policies around longterm use and continuation or discontinuation varied largely. Some patients saw their GP multiple times a year, but these contacts were not necessarily about antidepressant continuation or discontinuation. When patients came for other complaints, antidepressant use was discussed too. One practice, however, specifically checked longterm users of antidepressants on a yearly basis:

'I need to visit the GP once a year anyway for my diabetes check-up. We see each other at that moment anyway, and then we also tend to discuss my antidepressant use.' (Patient, female, 58 years)

'We evaluate at least once a year, standard for patients taking antidepressants or ... there is also other medication which we also evaluate every year. Normally these are short appointments, but at least we keep track of the patients. Not willing to discontinue yet? Fine, but at least we know. (GP, female, 35 years)

Dyads further indicated that it is unclear who is responsible for initiating contact about antidepressant continuation or discontinuation. Patients said they tend to initiate contact with the GP about their wish to discontinue, but think that the GP should take this responsibility:

'I do think that the GP is responsible for his patient, and should therefore also take the initiative around antidepressant treatment. On the other hand, there is also a trend

towards that you need to sort out yourself. I think that both patient and GP should be involved, but when you are depressed you haven't got the opportunities nor the insight to do anything. So in that respect the GP should take the responsibility.' (Patient, female, 44 years)

On the contrary, some GPs stated that when a patient is stable on medication there is no need for follow-up. They expect patients to contact them when their situation changes or when the patient wants to change or discontinue their treatment.

Supportive guidance

Patients and GPs agreed about who should provide supportive guidance during discontinuation: namely the GPs themselves, mental health assistants, or psychiatrists or psychologists. Both patients and GPs indicated that people in their social environment (for example, relatives or friends) can also help with monitoring. One GP indicated that these people can also provide supportive guidance.

Several conditions applied discontinuation. Some patients needed information about discontinuation effects. Both groups indicated that discontinuation schedules or modules can be useful, and that medication should be tapered when discontinued. Further, three GPs indicated that treatment guidelines should provide more information on how to discontinue:

'What you tend to regularly do is check the treatment guidelines, also when you are prescribing medication. A heading "discontinuation: what do you need to do?" could for example be included. I did not check, but do not think that currently exists. (GP, female, 41 years)

A small numbers of patients and GPs (four patients and two GPs) indicated that, after patients completely discontinued their medication, supportive contacts should be maintained, also to monitor symptomatology. For both groups, the preferred frequency of this contact varied from once a month to four times a year.

Importantly, some patients and GPs mentioned that continuation could also result from ignorance or neglect. Taking antidepressants can be incorporated into a patient's daily routine, without questioning. Further, GPs may also lose track of patients and their use of antidepressants. Some GPs prefer an automatic warning when they authorise repeat prescriptions for a patient who is potentially eligible for discontinuation:

'Sometimes you are just very busy and you think "let's get those repeat prescriptions over and done with", other times you have more time and you wonder "how long is this patient already using this or when did I last see this patient". So it depends a bit. If someone asked for a repeat prescription once every 3 months and you authorise the prescription on a day that you are extremely busy, then you may not notice.' (GP, female, 51 years)

Personal circumstances

The patient's improved functioning was a reason to continue as well as to discontinue antidepressants for patients and GPs:

'I am so glad that this patient is doing so much better, so we are both less inclined to discontinue. (GP, male, 57 years)

'I had been well for a long time. Then I was thinking why ... I could try to discontinue, it is poison anyway. You also don't take pain killers when you do not need them, so why continue taking antidepressants? Or let's put it differently, why not attempt to discontinue when you have been well for a long time? (Patient, male, 54 years)

For both, side effects were an important reason for discontinuation. According to some patients and several GPs the correct conditions for discontinuation were that the patients' personal circumstances were stable, the number of stressful situations limited, and the patient is motivated (exact numbers for reasons for discontinuation are: personal circumstances stable - five patients and 10 GPs; a limited number of stressful situations — two patients and two GPs; patient motivated to discontinue — two patients and nine GPs):

'When I have agreed with a patient that we are going to discontinue in 6 months' time and just before, a major life event occurs then that is not the right moment for discontinuation. You need to wait a bit, sometimes just 2 months and then it is possible. (GP, female, 57 years)

Even when these conditions were met, some patients still continued because they did not want to become a burden to their social environment:

'In general the responsibility you do have for your family ... so even if I wanted to discontinue, it does not only affect me but also my environment ... that makes my decision extra difficult.' (Patient, male, 50 years)

Furthermore, two patients questioned whether complete discontinuation should be the target or should the medication be reduced to a 'maintenance dose'? Moreover, GPs added that the number of relapses should be limited (the amount of relapses varied between GPs, with a minimum of one relapse and a maximum of three relapses indicated as a limited number), and patients should have faith in themselves being able to function without the use of antidepressants.

Patient-GP considerations

Patients often viewed antidepressants and the taking of them as 'unnatural', 'chemical', or 'foreign to the body', that is, 'unnatural' (six patients), 'chemical' (nine patients), or 'foreign to the body' (five patients); 16 individual patients used at least one of these descriptions and therefore wished to discontinue. One GP also described antidepressants as 'chemical' and provided this as a reason for discontinuation. Further, about half of the patients wished to be selfreliant:

'I have got a very strong drive to be healthy again. Taking medication has the same meaning to me as it had at the time. Although I am feeling well, there is still something in my head telling me that only when I discontinue my medication, I am really well again. (Patient, female, 32 years)

Some patients wanted to discontinue because of perceived (physical) dependency:

'I think it is addictive because you have to start and discontinue really slowly. You can also really feel it when you discontinue. I find it quite scary, I dislike it, but should not think about it too much. That is why I try to take as little as possible, because I think "just imagine that it is addictive". It just does not feel right. (Patient, female, 49 years)

Although patients tended to perceive antidepressants in a negative manner, nearly half of them believed that their disorder stemmed from a biological cause and therefore wished to continue their medication, whereas a few GPs shared this belief (for both anxiety or depressive disorder):

'I am really missing something [in my brain]. And that is being replaced by an antidepressant. (Patient, female, 47 years)

Additionally, most of the patients (28 of 38) experienced psychological treatment in varying extents as helpful,

but also considered it insufficient as it had not prevented them from relapsing. In total, 14 GPs thought that patients can become psychologically dependent on antidepressants and that this dependency may result in continuation:

'Patients obviously received antidepressants when they were experiencing a miserable time. Whether or not it is related to the antidepressant, they feel better again and link feeling better to having received antidepressants. Patients can sometimes feel very dependent of those tablets for their happiness. (GP, female, 50 years)

Furthermore, nearly half of the GPs believed that, if possible, patients are better off without medication, including antidepressants.

Both groups agreed that continuation can be a better alternative when a patient relapsed after previous discontinuation attempts. Additionally, fear of relapse is a reason for continuation for over half of the patients and GPs even if, as with the patient below, continuing with the medication can have unwanted side effects:

'I found side effects, especially a reduction of my sex drive, very bothersome. It may sound strange, but I would rather have a life without depression than a life with a sex drive. (Patient, male, 60 years)

Some GPs noticed that their patient only experienced symptoms in winter and therefore saw no indication to continue antidepressants during other seasons. However, patients continued because of discontinuation symptoms and the time until antidepressants become effective (again).

DISCUSSION

Summary

Dyads indicated discrepancies between patients and GPs in the perceived suitability of the GP to provide supportive guidance to patients; patients and GPs having discrepant views on how to meet the perceived need of care; large variations between practices in patient-GP contact regarding antidepressants; and unawareness of the different expectations of patients and GPs related to who is responsible for initiating discussion about antidepressant continuation or discontinuation. Further, for patients and GPs, the motivations and conditions to continue or discontinue antidepressants were related to supportive guidance during discontinuation, the

personal circumstances of the patient, and underlying considerations.

Strengths and limitations

Because both patients and GPs were interviewed about long-term antidepressant use, insight was gained into the interplay between them and into the motives and barriers contributing to continuation or discontinuation. Interviewers lived in different parts of the Netherlands, therefore participants could be sampled across rural and urban areas of the Netherlands. Patients with anxiety and/or depressive disorder(s) using a variety of antidepressants were included, and their male:female ratio seems to reflect the male:female ratio of the common mental disorders.1

Selection bias cannot be excluded, however, as only one patient of non-Western European ancestry was included. Moreover, original diagnoses were not systematically verified for all patients with their GP, and patients' remission state was not based on a clinical interview. Nevertheless, GPs were asked to refer only patients in remission and patients were systematically asked about experiencing residual symptoms. Further, most patients in this study had relapsed previously, which could be a reason for continuation. However, discussing their use of antidepressants may be helpful, as these patients can experience side effects¹⁶ and diminished functionality.26 Furthermore, the four interviewers had limited clinical experience and may have missed cues for further questioning. However, they had received interview training and had all conducted a substantial number of interviews. Lastly, further research needs to determine how widespread the expressed opinions are shared within the entire population of patients and GPs.

Comparison with existing literature

To date no other studies have investigated the interplay between patients and GPs regarding long-term antidepressant continuation or discontinuation. Dyads indicated that GPs perceived they have sufficient knowledge and time to provide supportive guidance to patients, but their patients did not necessarily agree. Previous research suggested that GPs experience time constraints in the care for patients with depressive and/or anxiety disorder(s).²⁷ Concurrently, long-term users of antidepressants tend to have longer GP visits (with a duration of >20 minutes)²⁵ and they also experience greater social and physical limitations than non-users and short-term users, 28,29 which may also be

a consequence of their remaining disease burden. When it comes to caring for these patients in GP practices, mental health assistants could possibly provide more support to GPs, for example, by monitoring antidepressant use and providing supportive guidance during discontinuation.

Furthermore, dyads indicated suboptimal communication about antidepressant treatment between patients and GPs. Patients saw their GP multiple times a year, but these meetings were seldom specifically about their antidepressant use. Additionally, both groups seemed unaware of each other's expectations regarding responsibility to discuss continuation or discontinuation. Previous research showed that patients consider shared decision making to be important. 19,20 Discussing antidepressant continuation or discontinuation can clarify mutual opinions and expectations.

Moreover, limited follow-up policies may contribute to long-term use, as some GPs in this study indicated not always having time to evaluate the repeat prescriptions. Also in previous studies patients mentioned ordering repeat prescriptions without discussing them with the GP, 19,30,31 which is understandable practice. Besides, the current treatment quidelines are inconclusive about when to discontinue antidepressants after remission of symptoms, 8-15 representing consensus rather than evidence-based recommendations. Although first steps have been made, 32 stringent scientific evidence regarding relapse risk for individual patients is lacking.

The included patients provided several reasons for discontinuation; possible physical dependency, a negative perception of antidepressants and of taking them, and concerns around side effects. For these patients of whom most had experience with discontinuation, however, reasons for continuation outweighed the benefits of discontinuation. Consistent with existing literature, patients continued because of a fear of relapse, 19,20,33 a perceived biological cause for their symptoms, 20,29,33 and their experience of improved functioning. 20,29 GPs largely agreed with patients on their motives for long-term continuation. GPs seemed to take a more psychosocial than biological perspective, however, on continuation or discontinuation, ^{26,33} as they indicated conditions for discontinuation related to the stability of the social environment, the patients' motivation, and their faith in being able to function without the use of antidepressants. In accordance with the multidisciplinary guidelines, 8-15 GPs were also more inclined to continue antidepressants when a patient had previously relapsed.

Implications for research and practice

The present results suggest that a more definite treatment plan discussed by both patient and GP may prevent unnecessary long-term use. This long-term plan should include agreements about who initiates future contact, and the frequency and method of this contact. Considerations about antidepressant continuation or discontinuation can influence treatment decisions, therefore GPs should be aware of their own and their patients' considerations and discuss them. Furthermore, the GP's mental health assistant could possibly have a role in monitoring patients using antidepressants, along with the implementation of automatic warnings in GP prescription systems to bring repeat prescriptions to their attention.

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Ethical approval

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Provenance

Freely submitted; externally peer reviewed.

Competing interests

In the last 5 years, Henricus G Ruhé received speaking fees from AstraZeneca and Lundbeck NV. Henricus G Ruhé is supported by an unrestricted Investigator Initiated Trial Grant from Lundbeck NV. All the other authors have declared no competing interests

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Appendix 1. Topic list in patient interviews

The topic list provided guidance to the interviews. Not all items were necessarily included in all interviews; this depended on the information retrieved during the interview. Questions in italic were included in the topic list in the course of the study.

Continuation or discontinuation of antidepressants

- Did you previously discontinue your medication?
 - a. Reason?
- 2. What are your experiences with discontinuation?
 - a. Do these experiences affect your decision to continue or discontinue?
- 3. Are you currently considering discontinuation?
 - a. Why/why not?
 - b. Have you any expectations of consequences following discontinuation?
 - c. To what extent do you think you can cope with your anxiety/depressive disorder without medication?
 - . To what extent does this influence your decision to continue or discontinue?
 - d. Have you anticipated any expected benefits from discontinuation?
 - e. Which role do side effects play in your decision whether or not to continue or discontinue antidepressants?
 - i. Which side effects?
 - ii. Did the patient consider discontinuation due to the mentioned side effects?
 - f. To what extent do you worry about:
 - i. Discontinuation symptoms?
 - - 1. Is this fear of relapse realistic?
 - iii. The antidepressant not being effective anymore when restarting it?
 - 1. Is that worry related to the type of antidepressant or the dose?
 - 2. Has this something to do with the number of attempts you made before an effective antidepressant was found?
 - a. If so, which antidepressants were tried, and in what dose?
- 3. Has this something to do with the disorder for which the antidepressant was prescribed, or with the course of the disorder (recurrent or first episode)?
- 4. To what extent does the patient consider discontinuation in the future?
 - a. If discontinuation is considered:
 - i. What do you need for discontinuation/which conditions apply to discontinuation?
 - ii. What would be a suitable moment to discontinue?
 - 1. How soon would you like to discontinue your antidepressant?
 - b. If discontinuation is not considered:
 - i. When is it responsible to continue antidepressants?
 - 1. To what extent did/do you accept that you will be taking antidepressants without an endpoint? Why?

GP-patient relationship

- 5. Have you felt restrained in any way discussing discontinuation of antidepressants with your GP? Why?
 - a. Was your GP previously involved when you discontinued your medication?
 - b. Who took the initiative to start discussing discontinuation? What do you think about that?
- 6. If/when you would discontinue again, would you involve your GP?
 - a. Why/why not?
 - b. In your opinion, how important is the role of the GP for discontinuation?
 - i. Which aspects do you consider important?
 - ii. Is this role also crucial for discontinuation?
- 7. To what extent do you think that your GP has sufficient knowledge and experience to advise you well and to help with discontinuing antidepressants?
- 8. To what extent do you think you are responsible for the contact between you and your GP regarding your antidepressant use?
- a. If there is little contact between the GP and patient: do you think that this could result in long-term use?
- 9. What does your GP think about your use of antidepressants (to either continue or discontinue)? Does this affect the choices you make?

Influences on the choice to continue or discontinue

- 10. What do your family/partner/friends think about your antidepressant use (either to continue or discontinue)?
 - a. Does this affect your choice whether or not to continue or discontinue?
- 11. Which role does the current organisation of the Dutch healthcare system play in your decision whether or not to continue or discontinue antidepressants?
 - a. How are things organised in the GP practice you attend?
 - b. What could be improved?
 - c. Would there be something you would like to see changed in the Dutch healthcare system that would facilitate discontinuation for you?
- 12. Which role do news reports in the media play in your decision whether or not to continue or discontinue antidepressants?
- 13. Are there any other factors that play a role in your decision whether or not to continue or discontinue antidepressants?
 - a. Which factors facilitate discontinuation?
- b. Which factors hinder discontinuation?
- 14. Do you notice/have you noticed any taboo/stigma regarding antidepressants, depressive disorder, and anxiety disorder?
 - a. Does this influence your use of antidepressants?
 - b. What do you yourself think about antidepressants?

... continued

Appendix 1 continued. Topic list in patient interviews

Psychological support

- 15. How much distress did the patient experience before they started with antidepressants?
- 16. What do you think about psychological treatment in comparison with pharmacological treatment (medication)?
 - a. What else had previously been tried?
 - i. Which therapy?
 - 1. From which therapy did you benefit most?
 - b. How does this affect your choice whether or not to continue or discontinue antidepressants?
- 17. Is psychological care a decent/viable alternative to medication?
- 18. What are the advantages and disadvantages of antidepressant use?
- 19. If applicable: On which grounds do you base that your complaints/symptoms are chronic?
 - a. On what do you base the view that your complaints are of a biological origin and that psychological care is not helpful to you?
 - b. Are you, because you are willing to accept psychological care, more likely to discontinue your use of antidepressants?

Perception of anxiety/depressive disorder: how does this affect antidepressant use?

- 20. What do you think is the cause of your depressive disorder? Does the reason for your depression influence your use/acceptance of the medication?
- 21. To what extent do you see depression as something more biological or more psychological?
 - a. Biological: is it easier to talk about it? (Because the cause is 'clear'?)

 - ii. Does this affect your choice whether or not to continue or discontinue?
- 22. Do you view yourself differently since you started using antidepressants?
 - a. Why? And in what ways?
- 23. Does the fact that you have been using antidepressants for such a long time make it more difficult to discontinue?
 - a. Has this changed since the first time you discontinued?

Other

- 24. If a patient came from specialised care:
 - a. How many therapists did the patient have?
 - b. How was the transition from the psychiatrist to the GP?
 - c. What does the patient mean by a 'good transition'?
- 25. Would the patient like to discontinue? If so, would they be prepared to participate in research investigating predictors of relapse? What considerations play a role?

Appendix 2. Topic list in GP interviews

The topic list provided guidance to the interviews. Not all items were necessarily included; this depended on the information being retrieved during the interview. Questions in italic were included in the topic list in the course of the study and questions with an '*' were of particular relevance to the patient-GP dyads.

Continuation or discontinuation of antidepressants

- 1. *Do you ever advise patients who have been using antidepressants long-term to discontinue?
 - a. To what extent do you think that the patient should continue or discontinue?
 - b. How does this work in practice?
 - c. How do patients respond?
 - d. What reasons do patients have to continue or discontinue antidepressants?
 - e. What are the advantages and disadvantages of antidepressant use?
 - f. What are the advantages and disadvantages of antidepressant discontinuation?
- 2. *When would you like to discontinue antidepressants with this patient?
 - a. Is there a suitable moment in the future?
 - b. What would be a suitable moment (definition)?
- 3. *What are your previous experiences with patients discontinuing antidepressants?
 - a. Do those experiences influence current decisions on whether or not to continue or discontinue antidepressants?
- 4. *Expectations GPs may have of possible consequences for patients following discontinuation:
 - a. To what extent do you think patients can cope with their anxiety/depressive disorder without medication?
 - i. To what extent does this influence your decision to continue or discontinue?
 - b. Which role do side effects play in your decision whether or not to continue or discontinue antidepressants?
 - i. What side effects are mentioned by patients?
 - ii. Do patients consider discontinuation due to the mentioned side effects?
 - c. To what extent do you worry about:
 - i. Discontinuation symptoms?
 - ii. Relapse?
 - 1. To what extent do you think the patient who expects to relapse will actually relapse?
 - 2. Is this fear of relapse realistic?
 - 3. To what extent do you think that people who think that they can manage without antidepressants are less likely to relapse because they have faith in their own ability to function without medication?
 - 4. Do you use different policies for both groups of patients?
- iii. Whether the antidepressant is no longer effective when restarting?
 - 1. Is that related to the type of antidepressant, or the dose?
 - 2. Has this something to do with the number of attempts before an effective antidepressant was found for the patient?
 - a. If so, which antidepressants were tried, and in what dose?
 - 3. Has this something to do with the disorder for which the antidepressant was prescribed, or with the course of the disorder (recurrent or first episode)?
- 5. *In your own words what would you need in order to be able to discontinue with more patients/which conditions apply?
 - a. To what extent does the quality of the contact with the patient play a role?
- 6. Placebo effect: Is there a group of people for whom you think that the medication is not effective, but functions as a placebo?
 - a. What do these patients need to discontinue?

GP-patient relationship

- 7. *Do patients frequently indicate that they want to discontinue or that they want to discuss the decision whether or not to continue or discontinue?
- a. How do you generally respond to these questions?
- 8. *Who tends to start the discussion about discontinuation more frequently, you or the patient?
- 9. *In your opinion, how important is the role of the GP regarding discontinuation?
 - a. What aspects do you consider important?
 - b. Is this role also crucial for discontinuation?
- 10. *Do you feel capable to discontinue antidepressants?
 - a. To what extent do you think you have sufficient knowledge and experience to advise patients correctly and to help them with discontinuing antidepressants?
 - b. If not, which additional knowledge do you need?
- 11. *To what extent do you think the patient is responsible for contact between you and the patient regarding use of antidepressants?
 - a. Who do you think should take the initiative to discuss discontinuing antidepressants?
 - i. Has this changed over the years?
 - b. If there is little contact between the patient and GP, do you think that this could result in long-term use of antidepressants?
- 12. Do you experience it as a burden when patients return to you after they have relapsed following discontinuation?
 - a. Is this a reason to not discontinue antidepressants (too burdensome for office hours)?
- 13. Emotional involvement:
 - a. Do you mind personally when patients relapse?
 - b. Does this affect the contact you have with patients about antidepressants?

Influences on the choice to continue or discontinue

- 14. To what extent do you have the impression that discontinuation is more difficult in patients with a personality disorder?
 - a. If so, what makes it more difficult?
- 15. To what extent are the time until antidepressants are effective and the time it takes to discontinue, of influence on discontinuation?
- 16. Are there any other factors that play a role in the decision whether or not to continue or discontinue antidepressants?
 - a. The (social) environment?
 - b. The role of current organisation of the Dutch healthcare system?
 - i. Does It frequently happen that patients had previous multiple therapists in specialised care?
 - c. The media?
 - d. The role of healthcare insurance?
 - e. The role of the government?

.... continued

Appendix 2 continued. Topic list in GP interviews

Psychological support

- 17. What is your view on psychological treatment?
 - a. How does your view affect your decision whether or not to continue or discontinue antidepressants?
 - b. If GP is enthusiastic about psychological treatment, why are you still prescribing medication for depression/anxiety disorders?
- 18. What is your view on pharmacological treatment/antidepressants?
 - a. How does your view affect your decision whether or not to continue or discontinue antidepressants?
- 19. To what extent are patients willing to attend psychotherapy also more likely to discontinue?
 - a. Are you, because you are in favour of psychological care, more likely to discontinue?
- 20. Do you provide, in your own opinion, relatively little, or a lot of mental health care?
 - a. Reason?
- 21. If applicable: On which grounds do you base that your complaints/symptoms are chronic?

Perceptions

- 22. What is your view on the pathophysiology of depression?
 - a. How does this affect your policies regarding the discontinuation of antidepressants?

- 23. To what extent do you use the treatment guidelines when treating anxiety disorders and/or depressive disorders? a. What do you think about the treatment guidelines?
- 24. Could the GP make an estimate of the number of people they saw in the past month presenting with depressive and/or anxiety symptoms, and how many of those received a prescription for antidepressants?
- 25. *Diagnosis of patient? (This question verified with the GP the diagnosis for which the patient was prescribed antidepressants.)