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ORIGINAL ARTICLE

Evaluating the knowledge and behavior of pediatric residents stimulating reading by children during well-child care

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Abstract

Pediatricians have a privileged opportunity to advise parents and caregivers on the importance of reading for babies and young children, which is a significant stimulus for language development and learning to read in childhood. This is a recommendation that should be part of regular childcare topics. This study sought to assess knowledge and behavior of pediatric residents regarding reading promotion and stimulus during childhood. A quantitative, descriptive, and cross-sectional study was carried out through the application of a questionnaire for pediatric residents in 2019. The data obtained was analyzed using descriptive statistical analysis. Although our results showed there were gaps in medical training during medical school and residency, 59.1% and 68.2%, respectively, all respondents agreed on the importance of encouraging reading in childhood. However, 22.7% stated that they do not feel comfortable in encouraging reading and 50% do not include the topic during consultation. These indicate there is a need to expand the insertion of encouraging reading in childhood as theme during medical undergraduate and postgraduate courses. Extending the duration of pediatrics residency to three years might provide an improved training in primary care and present an opportunity to include the discussion of this topic.

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INTRODUCTION

Reading is an important stimulus for a child's development. Skills are learned through storytelling, such as holding the book, turning pages and being aware that the spoken word is the representation of what is written. The act of reading to children favors attention, curiosity, empathy and strengthens the bond between the child and the caregiver. The early age at which parents start shared reading can be correlated with higher language scores, contributing to future word recognition, text interpretation, expanding vocabulary and facilitating reading learning. The spoken word helps with school readiness, contributes to cognitive development and language formation, especially from 0 to 6 years of age, a period in which there is greater formation of new brain synapses[1,2].

Furthermore, failure in the ability to read is associated with perpetuating cycles of poverty. In this way, encouraging reading can be a means of reducing social inequality, which is especially important in developing countries such as Brazil[3,4].

Pediatricians are in a prominent position in raising families' awareness about the importance of encouraging reading in childhood[5,6]. After being guided by this professional, parents and caregivers were more likely to read to their children[7]. Based on the realization of the importance of encouraging reading for the child by caregivers as a health promotion action to be stimulated and the privileged position of healthcare professionals to do, so programs were created to encourage reading such as "Reach Out and Read"[8] (ROR), with the aim of encouraging reading through health professionals as part of the routine of primary health care for children aged 6 months to 5 years. In the same direction, the American Academy of Pediatrics (AAP) and the Brazilian Society of Pediatrics (SBP) recommend encouraging reading as part of regular childcare topics. In 2015, the "Recipe a book" campaign was launched by the SBP to encourage and guide this practice[9].

However, encouraging reading is not yet a routine in consultations. Only part of the professionals feel able to encourage such a habit and think that this action should be incorporated into their daily lives, indicating the need for greater awareness and training[10].

In order to understand whether this is a reality in the specialization in Pediatrics, an investigation was carried out on the knowledge of pediatric residents at a hospital in Rio de Janeiro about the importance of encouraging reading for children during the childcare routine.

METHODOLOGY

We ran an exploratory, descriptive and cross-sectional through the application of a printed questionnaire, targeting physicians enrolled in the Pediatric Medical Residency Program in the year 2019 of Instituto Fernandes Figueira. The exclusion criterion was being the author of the study. This hospital has a library collection and storytelling activities by volunteers through a humanization strategy with the Projeto Biblioteca Viva em Hospitais (PBHV)[11], which is especially conducive to encourage reading.

The questions were intended to briefly investigate personal and professional training and knowledge about the importance of encouraging reading and ways to promote reading for children. The following variables were included: demographic data; formal education; reading habit and reading promotion. It was considered a "reader" who read a book in the last 3 months, according to the definition of the Instituto Pró-Livro used in the study "Portraits of Reading in Brazil"[3]. The questions about encouraging reading were based on the proposal of the document "Prescribe a book : strengthening development and bonding: the importance of recommending reading for children aged 0 to 6 years" from the Brazilian Society of Pediatrics[9]. A Likert-type scale, ranging from 1 to 5, was used to assess the degree of agreement of the interviewee or the frequency at which a particular activity is performed. This tool was chosen due to its psychometric quality and the possibility of evaluating intensities of opinion on the topic studied. An open question was included that allowed the interviewee to present other forms of reading stimulation used in their daily lives.

A database was created using the Excel 2013 software and descriptive statistical analysis was performed (absolute frequencies: n; and percentage relative frequencies: %), for closed questions.

Open answers were analyzed according to the content analysis technique[12], thematic modality.

The results were discussed in the light of scientific production on the topic of reading in childhood.

The study was submitted to the Research Ethics Committee, with protocol number 3.439.374 and an Informed Consent Form was obtained from each participating professional.

RESULTS

We analyzed 22 questionnaires answered by 100% of Pediatrics residents enrolled in the year 2019 who were eligible for the study. Of these, 19 (86.4%) were female and 3 (13.6%) were males. Regarding the age group, 95.4% are under 40 years of age.

Regarding the personal and professional training of respondents, 17 participants (77.3%) were considered "readers" and 19 (86.4%) have memories of their parents having read to them during childhood. Most respondents graduated in medicine from private institutions (n=13; 59.1%) and had been graduated for up to 5 years (n=21; 95.5%). There was no formal discussion about the importance of reading in child development in medical training, according to 13 residents (59.1%), nor in the pediatric residency, according to 15 residents (68.2%).

All 22 participants (100%) strongly agreed that reading is an important stimulus during childhood. A total of 77.3% feel prepared to encourage reading in the consultation, but the insertion of the topic in the consultation occurs in 50% of

the cases (Table 1).

Table 1. Understanding of resident physicians regarding the promotion of reading during childhood.

Understanding of resident physicians in relation to promoting reading	N (%)
Agreed with the importance	22 (100)
Feel prepared to promote Reading in pediatric practice	17 (77.3)
Reports adding the topic to their routine practice	11 (50)

The document "Prescribe a book"[9] from the Brazilian Society of Pediatrics, released in 2016, was not known to 21 (95.5%) of the residents. Table 2 shows the guidelines on reading promotion that were commonly used by children in childcare consultations. The answers indicated as "frequent use" or "very frequent" were considered routinely used by the professional.

The indication of appropriate books for the age group and the offer of a book for the child to handle during the consultation were the guidelines usually followed by 3 interviewees (13.6%). The holding of orientation groups was used only by one professional, corresponding to 4.5% of the total. Encouraging visits to public libraries and the use of posters in waiting rooms were not used routinely by any professional. Such results show that the practice of encouraging reading in this group of professionals is still not common.

Table 2. Report of habitual use of guidelines on encouraging reading during childcare.

Type of guideline	N (%)
Indicates books that are appropriate for the age range	3 (13.6)
Encourages going to public libraries	0
Promoting health-related activities (group activities, talking rounds)	1 (4.5%)
Having posters associated with the importance of reading	0
Supplying books for the children to handle during the consultation	3 (13.6)

Other ways of encouraging reading mentioned in the open questions were grouped into two thematic classes. The first was related to the habit of reading with the child:

"I talk to parents about the importance of reading together to stimulate language development and reading habits."

"Reading with parents and/or other caregivers."

"I advise parents to tell stories to their children through books."

The second was related to reading as a preventive or therapeutic intervention:

"Questioning about the insertion of reading in everyday life and encouraging the habit, mainly in place of screens/ electronic media."

"Especially for children with high media time or difficulties with sleep or learning, I advise parents to have time for daily reading."

Table 3 lists actions during storytelling for different age groups and adaptation for children with disabilities. The latter received the highest number of correct answers (86.4%), followed by guidance for ages 6 to 12 months and 1 to 2 years, both with 68.2%, and for babies aged 0 to 5 months, with 63.6. Half of the interviewees correctly informed the orientation for the age group from 2 to 4 years old and 54.4% for 4 to 6 years old.

Table 3. Correct answers about guidelines to encourage reading by age group of the child and presence of disability.

Correct answers	N (%)
0-5 months	14 (63.6)
6 months -1 year	15 (68.2)
1-2 years	15 (68.2)
2-4 years	11 (50)
4-6 years	12 (54.5)
Children with disabilities	19 (86.4)

DISCUSSION

Training in pediatrics is a subject widely discussed in the literature. There is evidence that most pediatric residents wish to contribute to the prevention, education and counseling of patients and families[13], as is the case with actions related to the promotion of reading. However, such desire is not always accompanied by the knowledge and behavior necessary for it to become part of the pediatrician's routine actions.

It is possible that personal and professional training prior to residency contributes to actions developed by the physician in his/her professional activity. To understand the context of the participants in this study, the distribution by sex and age was evaluated, which was similar to that found in the literature, with a predominance of females and a majority composition of young adults (20 to 40 years old), and under 5 years old. years since graduation, following the trend found in training in this specialty[13,14,15].

The personal history of those surveyed and the extent to which the stimulus for reading was present in their childhood can be decisive in the formation of future readers[16]. This relationship can be reinforced by the recollections of more than 80% of those surveyed about their parents having read to them. during their childhood, much higher than the result of the "Portraits of reading in Brazil" study, which pointed out that among readers, 45% received reading stimuli in childhood, against 17% of non-readers[3]. In our sample, they were considered readers (77.8%) and a similar percentage refers to raising parents' awareness during care.

Childcare, with its educational and preventive components, is the field of pediatrics with the greatest

tendency to grow, and childcare consultation by a pediatrician is the preferred model of action chosen by the family[17]. Given the childcare worker's strategic role, the family's trust and the importance of experiences in the child's brain development, it is essential that this professional takes ownership of the multiple interfaces that act on child development, acting early in promotion and prevention actions[18]. In this context, the habit of reading should be encouraged by parents and caregivers for children [1,2,5,6,7,8,9].

However, while learning about childcare, both in the undergraduate and in the residency in pediatrics, there was no discussion about reading in childhood in 59.1% and 68.2%, respectively, which is a possible reason for not doing it routinely. The material produced by the Brazilian Society of Pediatrics[9] on the subject, in 2016, was unknown to 95.5% of residents. The lack of discussions on the importance of promoting reading in the first years of life revealed by our study, both in medical training and in pediatrics, suggests the need to include the topic in undergraduate and graduate programs, and reinforces the importance of awareness campaigns such as that of the SBP. With the extension of the duration of the Medical Residency in Pediatrics to 3 years, a window of opportunity opens up for this topic to be further discussed.

Childcare is one of the Primary Care actions performed by pediatricians. In 2011, there was a lack of training and availability of Primary Care in the training of pediatric specialists[19]. An increase in the number of hours dedicated to the practice of primary care in pediatrics was a request from about 1/5 of the residents in another study[13]. In the evaluation of all Brazilian regions in 2020, the difficulty for training in primary healthcare, a field in which the action to promote reading should be inserted, is still a problem for 27.9% of the institutions that carry out training in medical residency in pediatrics[20]. It is possible that such obstacles may influence the discussion of issues related to childcare.

Despite all the difficulties listed, 100% of the interviewees considered that the promotion of reading is an essential aspect of the pediatrician's work. However, 50% of surveyed residents do not include the topic during their childcare consultation. It is known that insufficient time, limited resources to offer books and support initiatives and concerns about the receptiveness of parents are identified as the main barriers to promoting reading during pediatric consultations[10]. In our study, training failures may be among the reasons that contribute to the non-discussion of the subject in the consultations. However, to assess such questions, further studies will be necessary.

As for the specific knowledge about the guidelines for the promotion of reading for babies and children by parents and caregivers, 77.3% said they felt prepared, compared to 66% in the literature[10]. However, there was an expressive number of errors related to the age-specific guidelines. The percentage of ignorance about the most appropriate guidelines by age groups ranged from 13.6% (children with disabilities) to 50% (from 2 to 4 years), which may indicate the need for more training on cognitive and language development.

About the guidelines, the most cited models were the indication of appropriate titles for the age group and the offer of a book for the child to handle during the consultation. However, the study showed that guidance is rarely provided to parents. A possible intervention could be made with the integration of the healthcare professional to the Biblioteca Viva[11] project present in the institution where this study took place, such as, for example, a brief training with the volunteers, the presence of books in the office and the donation of titles to the patients. There could also be an issue included in the attendance sheets that addressed the encouragement to read.

Other reported guidelines include encouraging the habit of reading as a counterpoint to the use of screens, avoiding its harm and providing the benefits of storytelling. This guidance is extremely important today, since media time for children under 3 years old can generate changes in child development, such as cognitive impairment in the school age group[21], in addition to limiting verbal interactions between parents and children[22].

FINAL REMARKS

Childcare is a privileged field for promoting the health of children and healthy future adults. This study, despite the limitations related to the restricted scenario of a single institution that trains pediatric residents and the small number of respondents, indicates that there is a need to expand the training of professionals in pediatrics at undergraduate and graduate levels, in addition to be included in continuing education and competence-based teaching, training specialists capable of promoting and guiding reading in early childhood. The topic can also be included in medical education discussion forums, given its importance in the child's development and future potential. Maximizing the dissemination of materials, such as the "Prescribe a Book"[7], including on social media, could help to spread relevant topics for the specialist and contribute to the training of pediatric residents.

There is a need for further investigations on the subject aiming, among others, to understand the difficulties that may cause the low rate of guidelines. In this way, pediatricians should improve their performance in terms of encouraging reading, thus providing countless benefits to the child population, especially those at socioeconomic risk.

Finally, the expansion of the Pediatrics Residency to three years and the training in Primary Care can facilitate the usual inclusion of the promotion of reading in childcare consultations.

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