



Research Article

Expert Advice on Child Sleep Bibliotherapy: Anyone can Write Anything

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Abstract

The present study aims to assess the quality of self-help books on the subject of children's sleep. **Method:** An international committee of specialized pediatricians and psychologists established 37 criteria in terms of quality and recommendations on children's sleep development and treatment for sleep disorders. Thirty-three self-help books written in French language were assessed on exhaustiveness regarding quality criteria and on authors' compliance with expert advice. **Results:** Half of the authors had no health care qualifications, the other half were health professionals. A few authors were specialists in sleep. Nearly 82% self-help books were not exhaustive. Only 15% of all the self-help books in the sample were more than 50% compliant with expert advice. One-third of self-help books obtained higher than a 50% total weighted score combining exhaustiveness and compliance with the criteria. The majority of self-help books do not mention at all the following criteria: risk of sudden infant death syndrome (SIDS), recommended methods for treating insomnia, and the impact of screens on sleep. **Conclusion:** The heterogeneity of self-help books raises questions about the appropriateness of their proliferation: readers have a 50/50 chance of reading a book that follows expert advice, and those who read two books have a high risk of encountering conflicting advice. This variability and the lack of legitimacy of some of the authors to publish health recommendations are detrimental to the cause of preventive health, as well as to guiding parents seeking a care solution for their children with sleep disorders.

Keywords: Bibliotherapy; Children's sleep; Insomnia; Bed sharing; Nighttime crying; Sudden infant death syndrome prevention (SIDS);

Running title: Child sleep bibliotherapy

Highlights

- Thirty-seven quality criteria for children's sleep bibliotherapy were defined by an international committee of recognized experts in children's sleep.
- Parents have a one-in-two chance of reading a self-help book about their child's sleep that is inconsistent with evidence-based advice from sleep specialists.
- The majority of self-help books on children's sleep are not exhaustive, reducing the likelihood of detecting serious disorders such as sleep apnea syndrome or preventing the risk of SIDS.
- Half of the self-help books on children's sleep are written by non-specialist authors; the dissemination of individual opinions on the subject may drown out the spread of medical and scientific recommendations.

Introduction

Sleep disorders affect between 35 and 46% of children under the age of five years old [1]. These include disorders of initiating and maintaining sleep, parasomnias, circadian rhythm sleep-wake disorders, sleep related-breathing disorders and restless legs syndrome and periodic limb movement disorders [2,3]. Sleep deprivation in children affects their behavior (e.g., hyperactivity, irritability) [4,5], social and emotional development (e.g., regulating their emotions) [6,7] cognitive development (e.g., learning and memory) [8,9], language development [10,11] and weight [12,13]. Although there are international recommendations on how to treat sleep disorders, there are very few early childhood professionals who specialize in treating sleep disorders [14]. Faced with this lack of pediatric experts in sleep disorders and the strong prevalence of disorders, widely available self-treatment methods are of considerable interest, such as bibliotherapy, which could be useful in the field of preventing and treating sleep disorders in young children. The literature includes many definitions of bibliotherapy, such as "the guided use of reading always with a therapeutic outcome in mind" [15]. Its aim is to improve mental health, either by reducing psychological suffering or by enhancing psychological well-being [16]. Bibliotherapy includes several types of books: books not written for the purpose of treatment, but which the reader may find beneficial (e.g., novels, biographies, fictions), general books written to inform and help the reader to understand themselves better (e.g., personal development books), and self-help books, defined as self-treatment or self-assistance books, which propose a precise methodology for resolving psychological or psychiatric problems [17]. Our study investigates this latter type of publication used in the course of psychotherapy programs

according to three levels [18]. Type 1 bibliotherapy recommends using a book as a means of self-treatment, with no contact with a therapist. Type 2 bibliotherapy recommends using a book alongside minimal contact with a therapist, in the form of telephone or face-to-face consultations. Type 3 bibliotherapy recommends using a book alongside regular consultations promoting optimal application of the recommendations set out in the book. Over recent years, self-help books have grown in number in several countries, representing, for example, 32% of the market share of books in France [19]. Although the effectiveness of bibliotherapy in the treatment of adult insomnia has been demonstrated [20-28], to our knowledge, very few studies investigated this issue in children [29,30]. It is therefore relevant to explore whether self-help books could constitute a type 1 bibliotherapy for children's sleep.

Ramos and Youngclarke [31] analyzed advice on bed sharing (not recommended beyond the first few months of life to prevent the risk of Sudden Infant Death Syndrome, SIDS) [32,33] and the extinction method (recommended for treating behavioral insomnia) [34-36] in 40 English-language self-help books on children's sleep. One out of three books (n=11; 28%) promotes bed sharing and one out of three books (n=12; 30%) rejects the extinction-based learning method. More than half of the authors have no medical training (n=23; 57%). The books written by health professionals generally take a stance against bed sharing and in favor of the extinction-based learning method (71% of the books written by health professionals adopt this position, compared to 39% of those written by authors with no medical training). Faced with this diversity of advice disseminated in the general population, Ramos and Youngclarke [31] underlined the necessity to pursue research in this field using an evidence-based medicine approach, and they moreover recommended establishing a scientific consensus on the advice presented in self-help books on children's sleep. We feel that such consensus is all the more important in order to clarify and to make more widely available health recommendations with regards to SIDS and the treatment of insomnia in young children. The main aims of our study are twofold: (1) To establish quality criteria with respect to bibliotherapy in the field of children's sleep by a committee of experts highly qualified in the scientific knowledge and treatment of child sleep disorders. In order to develop and expand the study conducted by Ramos and Youngclarke [31], these criteria are not limited solely to bed sharing and the extinction-based learning method and include all criteria considered by experts as being relevant regarding advice on the proper development of children's sleep and on the prevention and treatment of sleep disorders among young children. (2) To analyze whether the self-help books currently available in French language on children's sleep quantitatively and qualitatively respect the quality criteria set out by the experts. To this aim, we firstly analyzed the availability of self-help books and the author's qualification. Then, the exhaustiveness and compliance of the quality criteria were assessed by two independent psychologists so that inter-judge reliability could be measured.

Method

Availability of self-help books

Our study investigates self-help books on children's sleep and, consequently, does not explore advice on sleep provided in general books or magazines. Between December 2020 and March 2021, we established a list of self-help books on children's sleep published in French. We used the following key words: "livre sommeil enfant" ("children's sleep book"), "bibliothérapie sommeil enfant" ("children's sleep bibliotherapy") and "insomnie enfant" ("child insomnia") on Google, as well as on most famous book selling websites such as FNAC, Décitre and Amazon. A selection was then made in April 2021 and again in June 2021, to only include self-help books still currently in print and available for sale in bookstores. When necessary, we selected the most recent edition, and the most recent book where more than one was written by the same author. Finally, no restrictions on the publication date were used. Documents unsuitable for our study were excluded (i.e., 1 CD and 1 book specifically about fear of darkness). This procedure is described in Figure 1 in Supplementary Data.

Characteristics of self-help books and authors' qualification

We studied the number of authors, the publisher, price, number of pages and availability in libraries using searches in the catalogue of the university documentation system, SUDOC. We also analyzed characteristics of the authors, in particular their gender, profession, specialization (i.e., pediatric, sleep), number of scientific publications, and country of residence. The status of the authors was searched in the "About the author" section, in the introduction of the self-help book or on the internet. Their scientific publications were counted on PsycNet, PubMed and Google Scholar databases. In the category of health professionals, we included physicians (i.e., general practitioners, pediatricians, psychiatrists, child psychiatrists), professionals in the field of psychology (i.e., psychologists and psychotherapists), and nurses.

Quality criteria of self-help books

Quality criteria. A consortium of four pediatricians and two psychologists, all specialized in children's sleep, comprising authors OB, PF, ML, FL, JM, and BP, established a grid of recommendations for the prevention and treatment of insomnia in children for Type 1 self-help books on children's sleep. An initial list of 25 criteria was proposed by BP and FL, based on international recommendations, and was subsequently completed and modified by the other expert authors. A second version was developed and submitted for review by all members of the consortium, who approved the 37 criteria provided in Table 1 in Supplementary Data. Note that, unlike Ramos and Youngclarke's study [31], co-sleeping and bedroom sharing were distinguished. As the term 'co-sleeping' seems to provoke confusion in the literature, we chose to use the terms 'bed sharing' and 'room sharing'.

Inter-judge reliability. Based on this list, each book was analyzed by two independent psychologist examiners (authors NR and LC). Inter-judge reliability was calculated using a Cohen's kappa per criterion and per self-help book.

Exhaustiveness of the criteria. The 37 quality criteria were scored on a binary scale (i.e., 0=the author does not evoke the criterion; 1=the author does evoke the criterion), and summed to measure the exhaustiveness of the criteria (i.e., whether the self-help books cover the established recommendations or not). A self-help book was considered exhaustive if it covered at least 80% of the criteria, moderately exhaustive if it covered between 50% and 80% of the criteria and non-exhaustive if it covered less than 50% of the criteria.

Compliance with criteria. Compliance was assessed using a score which represents the Euclidian distance between the book studied and a book which is supposed to be totally compliant with the international recommendations as a reference model. Among the 37 criteria, the committee defined recommendations for 14 of these. Following Ramos and Youngclarke's study [31], and in order to measure the compliance of self-help-books with expert recommendations, these 14 criteria were scored using a 5-point scale (1=categorically opposed; 2=presents a warning; 3=sets out pros and cons; 4=approved; 5=recommended).

Ranking of self-help books

A total score was calculated for each self-help book, combining exhaustiveness and compliance with international recommendations. It corresponds to the weighted geometric mean of the two scores (exhaustiveness and compliance). Although exhaustiveness is an important criterion, compliance is fundamental, hence the need to give it twice as much weight as the score for exhaustiveness. The total score was therefore calculated using the following formula:

$$\sqrt[3]{(1 + \text{exhaustiveness}) \cdot (1 + \text{compliance})^2}$$

Results

Characteristics of the self-help books and authors' qualification

An initial list of 71 self-help books, written in or translated into French, was established. Among this list, 25 out-of-print books, 11 books written by the same authors, and two inappropriate papers were excluded (see the procedure in Figure 1 in Supplementary Data). The final sample, provided in Table 2 in Supplementary Data, includes 33 self-help books written by a total of 41 authors and co-authors. The number of self-help books published has increased over the past 20 years (see Figure 2 in Supplementary Data). The majority of the self-help books included in our study were written by one author (n=25; 76%), some were written by two authors (n=6; 18%) and a small minority were written by three authors (n=1; 3%) or more (n=1; 3%). The median length of the self-help books is 191 pages, and their median price is 14€. Less than half of the self-help books (n=13; 39%) are available in libraries and of those available, only a maximum of four libraries in the whole of France offer them. However, they are all available in bookstores at the time of the study.

The self-help books included in our study were mainly written by female authors (n=35; 85%). The authors mainly reside

in France (n=29; 71%), some in the United States (n=5; 12%) and the rest in the United Kingdom or in European countries. Nearly half of the authors have no healthcare qualification (n=17; 41%), with the rest having a non-healthcare profession (e.g., author, coach, journalist). Authors in the healthcare profession (n=24; 59%) are mainly pediatricians (n=10; 24%), as well as a few general practitioners (n=2; 5%), nurses (n=2; 5%), child psychiatrists (n=2; 5%), psychiatrist (n=1; 2%) and psychologists (n=6; 15%) or psychotherapists (n=1; 2%). Among the professionals in the healthcare field, the authors are mainly specialized in the field of early childhood (n=13; 54%). However, one health professional out of five (21%) have no specialization and the majority of the authors are neither specialized in sleep (n=1; 4%) nor in children's sleep (n=5; 21%). Finally, the authors' records of publishing peer-reviewed science are quite diverse. The majority of them have never published a scientific article (n=26; 63%) and, among those who have, only one in two had written their articles about sleep (n=8 in 15).

Quality criteria for self-help books

Inter-judge reliability. The Cohen's kappas derived, per self-help book and per variable, ranged from 0.43 to 1, highlighting a moderate to strong agreement between the two judges. The results

presented a perfect agreement (k between .80 and 1) for 10 books and 18 criteria, a strong agreement (k between .60 and .80) for 17 books and 22 criteria and a moderate agreement (k between .40 and .60) for 6 books and 21 criteria. The weakest inter-judges reliability scores relied on authors' ambiguous position on a given criterion, the presentation of a treating method without mentioning its conventional name, or a description of a different set-up from the recommended one. Since the inter-judge reliability was acceptable, only the assessments of the first author are presented in the following results.

Exhaustiveness of the quality criteria. The analysis of the exhaustiveness criteria showed that only one self-help book (3%) is exhaustive (i.e., mentioning all 37 criteria), only 15% of self-help books (n=5) evoke more than 80% of criteria, 45% evokes 50 to 80% of criteria and 36% evokes less than 50% of criteria. In short, nearly 80% of self-help books are not exhaustive with respect to the criteria established by the committee of experts. The most exhaustive self-help books are written mainly by health professionals (n=12 out of 14; 85%), while the least exhaustive are written by both health professionals (n=9 out of 19; 47%) and non-health professionals (n=10 out of 19; 53%). Figure 1 presents the exhaustiveness of each criterion for the sample.

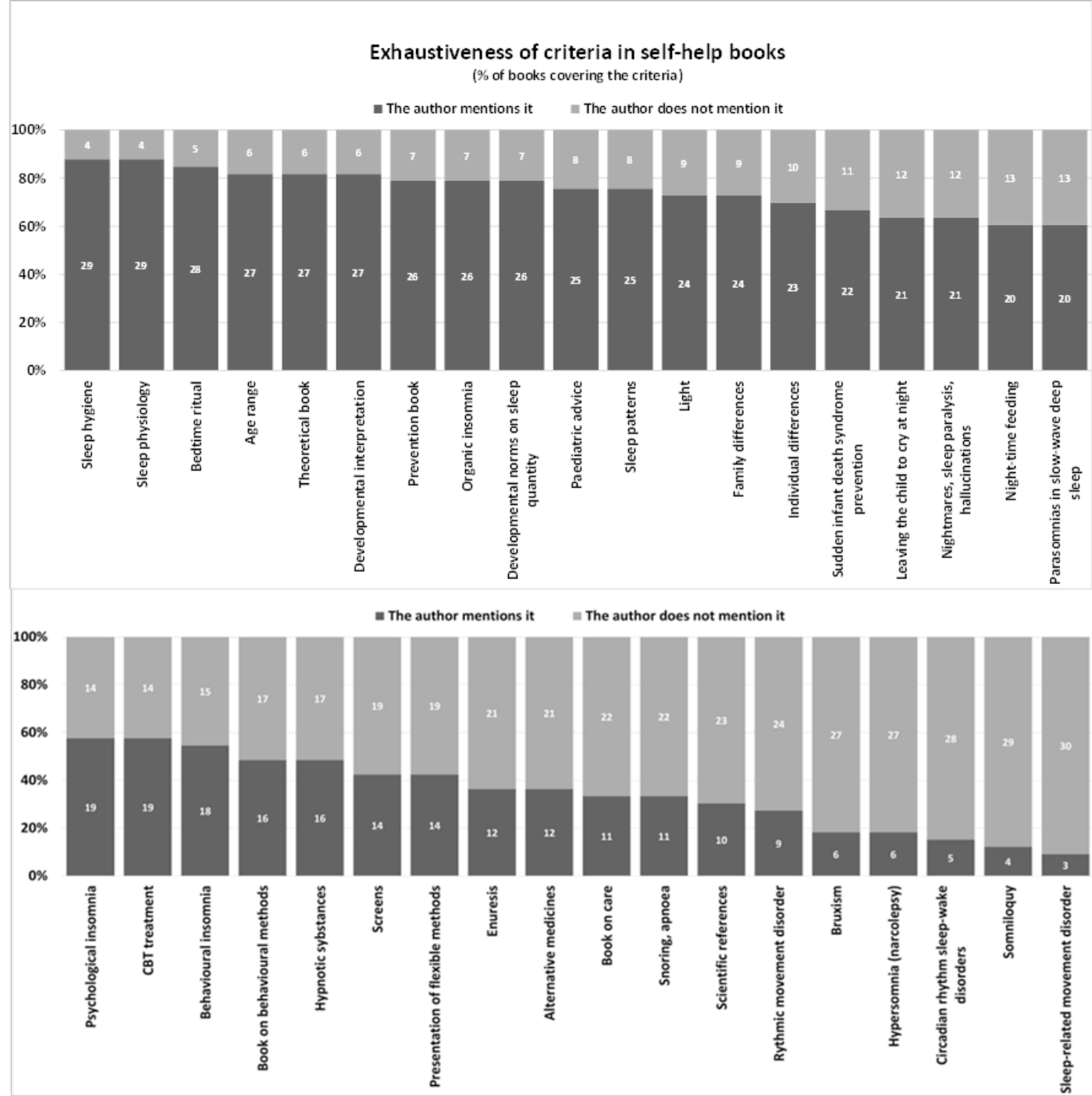


Figure 1. Exhaustiveness of criteria in self-help books

Type of self-help books. A large majority of self-help books (n=27; 82%) cites the age range of the children they are referring to and propose a developmental interpretation. Most self-help books propose aspects of theory (n=27; 82%) and prevention (n=26; 79%) but few present behavioral methods (n=16; 48%) and even less discuss care solutions (n=11; 33%). Finally, only a handful of self-help books cite scientific references (n=10; 30 %).

Physiology, hygiene and environment. More than 88% of self-help books (n=29) discuss recommendations relating to physiology and to sleep hygiene, covering sleep duration norms (n=26; 79%), sleep patterns (n=26; 76%), the use of a nightlight (n=24; 73%) and establishing a bedtime ritual (n=28; 85%). However, 39% of self-help books do not mention night time feeding (n=13; 39%) and 58% (n=19) do not mention screen exposure.

Treating disorders. Seventy-nine percent of self-help books (n=26) evoke organic insomnia and nearly one self-help book out of two discuss psychological (n=19; 58%) or behavioral insomnia (n=18; 55%). Nearly four self-help books out of five recommend seeking the advice of a pediatrician (n=25; 76%). Only one self-help book out of two mentions criteria for treating children’s sleep

difficulties, such as the use of hypnotic substances (n=16; 48%) or behavioral methods (n=19; 58%). Only two self-help books out of three mentions sudden infant death syndrome prevention (n=11; 33%) and two out of six discuss alternative medicines (n=12; 36%).

Parasomnias and other sleep disorders. The least addressed criteria are parasomnias and other sleep disorders, such as enuresis (n=12; 36%), snoring and sleep apnea (n=11; 33%), rhythmic movement disorders (n=9; 27%), bruxism (i.e., teeth grinding, n=6; 18%), hypersomnia (n=6; 18%), circadian rhythm sleep-wake disorders (n=5; 15%), somniloquy (i.e., sleep-talking, n=4; 12%) and sleep- related movement disorders (n=3; 9%).

Compliance with expert advice. The analysis of compliance was performed on the criteria cited in more than half of the self-help books (i.e., n=17 out of 33). Hypnotic substances (n=16), use of screens (n=14), alternative medicines (n=12), behavioral methods such as complete extinction (n=8) and reducing parental presence (n=7) were not cited enough to be analyzed. Figure 2 presents the books compliance with expert recommendations on the 9 remaining criteria.

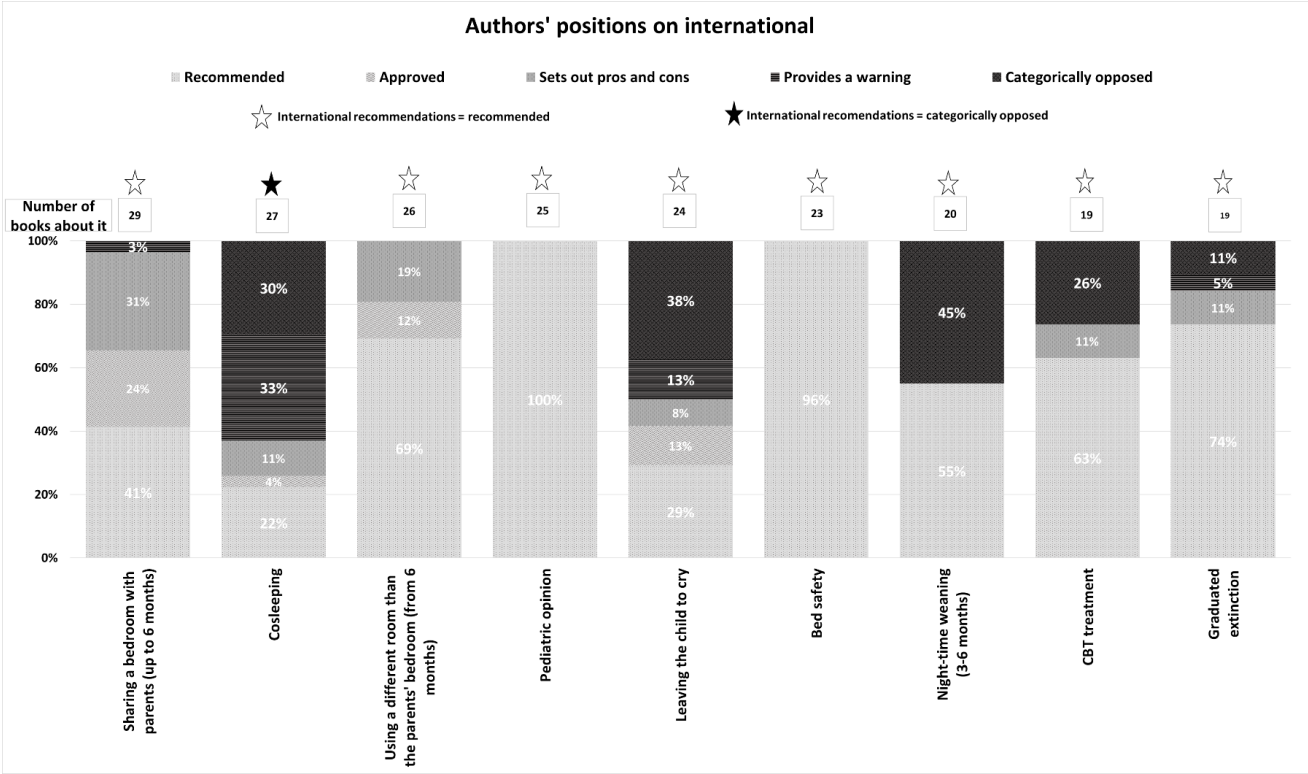


Figure 2. Authors’ positions with regards to the quality criteria cited in at least half of the self-help books.

Note. Criteria are ranked in order of exhaustiveness.

Room sharing. The experts recommend sharing a bedroom until the child is six months old [37,38]. Of the 29 self-help books that mentioned room sharing, 65% are compliant with expert advice by recommending (n=12; 41%) or approving (n=7; 24%) this practice. Moreover, 58% of these compliant self-help books were written by health professionals (n=11).

Bed sharing. Experts oppose co-sleeping due to the risk of SIDS, especially for children under 3 months [32,33,39]. Of the 27 self-help books that mention bed sharing, 63% are compliant with expert advice by categorically opposing (n=8; 30%) or warning parents (n=9; 33%) against the practice. Of these compliant books, 42% were written by health professionals (n=12), whereas 58% of the non-compliant books were written by non-health professionals (n=4 out of 7).

Using a different room than the parents' bedroom. Experts recommend that children sleep in a different room from their parents from the age of six months [40,41]. Of the 26 self-help books that mention this criterion, 81% are compliant with expert advice by recommending (n=18; 69%) or approving (n=3; 12%) this practice. Of these compliant books, 62% were written by health professionals (n=13 out of 21).

Recommended pediatric advice. Experts recommend that pediatric advice be sought in cases of sleep disturbance in children. Among the 25 self-help books that mention this criterion, all are compliant with the expert advice by recommending this.

Falling asleep independently. Experts recommend encouraging falling asleep independently [42,43]. Of the 24 self-help books that mention this criterion, 42% are compliant with expert advice by recommending (n=7; 29%) or approving (n=3; 13%) this practice. Of these compliant books, 80% are written by health professionals (n=8 of 10), 50% of the non-compliant books are written by non-health professionals (n=6 out of 12).

Crib/bed safety. Experts recommend measures for ensuring the child's crib/bed is safe [44,45]. Of the 23 self-help books that mention this criterion, all are compliant with expert advice and recommend such measures.

Nighttime feedings. Experts recommend that nighttime feedings are no longer necessary by approximately 6 months under normal growth conditions (height, weight) [46,47], with some nuances to be taken into account between a breast-fed or bottle-fed child. Of the 20 self-help books that mention this criterion, 55% are compliant with expert advice by recommending (n=11) this practice. Of these compliant books, 73% are written by health professionals (n=8 out of 11), whereas 55% of non-compliant books are written by non-health professionals (n=5 of 9).

Behavioral techniques. Experts recommend empirically-validated sleep learning methods: complete extinction [34-36], graduated extinction [48-51] and reducing parental presence [52,53]. Of the 19 self-help books that mention using behavioral techniques to treat insomnia, 63% are compliant with expert advice by recommending (n=12) this practice. Of these compliant books, 75% are written by health professionals (n=9 out of 12),

whereas 60% of non-compliant books are written by non-health professionals (n=3 out of 5).

Graduated extinction method. Experts recommend the graduated extinction method [48-51] as a sleep training technique, which consists of progressively reducing parental presence at the time of falling asleep. Of the 19 self-help books that mention the graduated extinction method, 74% are compliant with expert advice by recommending (n=14) this practice. Of these compliant books, 71% are written by health professionals (n=10 out of 14), whereas 33% of non-compliant books are written by non-health professionals (n=1 out of 3).

Ranking of self-help books. A self-help book can obtain a good average score if it is exhaustive yet not necessarily compliant, and vice versa. The results show how certain self-help books obtain a good score due to being exhaustive but not very compliant. Regarding good exhaustiveness and compliance scores, 30% of self-help books obtain a total weighted score above 50% with an exhaustiveness score ranging between 81% and 100% and a compliance score ranging between 41% and 62% (Table 3 in the Supplementary Data). Of these self-help books, nearly all (n=9 out of 10; 90%) are written by health professionals. Of these professionals, only 38% (n=5 out of 13) have had at least one academic paper on sleep published. The top three self-help books that scored highest were those written by Thirion and Challamel [54], Kahn [55] and Skula [56].

Discussion

The aim of this study was to establish a quantitative and qualitative inventory of self-help books on children's sleep available in French language. It is a continuation of the original article on the subject of children's sleep therapy by Ramos and Youngclarke [31], which called for further developing quality criteria based on scientific knowledge of child development and sleep disorders. Our study is the first to establish a list of quality criteria in this area by an international committee of experts. We replicated the findings of Ramos et Youngclarke [31] while further specifying several other important aspects to be taken into account in the field of children's sleep.

Availability of self-help books

The number of publications on the subject has steadily increased over the last fifteen years. Very few self-help books are available in French libraries, which means that parents must purchase them. Although the median price is reasonable, it would be beneficial if libraries made available books that follow the recommendations of experts on children's sleep.

Quality of the authors

Self-help books on children's sleep are written by authors from a variety of professions. Many are written by non-health professionals. The health professionals who have written some of the books are mainly physicians, most of whom specialized in early childhood, but rarely in sleep. Researchers and psychologists are very little represented. These results are consistent with Ramos

and Youngclarke [31]. The lack of expertise of the authors raises questions about the quality of the advice given and their selection by mainstream publishers. Our results show that the best books are written by health professionals and that their recommendations are more accurate and reliable. Self-help books which go against expert recommendations are mostly written by non-healthcare professionals, often by parents sharing their own experiences and personal opinions.

Quality criteria for self-help books

The variety of methods and their names. Cohen's kappas per self-help book and per variable show good consensus between the two judges. The lowest scores are for aspects which are difficult to assess due to ambiguity in the authors' position on certain criteria and because of methods for treating insomnia being referred to with different names and/or different practical application. For example, the graduated extinction method is referred to as *chronododo* [57] ("timed sleep") or 5-10-15 [58].

Some authors claim that they have invented a method to improve children's sleep, when in fact they have clearly appropriated methods, which already exist. Others invented their own methods, particularly because they are opposed to scientifically validated methods (e.g., *la cure au dodo des petits* [59] ("the sleepy time cure")). In order to clarify the links between scientific and medical knowledge and their wider dissemination, it would be more appropriate for the authors to simply propose scientifically and internationally validated methods, name them by name and propose their exact and validated application.

Exhaustiveness of quality criteria. The vast majority of self-help books are not exhaustive with respect to the criteria established by the expert committee. The most exhaustive self-help books are written mainly by health professionals. They are therefore the most likely to provide quality advice to parents. However, half of the non-exhaustive books (n=9 out of 19) are written by health professionals. We can assume that the low exhaustiveness of the majority of the books complicates the care pathway for parents faced with sleep disorders in their children. This is evidenced by the fact that the distinction between organic and behavioral insomnia is mentioned in only 54% of the books, a recommendation to consult a pediatrician is not mentioned in 24% of the books, and screening for sleep apnea syndrome is specified in only 33% of the books.

Type of self-help books. The self-help books studied generally provide elements of theory and prevention, but little in the way of care or behavioral methods. Very few self-help books include scientific references, which raises questions about the degree of professionalism and expertise of the authors and, consequently, about the quality of the advice given. It is recommended that each self-help book specify, on the back cover, its category, the age of the children concerned and its main objective. Indeed, recommendations are quite depending on the children's age. The presentations of these books on the fourth cover are often too vague.

Sleep hygiene. The criteria for sleep hygiene are generally well covered. On the other hand, a significant number of self-help books do not mention night-time weaning for children from six months of age nor screen exposure. Yet these two criteria have an impact on children's sleep [46,47,59,60]. A systematic review notes that screen time is associated with poorer sleep outcomes in infants, toddlers, and preschool children, and a meta-analysis confirmed this adverse association in infants and young children [60]. It would seem essential that books dealing with children's sleep mention these two factors in order to warn parents of the risks.

Treating sleep disorders. Few self-help books cover concerns about hypnotic substances [61,62], behavioral methods [63–67], SIDS prevention [32,33]. It would seem fundamental that any book on children's sleep should mention these important elements for parents so that they have the necessary information on the prevention and treatment of insomnia in children. In addition, it is essential that when the authors present alternative medicines, they warn that these are not scientifically validated methods for sleep disorder treatment.

Parasomnias and other sleep disorders. Parasomnias and other sleep disorders are the least covered criteria in self-help books, suggesting the authors' lack of expertise. They are nevertheless very common between 2.5 and 6 years old [68]: rhythmic movement disorders affect 9.2% of children, sleepwalking 14.5%, enuresis 21.4%, night-time terrors 39.8%, bruxism 45.6%, and somnoliquy 84.4%. Moreover, it is essential to screen for obstructive sleep apnea syndrome in children, given the significant risk it implies. It would be beneficial for more self-help books to address these different quality criteria in order to better inform parents, warn them about certain risks and suggest empirically validated methods to improve their child's sleep.

Compliance with expert advice. There was high compliance with expert recommendations on some criteria such as seeking a pediatrician's advice, and crib/bed safety. Compliance is lower for room sharing, bed sharing, night-time weaning after six months of age, and use of behavioral techniques, and very low for developing independence at sleep onset.

Sharing a bedroom. The experts recommend sharing a bedroom [40,41] in the first six months of life to reduce the risk of SIDS. Our study shows that many self-help books are not compliant with expert recommendations on this criteria but recommend placing the child in a separate bedroom as soon as they leave the maternity hospital [69] or simply present the pros and cons and leave it up to the parents to make the decision that suits them [70,71]. Nevertheless, it should be noted that this criterion is not culturally sensitive.

Sharing a bed. The large number of studies [32,33] highlighting the link between bed sharing and a higher risk of SIDS should be sufficient to categorically oppose this practice, in accordance with international recommendations. Indeed, experts advise against

bed sharing, especially for children under 2 months old, preterm babies, tired and/or smoking parents. Our study reveals that the bed-sharing debate is still ongoing, dividing parents and medical professionals. Some of the authors do not take a position on this [56,72], which is undoubtedly a reflection of this controversial debate, as underlined by Ramos and Youngclarke [31] in their study.

Night-time breastfeeding. Scientific literature stipulates that late night feeding is associated with persistent sleep disturbances in preschool children [46,47]. Our study shows that many self-help books do not follow expert recommendations on this criterion and advocate continuing to feed the child at night beyond six months of age, even though the child is diversified and no longer needs nocturnal feeding at this age, promoting breastfeeding on demand [73,74].

Treating insomnia using behavioral techniques. Interventions based on the principles of behavior therapy involve removing excessive parental involvement at bedtime and helping the child to develop self-soothing strategies to help them fall asleep at night and during night-time awakenings. Extensive research has established the effectiveness of this type of intervention on child insomnia [63-67]. Our study demonstrates how many self-help books do not comply with expert recommendations on this criterion and attempts to offer alternatives.

Extinction method and leaving the child to cry. Despite international recommendations, there seems to be a controversy, both among non-professionals and among healthcare professionals, concerning whether to leave a child to cry at night and on the extinction-based learning method. Indeed, few self-help books do mention it, a large number of authors oppose it, some authors do not take sides and some others propose alternative methods that have not been empirically validated. However, the scientific literature advocates interventions that support sleep onset independence, which is the learning method recommended by experts with the largest amount of evidence [34-36]. Our study shows that many self-help books are not compliant with expert recommendations on these criteria, often stating that children should not be left to cry. In this way, several authors clearly state their positions with titles including “Sleep without tears” [73] or “Peaceful sleep without tears” [75]. Others go further, speaking of internal insecurity [76], damage [77] or abuse [78]. Such ideas reflect a lack of consensus among the authors, many of whom are healthcare professionals.

Recommendations

In order to improve the quality of this mainstream literature, experts recommend that publishers give preference to professionals who are knowledgeable about children’s sleep and have professional experience in the field. The difference between an expert who has consulted and treated thousands of children and a parent or journalist with unique experience with their own children is significant. Our expert panel recommends that self-help books make the age ranges involved clear, whether they are general or disorder-specific books that they clarify each piece of advice in

terms of the child’s age (e.g., night-time weaning, bedroom sharing and letting the child cry depends on children’s age), describe the development of the child’s sleep, discuss family, cultural and individual differences, and present the patterns and physiology of sleep, the sleep time initiators and any factors which interfere with the child’s sleep development. It seems fundamental that any book on children’s sleep should mention the basics of SIDS prevention and discuss screens, light, bedroom sharing, bed sharing, bed safety, night weaning, parasomnias and treatment methods. It also seems appropriate for the authors to cover scientifically validated treatment methods using their exact name and application.

Limitations and Perspectives

The research presented herein is limited by the qualitative and non-neutral nature of the study, since all the authors are health professionals specializing in child sleep disorders, potentially resulting in a response bias.

The criteria established by experts have several limitations. First of all, while age is taken into account for some variables, this is not the case for all 37 criteria established by the experts. For example, not mentioning narcolepsy, in a book dealing with the sleep of older children is more problematic than in a book dealing with younger children’s sleep. Secondly, comparing self-help books on the exhaustiveness of the criteria without considering the year of publication is not helpful either. For example, the issue of screens cannot be assessed for books published in 2000 in the same way as for those published in 2010 or 2020. In the 2000s, no book or scientific publication on children’s sleep mentioned the issue of screens. These criteria tend to evolve over time and with new scientific discoveries. Thirdly, these recommendations should be considered with caution and an open mind. Overly rigid adherence may hinder the possibility of them changing over time and thus prevent any exploration of new developments in the field.

Our study enabled us to distinguish between books written by health professionals and those written by non-professionals. However, we can also question the ability of any health professionals to provide advice on children’s sleep, rather than those with expertise in this area. Our ranking is limited by the type of self-help book, as there are books on both prevention and treatment of sleep disorders. It is therefore necessary to differentiate between a book dealing with a specific pathology (e.g., nightmares) which will be poorly ranked because it is not considered to be exhaustive on the subject of children’s sleep, and a general book which will receive a good score because it is considered highly exhaustive.

Regarding our ranking, it would be interesting to compare compliant and non-compliant with expert recommendations of self-help books. For example, the self-help books written by Marie-Josèphe Challamel, a paediatrician, and Rosa Jové, a child psychiatrist, both specialized in children’s sleep, are the two most exhaustive. However, Rosa Jové’s book does not follow the recommendations of the experts, despite her professional qualification and specialisation. It would therefore be useful to carry out a randomized controlled study to compare the

effectiveness of these two books on the prevention and treatment of outcomes for insomnia in children. Bibliotherapy has already proven its effectiveness in many areas such as mood disorders [79], anxiety and phobia disorders [80], sexual disorders [24], excessive alcohol consumption [81] or even adult sleep [82], but very little on children's sleep disorders [29,30]. In addition, it should be mentioned that this study was limited to books written and available in French language. Our study of available bibliotherapy in French revealed a relatively small number of books, which is why we were able to study them all. On the contrary, it is expected that in other languages (i.e., especially English), the number of available books on children's sleep is greater, making this type of methodology impractical. Furthermore, the use of books tends to be obsolete in some way, with the arrival of "digital books" that go through social networks. A comparative study of books published in different languages with the inclusion of this "new" type of documentation would be interesting.

Conclusion

Our study has highlighted the strong prevalence of childhood sleep disorders and the lack of experts able to address them. The authors qualification and the advice disseminated in children's sleep literature vary widely. Anyone can publish whatever they wish in mainstream literature. This variability leads expert recommendations to be drowned out and confuses parents because they have a one in two chance of coming across a self-help book that does not conform to expert recommendations. In clinical consultations for children's sleep disorders, many parents report having read several self-help books to solve their child's sleep problems and have felt confused by the contradictory advice available. This implies a lack of consensus, whereas there are evidence-based medical recommendations for the improvement and treatment of children's sleep. Without setting up a system of labelling such literature, out of respect for freedom of expression, our study nevertheless encourages publishing houses to better assess the authors' backgrounds in order to determine the legitimacy of the publication, as is done for scientific literature, for which the criteria for assessing authors are strict and publications are not widely distributed. If this were the case, self-help books could constitute an effective type 1 literature for reference (without therapist intervention) on children's sleep for parents.

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