Clinical Outcomes of a New Self-Help Booklet for Premature Ejaculation

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ABSTRACT

Introduction. Premature ejaculation (PE) is quite common. Although effective treatments do exist, only a few affected people consult a practitioner in order to overcome their problem. At the same time, studies have shown that reading didactical documents about their PE problem (bibliotherapy) can be useful to men.
Aim. The aim of this study was to improve the bibliotherapy approach using up-to-date knowledge and techniques. The expected benefits were the following: (i) an effective manual shorter than previous ones; (ii) easier to assimilate therapeutic principles; and (iii) a method thereby made accessible to a broad population most of whom usually do not consult for this type of sexual problem.
Method. A short bibliotherapy titled *The Practical Guide of PE* [in French] was tested among PE subjects who were diagnosed with PE according to Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision criteria. Assessments were made at baseline (N = 421), at 4–8 months (N = 120), and at 10–14 months (N = 79) after they read *The Practical Guide*. A control group of 66 subjects was left on a waiting list and was assessed 2 months after baseline.
Main Outcome Measures. The main outcome measures are self-reported ejaculatory latency time, feeling of control upon ejaculation, sexual satisfaction, distress related to PE, anxiety experienced during sexual intercourse, and sexual cognitions (Sexual Irrationality Questionnaire).
Results. Significant improvements were found for all the self-reported parameters, both at 4–8 and at 10–14 months after the bibliotherapy. The improvements were associated with an adjustment of sexual cognitions. The response to treatment seemed better for those subjects with moderate PE. Although the severity criteria used in this study did not precisely meet the International Society for Sexual Medicine criteria for lifelong PE, they were likely related. The response did not seem to be affected by variables such as age, education, or personality.
Conclusion. Its cost/benefit ratio makes *The Practical Guide* a valuable therapeutic tool. **Kempeneers P, Andrianne R, Bauwens S, Georis I, Pairoux J-F, and Blairy S. Clinical outcomes of a new self-help booklet for premature ejaculation. J Sex Med **;**:**–**.**

Key Words. Premature Ejaculation; Bibliotherapy; Self-Help Book; Cognitive-Behavior Therapy; Treatment; Anxiety; Sexual Cognitions; Sexual Health; Ejaculatory Latency Time

Introduction

The purpose of the present study, called BibliothEP,[1] was to improve a bibliotherapy approach to the problem of premature ejaculation (PE) based on up-to-date techniques, the efficacy of which has been advocated previously by Kempeneers et al. [1].

[1]The word *BibliothEP* is a contraction of the word *bibliotherapy* and the acronym *EP* for "Ejaculation Précoce" ("Premature Ejaculation" in French). The University of Liege (Belgium) and the Province of Liege Department of Health and Quality of Life (Belgium) collaborated on leading this study. It received the Best Presentation Award 2010 from the Association Française de Thérapie Comportementale et Cognitive (AFTCC).

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PE is a very common disorder. Its estimated prevalence is around 20–30% of the male population, depending on the study. However, although effective treatments do exist [2,3], few affected people consult a practitioner about their problem: around 15% [4] to 18% [5]. The reasons for these low numbers might include embarrassment at discussing the problem and a lack of information about available treatments [4,6]. Bibliotherapy thus represents a useful option for treatment.

Research into cognitive-behavioral treatments showed that reading didactic documents about the problem might help PE men improve their condition. Such an approach is called "bibliotherapy." In 1975, Lowe and Mikulas performed the first test of a bibliotherapy for PE [7]. The authors reported an improvement rate of 100% but in a small sample of only 10 subjects. The self-help book used in this study was never published. A second bibliotherapy developed by Zeiss and Zeiss (p. 159) [8] was tested by Zeiss himself in 1978 [9] and by Trudel and Proulx in 1987 [10]. Only Trudel and Proulx found significant improvements, but once again in a very small sample (N = 15). These bibliotherapies were based on a classical behavioral approach developed by Masters and Johnson [11] and primarily focused on stop–start techniques. More recently, De Sutter et al. [12] tested a self-help book (p. 311) written by De Carufel and De Sutter (alias Carr and Sutter) [13] and based on alternate techniques to regulate the escalation of sexual arousal in order to keep it below a threshold of uncontrollability. These regulation techniques were first proposed by Desjardins in 1985 [14] and have been developed by De Carufel since 1996 [15,16]. Using Carr and Sutter's book, De Sutter and colleagues reported a lengthening of self-reported latency in 75% of the 64 users. The significance of the improvement was controlled for by comparing it with outcomes for subjects remaining on a waiting list without treatment. Using the same bibliotherapy, Jurysta and De Sutter found similar results in 116 subjects with both PE and an erectile disorder [17].

Carr and Sutter's bibliotherapy, which was clearly effective, mostly depended on regulating techniques. Nevertheless, the method described derived from an original therapeutic protocol spread out over about a dozen face-to-face 30-minute interviews. This bibliotherapy was presented as a novel of more than 300 pages, in which a mass of sexological information and recommendations were diluted by a romantic intrigue. We thought that this formula might not be optimal for easy and widespread use and we were convinced that it was possible to improve the approach. De Sutter et al. did not provide any information about the 25% of the subjects that did not report an improvement or about those (N = 53) that quit the protocol [12]. However, one cannot exclude the possibility that the format of this self-help book might not have been easy to use for some people, for example, those reluctant to read novels or those who needed concise and a straightforward overview.

In 2004, Kempeneers et al. argued that, compared with the classical cognitive-behavioral format focusing on stop–start techniques, the regulating approach had better theoretical validity and was easier to apply [1]. They also suggested simplifying the therapeutic protocol by focusing it on those elements thought to be most effective. Essentially, these included the following: (i) cognitive intervention to help people free themselves from an overvaluation of coitus as a way of providing pleasure and (ii) behavioral training to thwart a rapid escalation of sexual arousal by using specific self-masturbatory and breathing exercises and by integrating the principle of breaks. Therefore, one might assume that a short bibliotherapy synthesizing these essential components of the regulating method would be at least as efficacious as previous self-help books on PE and would certainly be easier to use.

Aim

The aim of the present study was to improve the bibliotherapy approach by using up-to-date techniques, the effectiveness of which was assumed [1]. The expected benefits were to obtain the following: (i) an efficient manual shorter than previous ones; (ii) with therapeutic principles easier to assimilate; and, therefore, (iii) a method made accessible to a large public, notably to those men who usually do not consult with a professional for help with this type of sexual problem.

Material and Method

The Practical Guide of PE

A short bibliotherapy named *The Practical Guide of PE* [in French] was developed [18].

In 41 A5 format pages, the booklet described some essential processes involved in PE and proposed some exercises for learning to manage sexual arousal and thereby delay ejaculation. It also provided some food for thought about generally

Table 1 Contents of the practical guide of premature ejaculation

Introduction
- I. Definition
  1. A subjective landmark: the person's wish
  2. Minimal stimulation of the penis
  3. Frequency of the difficulty
  4. Frequency of sexual activities with ejaculations
  5. Newness of the sexual experience, newness of the partner

  Conclusion: the «official definition»
- II. The causes of premature ejaculation

  Preamble
  1. In general
  2. Special cases
  3. In detail
     - 3.1. Nature factor
     - 3.2. Culture factor
- III. A two-stage behavioral treatment
  1. To look at the coitus in perspective and to enlarge the range of erotic behaviors
  2. To thwart the reflexes contributing to a rapid growth of excitation
     - 2.1. Masturbation "fixed wrist—mobile body"
     - 2.2. "Abdominal" respiration
     - 2.3. To synchronize the breathing with the copulating movement
     - 2.4. To have breaks
     - 2.5. Application in coital situations
     - 2.6. In the end
- VI. Epilogue
  1. The advantages of the booklet
  2. Its limits
  3. Do efficacious medications for premature ejaculation exist?

Glossary
For further reading
Useful addresses

improving sexuality. Its contents are described in Table 1. *The Practical Guide of PE* can be viewed as a popular work adapted from the protocol previously advocated by our team [1].

The protocol was based on the assumption that PE is often due to an individual not having learned the sexual abilities to prevent spontaneous copulating habits that involve a rapid growth of arousal and a risk of complaints related to the ejaculation time. The main purpose of *The Practical Guide* is to help people to acquire such abilities. The guide's educational elements target two main sorts of abilities: (i) abilities used to shift the focus away from coitus as the primary way to get pleasure and (ii) abilities used to manage arousal without directly giving in to sensory-motor automatisms that hasten the ejaculatory reflex.

Trial Design and Population[2]

An invitation to test *The Practical Guide of PE* was advertised in the Belgian French-speaking media. In the advertisements, voluntary PE subjects were invited to phone the study call center. Four hundred ninety-two men responded to the invitation. During the initial phone call, the diagnosis of PE was confirmed (N = 461) or not confirmed (N = 31) on the basis of Diagnostic and Statistical Manual, fourth edition, text revision criteria [19]. The interview focused on two inclusion criteria and five exclusion criteria. The inclusion criteria were as follows: (i) the subject reported that ejaculation generally occurred before he wished it to occur, with sexual stimulation estimated as minimal before, during, or shortly after penetration, and (ii) the subject expressed distress due to this condition. The exclusion criteria were as follows: (i) the difficulty appeared to be mainly due to the effects of substance use, such as an opioid, antidepressant, or antipsychotic withdrawal; (ii) the difficulty appeared to be due to an organic affliction such as a urinary tract infection or a pelvic or medullar trauma; (iii) the PE appeared to be secondary to erectile dysfunction; (iv) the problem began less than 3 month prior to the study; and (v) the subject was not yet 18 years old. The interviews were conducted by psychology or sexology students who were specifically trained and supervised by experienced sex therapists (the first four authors). If included, subjects gave their e-mail address and received a password allowing them to complete online questionnaires after reading and signing an informed consent form. The subjects were also invited to include their (primary) partner in the study. If both subject and partner agreed to participate, the latter received her own password in order to also complete an online questionnaire.

The study comprised several steps:

- *Pretest (T0)*: Among the 461 subjects eligible for the protocol, 421 (91%) at least partially completed a baseline questionnaire; 392 (85%) completed the whole questionnaire and then received *The Practical Guide of PE*. Eighty partners also filled out a baseline questionnaire.
- *Control group (Ti)*: Among the 392 participants, 66 (one-fifth) were randomly selected to be on a waiting list for 2 months before completing a second pretest questionnaire (pretest 2), and then received *The Practical Guide*.
- *Posttest 1 (T1)*: 120 subjects completed a posttest questionnaire 4–8 months after having received *The Practical Guide*.
- *Posttest 2 (T2)*: Among the 120 participants at T1, 79 subjects completed a second questionnaire online 4–8 months after T1.

[2]The protocol was approved by the Ethics Committee of the Faculty of Psychology of the University of Liege (Belgium) on October 31, 2008.

Outcome Measures

Sociodemographic and Relational Data

The subjects' ages and relational situations (one, several, or no fixed partner) were assessed during the phone call. Their educational levels were assessed in the first online questionnaire (T0).

Sexual Functioning

The subtypes of PE (lifelong/acquired; generalized/situational) were assessed during the phone call. On each online questionnaire (T0, Ti, T1, and T2), sexual functioning was assessed using self-report multipoint scales. The measures dealt with the frequency of sexual intercourse (1. more than once per week → 3. less than once per month), the perceived latency time ("During the last few months, what was the mean duration of your penetrations?" 1. ejaculation before intromission → 8. >10 minutes), the feeling of control upon ejaculation (1. no control → 7. total control), the general sexual satisfaction (1. no satisfaction → 7. total satisfaction), and the distress related to PE ("To what extent is your PE a problem for you now?" 1. not a problem at all → 7. very important problem). The questionnaire also measured the satisfaction and the distress that the subjects attributed to their (primary) partner ("In your opinion, what is your partner's general sexual satisfaction?" "In your opinion, to what extent is your PE a problem for your partner?").

Anxiety During Sexual Intercourse

The anxiety experienced during sexual intercourse was evaluated using an adaptation of the French version of Spielberger's State Anxiety Inventory [20] with the original period of time considered, "now," replaced by "when you have sexual intercourse." Measurements were taken by means of this inventory at each step of the study (T0, Ti, T1, and T2).

Sexual Cognitions

The sexual cognitions were measured at each step of the study by the French version of McCormick and Jordan's Sexual Irrationality Questionnaire (SIQ) [21]. The SIQ produces five scores: one for the total scale (SIQ) and four for factorial subscales. The first subscale, called *Control* (SIQ-F1), refers to an irrational need to keep sexuality, sexual reactions, and desires under control; the second one, called *Communication* (SIQ-F2), refers to a lack of communication regarding adapting sexual activities to the partners' differences in erotic sensibility; the third one, *Fantasies* (SIQ-F3), expresses a tendency to regard certain fantasies as unbecoming; and the fourth one, *Frustration* (SIQ-F4), refers to a lack of tolerance for sexual frustration. The higher the subject's scores, the more he is assumed to have dysfunctional or "irrational" beliefs about sexuality.

Anxiety Trait

The French version of Spielberger's State-Trait Anxiety Inventory, form Y, subscale B (STAI Y-B) [20] measured the subject's baseline anxiety trait.

Personality Traits

The French version of Cloninger's Temperament and Character Inventory-Revised (TCI-R) assessed the subject's personality [22]. The TCI-R produces seven dimension scores: Novelty seeking (NS), Harm avoidance (HA), Reward dependence (RD), Persistence (P), Self-directedness (SD), Cooperativeness (C), and Self-transcendence (ST).

Social Anxiety

The subject's baseline social anxiety was measured by both the French version of Liebowitz's Social Anxiety Scale (LSAS) [23] and the French version of the Social Interaction Self-Statement Test (SISST) [24]. The LSAS produces two main scores: a score of fear or anxiety experienced in social situations (LSAS-F) and a score of avoidance of such situations (LSAS-A). Each of them concerns either situations involving social interactions ("S") or situations involving social performance ("P"). Overall, there are four subscores: LSAS-FS, LSAS-FP, LSAS-AS, and LSAS-AP. The SISST measures the frequency of certain thoughts in situations involving social interactions. These thoughts may be either "positive" or "negative." Therefore, this test comprises two scales: SISST+ and SISST–. The more socially anxious the subject, the lower he will score on the SISST+ and the higher he will score on the SISST–.

Assessments of Partners' Baselines

Partners' educational level, opinions about sexual functioning, sexual cognitions, anxiety trait, and sexual anxiety were assessed in the same way as those of the subjects in the pretest.

Feelings of Improvement in Posttest 1

At posttest 1 (T1), the subjects' feeling of improvement was assessed using a multipoint scale (1. no improvement → 7. very strong improvement). Those subjects who felt no improvement were invited to provide comments.

Perception of the Booklet at Posttest 1

At posttest 1, the subjects were asked to provide their opinion of the usefulness of *The Practical*

Table 2 Significant differences (*$P < 0.05$) found among subjects remained in the protocol at posttests 1 and 2

Parameters assessed at baseline		All subjects N = 421 M (sd)	Posttest 1 N = 120 M (sd)	Posttest 2 N = 74 M (sd)
Age		39.1 (11.3)	40.8 (11.4)*	41.6 (12)*
SISST+	(Facilitative self-statements)	42.6 (7.1)	42 (6.3) ns	41 (6.4)*
TCI-R, NS	(Novelty seeking)	99.6 (14.9)	96.5 (13)*	95.8 (13.5)*
TCI-R, HA	(Harm avoidance)	90.7 (19.3)	93.3 (19.3) ns	95 (19.1)*
TCI-R, P	(Persistence)	120.8 (19.5)	118 (20.9)*	116 (19.4)*
TCI-R, ST	(Self-transcendence)	67.6 (15.6)	64.5 (15.4)*	63.8 (14.8)*
Partner's score at SIQ-F2 (lack of communication)		16 (3.6)	17.3 (3.3)*	17.4 (3.7)*

M, mean; ns, not significant; sd, standard deviation; SISST, Social Interaction Self-Statement Test; SIQ Sexual Irrationality Questionnaire; TCI-R, Temperament and Character Inventory-Revised

Guide by means of a multipoint scale ("do you feel that the bibliotherapy booklet has been useful in the approach to your sexual difficulties?" 1. not useful at all → 7. strongly useful). They were also invited to describe what they thought were the advantages and the limitations of the booklet in two open questions.

Statistical Analyses

Statistical analyses were performed using Statistica© software, version 9 (StatSoft Inc., Maisons-Alfort, France) For the most part, repeated measures (*t*-tests) were used to compare pretest and posttest outcomes, and analysis of variance (ANOVA) and linear regression were used to predict the therapeutic response in posttest 1 using baseline variables as criteria. A probability alpha <0.05 was regarded as the significance cut-off value.

Results

Description of the Sample

At baseline, subjects' ages ranged from 18 to 74, with an average of 39 years old. More than four-fifths of the sample was between 25 and 55 years old. Subjects' educational level was rather high given more than half of them had at least a college degree. The partners' educational level was lower than the subjects: none of them had attended college and 66% had no education beyond primary school. More than 90% of male subjects had only one partner, 2.5% had several, and 6% had no fixed partner. Three-quarters of the subjects presented a lifelong form of PE and one-quarter an acquired one. For four-fifths, the trouble was generalized and for one-fifth it was situational.

Functional and psychometric characteristics of the subjects and their partners have been reported and discussed in detail in a previous article [25].

Of the 461 included subjects, 85% completed the pretest assessment, 26% completed posttest 1, and 16% completed posttest 2. The subjects who completed the entire protocol (pretest, posttest 1, and posttest 2) largely showed the same sociodemographic, functional, and psychometric characteristics as those who fell away during the follow-up. Nevertheless, some slight differences (*t*-tests) were found in Table 2. The subjects who completed the study were a little bit older than the others ($t = 2.23$; degrees of freedom [df] = 458; $P < 0.03$), they tended to have fewer facilitative self-statements in social interactions ($t = 2.30$; $df = 410$; $P < 0.03$), they scored lower on NS ($t = 2.50$; $df = 396$; $P < 0.02$), P ($t = 2.54$; $df = 394$; $P < 0.02$), and ST ($t = 2.42$; $df = 395$; $P < 0.02$) scales and higher on the HA scale ($t = 2.22$; $df = 396$; $P < 0.03$), and their partners seemed to have more dysfunctional beliefs impairing sexual communications ($t = 2.10$; $df = 78$; $P < 0.04$). These differences were discrete—it is not likely, but it is possible that they influenced the improvements reported below.

Improvements in Sexual Functioning

Significant improvements ($P < 0.05$) were found for all the self-reported parameters, both at 4–8 (T1) and at 10–14 months (T2) after bibliotherapy. The *t*-tests and the comparison of the means (reported in Table 3a) revealed that the classic indicators of PE, that is to say ejaculatory latency, the feeling of lack of control, the lack of sexual satisfaction, and the distress, clearly decreased in severity from baseline to the posttests. Section *a.1* of Table 3 reports the progress of the subjects who completed the posttest 1 questionnaire. The *t*-values were 6.87 ($df = 119$; $P < 0.001$), 8.30 ($df = 119$; $P < 0.001$), 6.18 ($df = 119$; $P < 0.001$), and 5.82 ($df = 119$; $P < 0.001$) for latency, control, satisfaction, and distress criteria, respectively. Section *a.2* reports the progress of the subjects who completed posttest 2. From baseline to T2,

Table 3 Improvement of the sexual functioning (primary indicators)

a. Total sample				b. Subset of subjects meeting the ISSM criteria for lifelong PE			
	T1 completed (N = 120)				T1 completed (N = 55)		
a.1.	Pretest M (sd)	Posttest 1 M (sd)		b.1.	Pretest M (sd)	Posttest 1 M (sd)	
Latency	3.7 (1.2)	4.5 (1.6)***		Latency	2.6 (0.6)	3.7 (1.5)***	
Control over ejaculation	2.1 (0.8)	3 (1.3)***		Control over ejaculation	1.8 (0.7)	2.7 (1.2)***	
Sexual satisfaction	2.7 (1.2)	3.5 (1.4)***		Sexual satisfaction	2.5 (1.1)	3.1 (1.3)**	
Distress	5.9 (1.2)	4.9 (1.7)***		Distress	6 (1.3)	4.9 (1.7)***	
	T2 completed (N = 79)				T2 completed (N = 36)		
a.2.	Pretest M (sd)	Posttest 1 M (sd)	Posttest 2 M (sd)	b.2.	Pretest M (sd)	Posttest 1 M (sd)	Posttest 2 M (sd)
Latency	3.6 (1.3)	4.4 (1.7)***	4.6 (1.7)***	Latency	2.5 (0.7)	3.6 (1.6)***	3.6 (1.5)***
Control over ejaculation	2.2 (0.8)	3.1 (1.2)***	3.3 (1.3)***	Control over ejaculation	1.9 (0.7)	2.9 (1.2)***	2.9 (1.2)***
Sexual satisfaction	2.8 (1.1)	3.5 (1.4)***	3.6 (1.5)***	Sexual satisfaction	2.6 (1.1)	3.3 (1.4)**	3.2 (1.5)*
Distress	6 (1.1)	4.8 (1.7)***	4.4 (1.7)***	Distress	6.1 (1.1)	4.9 (1.6)**	4.8 (1.7)***
	Control condition (N = 66)				Control condition (N = 35)		
a.3.	Pretest M (sd)	Pretest 2 M (sd)		b.3	Pretest M (sd)	Pretest 2 M (sd)	
Latency	3.4 (1.1)	3.5 (1.2)	ns	Latency	2.5 (0.6)	3.1 (1.2)***	
Control over ejaculation	2 (0.8)	2.2 (0.9)*		Control over ejaculation	1.7 (0.6)	2 (0.9)*	
Sexual satisfaction	2.7 (1.2)	3 (1.3)	ns	Sexual satisfaction	2.7 (1.1)	3 (1.3)	ns
Distress	5.9 (1.1)	5.8 (1.1)	ns	Distress	6 (0.9)	5.7 (1.3)	ns

*Different from baseline at $P < 0.05$; ** at $P < 0.01$; ***at $P < 0.001$
ISSM, International Society for Sexual Medicine; M, mean; ns, not significant; PE, premature ejaculation; sd, standard deviation

the t-values were 6.13 ($df = 78$; $P < 0.001$), 8.85 ($df = 78$; $P < 0.001$), 4.66 ($df = 78$; $P < 0.001$), and 7.61 ($df = 78$; $P < 0.001$). The median self-esteemed ejaculatory latency times were 1–2 minutes at baseline and 2–4 minutes at posttests 1 and 2.

An agreement has emerged among several authors affiliated with the International Society for Sexual Medicine (ISSM) to define lifelong PE as a primary disorder that renders a man unable to delay ejaculation beyond 1–2 minutes in any circumstance [26]. Therefore, the assessments were repeated with the subset of 188 subjects (44.5%) who met these criteria at baseline (i.e., a lifelong and generalized form of PE with a mean latency time under 1 minute). Among these 188 subjects, 55 (29%) completed posttest 1 and 36 (19%) completed posttest 2. As shown in Table 3b, their progress appeared to be quite similar to the progress of the subjects in the sample as a whole.

The ISSM lifelong PE subset showed more severe scores both at the pretest and the posttests, but the changes had the same magnitude. From baseline to posttest 1 (section *b.1*), the t-values were 5.81 ($df = 74$; $P < 0.001$), 5.76 ($df = 74$; $P < 0.001$), 3.29 ($df = 74$; $P < 0.001$), and 3.73 ($df = 74$; $P < 0.001$) for latency, control, satisfaction, and distress criteria, respectively; from baseline to posttest 2 (*b.2*), the t-values were 4.51 ($df = 35$; $P < 0.001$), 5.12 ($df = 74$; $P < 0.001$), 2.28 ($df = 74$; $P < 0.03$), and 4.56 ($df = 74$; $P < 0.001$). The median latency times increased from 30 seconds to 1 minute at baseline to 1–2 minutes at posttests 1 and 2.

As shown in Table 4, improvements were also found for other indicators of sexual functioning: the sexual satisfaction attributed to the partner and the distress attributed to the partner. In the entire sample (Table 4a), the subjects attributed more satisfaction ($t = 4.76$; $df = 119$; $P < 0.001$) and less distress to their partner ($t = 4.78$; $df = 119$; $P < 0.001$) at posttest 1 than they did at baseline (section *a.1*). The differences remained significant at posttest 2 (section *a.2*), with t-values of 3.97 ($df = 78$; $P < 0.001$) and 5.60 ($df = 78$; $P < 0.001$) for satisfaction and distress criteria, respectively. In the subset of subjects meeting the ISSM criteria for lifelong PE, the t-values related to the change at posttest 1 (section *b.1*) were 2.50 ($df = 54$; $P < 0.02$) and 3.60 ($df = 54$; $P < 0.001$) for satisfaction and distress criteria, respectively, and from baseline to posttest 2 (section *b.2*), the t-values were 2.10 ($df = 35$; $P < 0.05$) and 4.01 ($df = 35$; $P < 0.001$), respectively.

Table 4 Satisfaction and distress attributed to the partner

a. Total sample

a.1.	T1 completed (N = 120)		
	Pretest M (sd)	Posttest 1 M (sd)	
Satisfaction†	2.9 (1.5)	3.7 (1.5)***	
Distress†	4.8 (1.6)	3.9 (1.7)***	
a.2.	**T2 completed (N = 79)**		
	Pretest M (sd)	Posttest 1 M (sd)	Posttest 2 M (sd)
Satisfaction†	3.2 (1.5)	3.7 (1.5)**	3.9 (1.7)***
Distress†	4.8 (1.6)	3.8 (1.6)***	3.7 (1.7)***
a.3.	**Control condition (N = 66)**		
	Pretest M (sd)	Pretest 2 M (sd)	
Satisfaction†	2.9 (1.4)	3 (1.4)	ns
Distress†	4.7 (1.7)	4.7 (1.6)	ns

b. Subset of subjects meeting the ISSM criteria for lifelong PE

b.1.	T1 completed (N = 55)		
	Pretest M (sd)	Posttest 1 M (sd)	
Satisfaction†	2.7 (1.4)	3.3 (1.5)*	
Distress†	4.9 (1.8)	4 (1.6)***	
b.2.	**T2 completed (N = 36)**		
	Pretest M (sd)	Posttest 1 M (sd)	Posttest 2 M (sd)
Satisfaction†	2.8 (1.6)	3.4 (1.6) ns	3.5 (1.6)*
Distress†	5.1 (1.7)	4.1 (1.6)**	4 (1.6)***
b.3.	**Control condition (N = 35)**		
	Pretest M (sd)	Pretest 2 M (sd)	
Satisfaction†	2.8 (1.4)	2.9 (1.3)	ns
Distress†	5 (1.5)	4.8 (1.4)	ns

*Different from baseline at $P < 0.05$; **at $P < 0.01$; ***at $P < 0.001$
†Satisfaction and distress *attributed to the partner*
ISSM, International Society for Sexual Medicine; M, mean; ns, not significant; PE, premature ejaculation; sd, standard deviation

The anxiety experienced during sexual intercourses also slightly decreased. In the entire sample, anxiety decreased from 54 at baseline to 52.32 at T1 ($t = 2.52$; $df = 119$; $P < 0.02$). At T2, a decrease from 54.26 (baseline) to 53.07 ($t = 2.20$; $df = 78$; $P < 0.04$) was observed. In the subset of subjects meeting the ISSM criteria for lifelong PE, the anxiety decrease was not significant at T1, decreasing from 55.39 (baseline) to 53.75 ($t = 2.0$; $df = 35$; $P < 0.05$) at T2. No anxiety decrease was found in the control group.

Control Group

Sections *a.3* and *b.3* of Table 3 show a slight improvement at 2 months (pretest 2) in subjects on the waiting list. The entire sample experienced improvement in the feeling of control ($t = 2.12$; $df = 65$; $P < 0.04$). The lifelong subset experienced improvement in the feeling of control ($t = 2.42$; $df = 34$; $P < 0.03$) and latency time ($t = 3.64$; $df = 34$; $P < 0.001$). This suggests that a part of the response to treatment might be related to a spontaneous evolution and/or to nonspecific care effects. Such a slight improvement might also suggests the hypothesis that only by joining the study and completing a questionnaire, some participants became more aware of their condition and encouraged to take relevant steps toward improvement (e.g., to gather documentation or to talk with their partners).

It is notable that among the 67 subjects in the control group, 13 completed T1 and 10 completed the entire protocol. Such low Ns did not allow for the calculation of relevant statistics related to the progress of these subjects.

Sexual Cognitions

Scores on the SIQ decreased significantly from 108.4 at baseline to 99.59 at posttest 1 ($t = 7.23$; $df = 109$; $P < 0.001$). At posttest 2, the decrease was from 107.69 to 99.03 ($t = 5.52$; $df = 79$; $P < 0.001$). In other words, men who had read *The Practical Guide* appeared to have fewer counterproductive sexual beliefs. For the subscales, the mean scores decreased from 38.47 to 33.66 ($t = 8.15$; $df = 116$; $P < 0.001$) at posttest 1 and from 38.01 to 33.65 ($t = 5.80$; $df = 79$; $P < 0.001$) at posttest 2 for SIQ-F1; from 17.6 to 16.14 ($t = 3.93$; $df = 117$; $P < 0.001$) at posttest 1 and from 17.56 to 16.49 ($t = 2.77$; $df = 79$; $P < 0.008$) at posttest 2 for SIQ-F2; from 10.69 to 9.88 ($t = 3.39$; $df = 119$; $P < 0.001$) at posttest 1 and from 10.66 to 9.95 ($t = 2.32$; $df = 79$; $P < 0.03$) at posttest 2 for SIQ-F3; and from 14.55 to 13.66 ($t = 3.29$; $df = 119$; $P < 0.002$) at posttest 1 and from 14.34 to 13.55 ($t = 2.99$; $df = 79$; $P < 0.03$) for SIQ-F4.

Feelings of Improvement

Figure 1 shows the distributions found at posttest 1 regarding subjects' feeling of improvement.

About 85% of the subjects reported at least a slight improvement in their condition after using the bibliotherapy (values >"1" at the multipoint

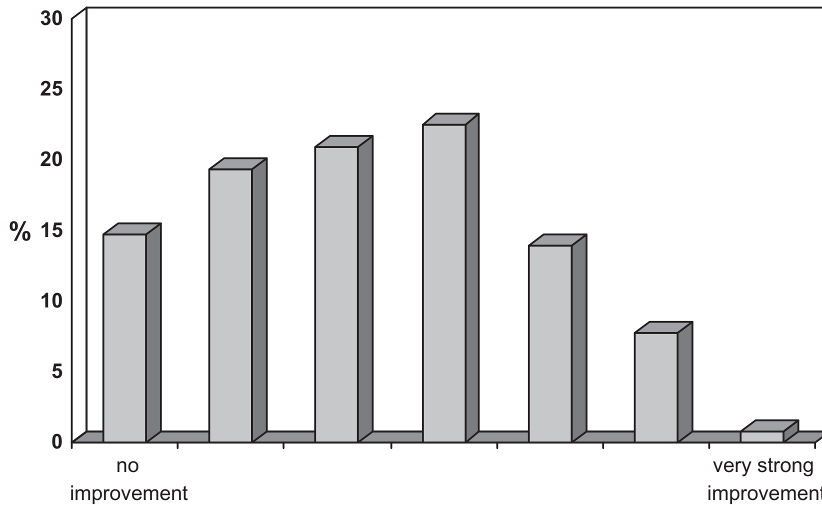

Figure 1 Feeling of improvement.

scale). On the other hand, almost 15% reported no improvement (value "1"), and almost 20% found the improvement only "slight" (value "2").

Almost 50% of the subjects who reported no ("1") or slight ("2") improvement did not provide comments. Twenty percent stressed that the bibliotherapy was not useful or not sufficiently useful but did not offer any additional explanation. In the remaining cases, the subjects provided comments that we have classified in three categories, which were not necessarily mutually exclusive. In decreasing order of importance: (i) *exercises not done* (cited by about 23% subjects)—the exercises suggested in *The Practical Guide* were not done or not frequently enough; subjects then gave explanations for not doing the exercises such as a lack of time, uneasiness, insufficiently intimate conditions, or a personal reticence to masturbate; (ii) *holding the partner or the relationship responsible* (about 18%)—explanations here included a partner opposed to any sexual change, relational difficulties, a partner's unwillingness to "practice," or a partner's having a health problem incompatible with "practice"; and (iii) *lack of hindsight* (5%)—the frequency of sexual intercourse was insufficient to realize the results.

Opinions about the Booklet

Figure 2 shows that a large majority of subjects found the bibliotherapy booklet at least slightly useful (values >"1") as an approach to addressing their sexual problem.

The subjects reported four main advantages of *The Practical Guide of PE*, which were not mutually exclusive: (i) Improvement in personal feelings (e.g., "The booklet helped me to stop feeling

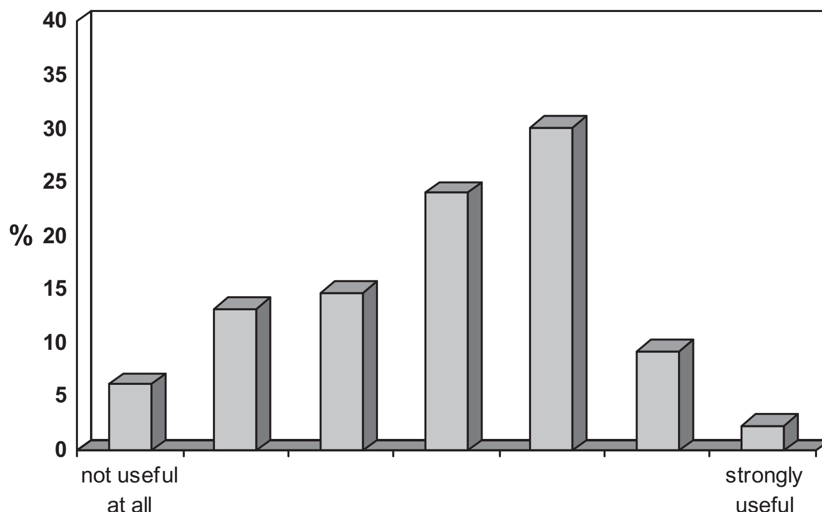

Figure 2 Opinion concerning the utility of the bibliotherapy.

guilty about PE and to make the problem less daunting"); (ii) Suitability of format (e.g., "The booklet was concise and easy to read"); (iii) Clarity (e.g., "The explanations given were clear and the behavioural techniques easy to understand" and "the explanatory model allowed for a correct understanding of the goals and the terms of the method"); and (iv) Illustrations (e.g., "the personalized examples and the illustrations facilitated understanding").

The limitations of *The Practical Guide* fell into three main categories: (i) Application (e.g., "Although easy to understand, the exercises were not always easy to implement"); (ii) Inadequacy (e.g., "It seemed to me that the explanatory model and the techniques were not appropriate for my situation"); and (iii) Relational problems (e.g., "The booklet was not sufficient to help me to overcome some problems in my relationship with my partner"), which could also, it should be noted, be the reason behind the first two categories.

Factors Facilitating the Outcome of Treatment

In order to explore which factors predict a better therapeutic outcome, the feelings of improvement reported at posttest 1 were cross-referenced with all the parameters assessed at baseline (linear regression and ANOVA).

The outcome appeared significantly better: (i) among subjects showing *less of a feeling of lack of control* at baseline ($F = 2.05$; $P < 0.05$); (ii) among those reporting a *higher frequency of intercourse* ($F = 2.76$; $P < 0.007$); and (iii) among subjects presenting a *situational* rather than generalized PE ($F = 4.1$; $P < 0.05$).

The response did not seem to be related to variables such as age, educational level, anxiety, personality traits, or partner's characteristics. Furthermore, there was no difference in the feeling of improvement between the subjects meeting the ISSM criteria lifelong PE and those who did not.

Discussion

The results of the present study sustain the idea that a short bibliotherapy focusing on some specific techniques, which allow regulation of the escalation of sexual arousal, could improve PE problems.

It is important to note that the improvements were accompanied by adjustments of sexual cognitions. It has been reported in a previous article [25] that in that sample subjects with PE showed more dysfunctional sexual beliefs than the general population. Therefore, it is possible that a part of the treatment lay in cognitive restructuring. Indeed, effective exercises for delaying ejaculation require suitable knowledge free of inadequate expectations about sex [3].

The improvements clearly remained stable at the 1-year follow-up. This result contrasts with the current opinion that significant relapses occur when sex therapy is applied to PE [27–29].

Besides, the study presented some limitations. The sample was not selected on a representative basis, so the possibility that the degree of efficacy of *The Practical Guide of PE* derived from selection bias cannot be excluded. The male subjects of BibliothEP study were more educated than the general population, while partners' educational level was quite low: such educational gaps inside couples are actually atypical in Belgium. Therefore, it is important to be cautious in generalizing. Both the supports used for the recruitment (mainly newspapers and radio news reports) and the obligation to complete online questionnaires were likely lead to a selection of men whose education was above average. It is uncertain if similar results would have been obtained with people less acquainted with the media or with the Internet. However, one also must note that within the sample higher educational level did not predict a better therapeutic outcome. This qualifies the hypothesis of an efficacy primarily due to the education level of the sample.

Not only entering but also staying in the protocol might induce bias leading to overestimate the efficacy of the bibliotherapy. At 6- and 12-month posttreatment, the participant drop-out rates were quite substantial: 68% and 81%, respectively. Very little is known about attrition in surveys. This phenomenon is likely related to questionnaire length [30] and to the follow-up duration [31], which were both high in the BibliothEP study, but the subjects' motives for discontinuation remain largely unknown. The hypotheses that a lack of benefit from the bibliotherapy might be a reason for discontinuation and that treatment efficacy might result from a higher level of motivation in the subjects remaining in the protocol should not be neglected.

Overall, the bibliotherapy did seem to be effective. However, the improvements appeared rather small at times, indicating that treatment efficacy was not the same for all participants. Therefore, it was useful to try to identify the factors that determine the quality of the therapeutic response.

First, the outcome of treatment appeared better for subjects with situational PEs than for those with generalized ones. It was also better when the feelings of lack of control were not in the most severe range at baseline. We have argued in a previous study [25] that situational PE, on the one hand, and generalized and lifelong PE with very short latency times, on the other hand, could be viewed as two ends—low and high—of a PE severity continuum. Presumably, the bibliotherapy would present its best efficacy with less severe forms of PE.

Waldinger [32] suggested that some lifelong PE, as diagnosed according to ISSM criteria (i.e., with stopwatch recorded latency times lower than 1 minute in any circumstances), results from constitutional problems that can be quite resistant to any treatment. In the BibliothEP study, subjects presenting a generalized form of PE and a poor control in baseline were associated with lower improvement. Although they did not precisely meet the ISSM definition of "lifelong PE," there was likely some overlap. Of course "resistant" to treatment does not mean "untreatable," but bibliotherapy alone may not always be enough. Therefore, it could be interesting to test a treatment combining bibliotherapy and drug therapy for those severe forms of PE possibly largely biological in origin.

Second, some subjects found the exercises difficult to understand and/or to apply. Some also reported relational problems. These factors tended to restrict the efficacy of *The Practical Guide of PE*. It would certainly be unrealistic to expect a bibliotherapy to be able to manage every PE situation in every relational context. Numerous personal and relational factors may interfere, requiring meeting with a professional in order to adjust the treatment [33]. Nevertheless, in some cases, one wonders if other didactical manuals on PE—more detailed and more complex—such as De Carufel's [34] or Metz and McCarthy's [35] monographs, or such as Carr and Sutter's [13] didactical novel, would produce a therapeutic gain. Would they be able to facilitate the implementation of some suitable behaviors or, on the contrary, would they be too difficult to digest? A comparison of several bibliotherapies would certainly be instructive.

Third, the magnitude of improvement also appeared to be dependent on a sufficient frequency of sexual intercourse. The infrequency of intercourse might be related to numerous factors; nevertheless, significant results are unlikely without sufficient behavioral training and practice.

Overall, a short self-help manual such as *The Practical Guide of PE* seems both effective and easy to use. It could certainly be recommended as a first-line treatment tool. It could even be an attractive alternative to first-line drug therapies. Regarding the low rate of PE men who consult with professionals regarding their sexual disorder, the mass diffusion of such a booklet might also be useful in improving the sexual health. It provides information about available treatments, and in best cases it enables a man to overcome PE problems without any other help and without needing to talk with anybody about his sexual difficulty. Furthermore, this approach is considerably less expensive than classic drug or psychological treatments.

Conclusions

In conclusion, *The Practical Guide of PE* leads to a significant improvement in PE problems, especially when the severity of PE is moderate. Its cost/benefit ratio makes *The Practical Guide* a valuable first-line therapeutic tool, and broad distribution of such a bibliotherapy might be useful in helping men with PE who otherwise would never have sought professional help. Nevertheless, some clinical pictures have complexities that exceed the therapeutic capacities of *The Practical Guide*. In particular, relationship factors may restrict its efficacy. In such cases, meeting with a specialized professional remains indispensable for adjusting the treatment. Regarding prognosis, the hypothesis may be ventured that some severe forms of PE would better benefit from a treatment combining bibliotherapy and drug therapy. Further clinical trials are needed on this question.

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