



Determining the maternal attitude in supporting infant development

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Abstract

Aim: The positive contribution of parental support to children's cognitive, emotional and social development in early infancy is well known. The aim of this study was to learn the attitudes and opinions of mothers of newborns about supporting development, shared reading, playing games and watching television and to evaluate the factors that may affect these predictions.

Materials and Methods: The study was conducted with 154 mothers who applied to İnönü University Faculty of Medicine Developmental Paediatrics outpatient clinic using the "Maternal Attitude Interview Form Regarding Supporting Infant Development".

Results: Findings revealed that 136 (88.3%) of mothers planned to reading together, but 88 (57.1%) of them didn't plan to start before the age of 1 year. There were no baby books in 45.5% and no toys in 30.5% of the houses. A total of 20.1% of the mothers believed that watching television would have a positive impact on development, while 37% planned to allow their children to watch television before the age of 2 years. According to the regression analysis, it was determined that the most significant factor influencing mothers' intention to begin reading books with their babies before the age of 1 year was higher level of education ($p < 0.001$).

Conclusion: The rate of those who don't plan to read in the early period and those who don't have baby books and toys in their homes are at a considerable level. Nevertheless, it is promising that the most important factor affecting reading together in the early period is maternal education. It is of great importance that families are informed from pregnancy onwards about the contribution of reading and playing together to development and the negative effects of media tools in early childhood. Increasing the sensitivity of physicians who will follow the mother and the child will ensure the spread of preventive guidance services.



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Introduction

Early childhood is the most effective and cost-effective time to provide support to enable children to develop to their full potential. The developmental support provided by parents with interactions that are sensitive to early learning opportunities, emotionally supportive, and developmentally stimulating facilitates the cognitive, social, and emotional development of children and their readiness for school [1, 2]. Babies need a loving attachment relationship and social interaction with their parents to develop

cognitive, language, motor, and social and emotional skills [3, 4, 5]. On the contrary, insufficient attention or a lack of family involvement in developmentally appropriate play and communication activities (e.g., speaking, singing, and playing) with their young children have been highlighted as contributing factors to poor child development in low- and middle-income countries (LMIC) [6].

Cognitive, social and emotional development of children is affected by the frequency of reading to them by their early caregivers [7, 8, 9]. Studies have shown that starting shared reading as early as 6 months is associated with increased language development and subsequent reading activities in the second year [7, 8]. Parents' reading aloud

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to children from an early age was also associated with the development of preschool language skills and children's interest in reading [9, 10]. The literacy environment at home is also important in terms of affecting the language and literacy development of children [11]. Studies have shown that the reading frequency of a caregiver is positively associated with emerging literacy, academic, and social skills in children [9, 12, 13].

Likewise, playing is very important for healthy brain development. Playing can improve the lives of children by making a positive contribution to their development in social, physical, emotional, and cognitive areas [14]. It was found that toys at home at months 6 and 18 predicted receptive language development and were associated with a decreased frequency of meeting eligibility criteria for early intervention services [8]. The American Academy of Pediatrics (AAP) recommends that pediatricians guide families in choosing appropriate toys and developing literacy skills [15, 16].

Contrary to reading books and playing games together, early screen exposure is an important risk factor that negatively affects development. In particular, it is known that the response of the developing brain to face-to-face interaction with parents differs from the stimulation generated by the use of electronic devices. Babies and young children cannot learn from the screen what they have learned from their parents because their memory and attention skills are not mature yet [17]. It is known that the beginning of screen exposure tends to go down to early infancy, and the time spent in front of the screen increases [18]. Many studies show associations between excessive screen exposure in early childhood and delays in cognitive, language, social, and emotional development and increased attention problems [19, 20, 21].

In early childhood, mothers' attitudes and thoughts about supporting the development of their babies can be affected by demographic factors such as education level, age, income [22, 23, 24]. The aim of the study is to learn the attitudes and thoughts (reading books, playing games, and watching television) of the mothers of newborn babies in Malatya province about supporting the development of their babies after birth and to evaluate the factors such as education level, age, income, employment status, and health status of the baby that may affect these predictions.

Materials and Methods

Mothers of babies who applied to İnönü University Turgut Özal Medical Center Department of Pediatrics, Neonatal Outpatient Clinic and did not complete their postnatal first month constituted the population of the study, and 154 mothers who agreed to be included in the study and were evaluated in the Developmental Pediatrics Outpatient Clinic formed the sample of the study. Mothers who do not speak enough Turkish to maintain the interview were not included in the study. Both healthy and at-risk babies (such as preterm birth, asphyxia, and small for gestational age) were included in the study and in vitro fertilization pregnancy and multiple pregnancies were not included in the study. This research is a cross-sectional situation determination study conducted with one-on-one

interviews. Attitudes and thoughts of mothers about supporting the development of their babies were evaluated using the "Mother Attitude Interview Form Regarding Supporting Infant Development" developed by the İnönü University Developmental Pediatrics Department. In this form, mothers were asked what they plan to do in the first year to support their children's development and learning. In addition, in 17 questions, their thoughts on how reading books, playing with toys, and watching television together would contribute to the development of their babies were learned, and it was questioned when they planned to start these activities and whether there were books, toys, and television at home. After the interview, the importance of supporting the development of babies in the early period was explained to the mothers, and development support suggestions were given in writing.

In addition to this form, birth history, family's economic level and mother's education level were evaluated with the demographic information form.

The ethics committee approval of the study was obtained with the result of the session of İnönü University Scientific Research and Publication Ethics Committee dated 2.2.2016 and the decision number is 2016/3-11. The mothers participating in the study were informed about the purpose of the study, and their consent was obtained.

Statistical analysis

The analyses were completed using SPSS 22 software (Statistical Package for Social Sciences; IBM Corp. (2013). IBM SPSS Statistics for Windows, Version 22.0. IBM Corp., Armonk, NY.). As a result of the power analysis, it was calculated that at least 144 people should be included in the study. Mean and standard deviation values were used in quantitative variables, and number (percentage) values were used in qualitative variables. A chi-square analysis (Pearson chi-square) was used to compare categorical variables. A logistic regression analysis was performed to show the probability of an event occurring among categorical variables. A ROC curve analysis was performed to determine the cut-off point of the mother's education years, which would best predict the plan of reading together with their children in the early period. Multivariate regression analysis (backward LR model) was used to determine independent markers. A p-value less than 0.05 was considered statistically significant.

Results

One hundred and four mothers of infants, 89 (57.8%) of whom were in the risk group, were included in the study. The mean age of the mothers was 29.7 ± 5.6 years (min: 18, max: 46), and the majority (66.2%) were in the 25-35 age range. The mean education level was 9.1 ± 4.5 years. 61 (39.6%) of the babies were the first children of the family. Detailed demographic information is given in Table 1.

When the mothers were asked about their plans to read books to their babies, it was learned that 136 mothers (88.3%) were planning to read with their children, but 88 mothers (57.1%) did not plan to start reading before the age of 1 year. It was determined that as the education level

of the mother increased, the plan to start reading with her baby before the age of 1 increased statistically ($p=0.007$). As a result of the ROC analysis, the best cut-off point for reading together before the age of 1 was found to be 10.5 years or more of education (sensitivity=0.636, specificity=0.693, $p=0.001$, asymptotic 95% CI= 0.566-0.744). In addition, it was determined that the mother's being a working mother, the baby being at risk, and being the first child of the family statistically significantly increased the mother's plan to start reading with the baby before the

age of 1 year ($p=0.02$). It was found that as the education level increased, the working rate of mothers also increased statistically significantly ($p<0.001$). Multivariate regression analysis (backward LR model) was performed to determine the independent markers among these four variables, which were determined to affect reading together in the early period. As a result of the analysis, it was determined that the education year of the mother was the only independent factor affecting reading with the child ($p<0.001$) (Table 2).

Table 1. Socio-demographic factors.

Demographic Factors	n	%
Mother's age		
<25	24	15.6
25-35	102	66.2
>35	28	18.2
Mother's year of education		
<8	57	37
8-12	68	44.2
>12	29	18.8
First child		
Yes	61	39.6
No	93	60.4
Risky infant		
Yes	89	57.8
No	65	42.2
Work status		
Yes	29	18.8
No	125	81.2
Income level		
<Minimum wage	18	11.7
Minimum wage	54	35.1
>Minimum wage	82	53.2

There were no children's books at home (45.5%) of 70 mothers who participated in the study. The rate of having children's books at home increased as the age of the mother increased, and a statistically significant difference was found ($p=0.01$). As the age of the mother increased, the number of siblings also increased statistically significantly ($p=0.001$). If the newborn baby is the first child of the family, the rate of having a children's book at home is 23.7%; this rate is found to be 78.7% if the newborn is the second or later child, and the difference is statistically significant ($p<0.001$).

It was learned that 47 (30.5%) of the mothers who participated in the study did not have toys at home. If the newborn baby is the first child of the family, the rate of having toys at home is 39.3%; this rate is 89.2% if the baby is the second or later child, and the difference is statistically significant ($p=0.000$). The rate of not having toys at home (41.7%) among mothers under the age of 25 was found to be higher than other age groups, but no statistically significant difference was found ($p=0.333$).

Fifty-seven of the mothers (37%) stated that they plan to have their children watch television before the age of 2. Thirty-one (20.1%) mothers stated that they thought that watching television would contribute positively to development. No factor was found to affect the views of mothers about watching TV.

Less than the minimum wage earners' households lack adult books entirely, accounting for 55.6%, whereas those earning above the minimum wage have over 20 books at home, representing 58.5% ($p<0.001$). No significant correlation was found between monthly income and other investigated parameters.

The relationships of sociodemographic factors with the researched attitudes are given in Table 3 in detail.

Table 2. Results of multivariate regression analysis of factors affecting planning to read books with children before 1 year of age (backward LR model).

		Beta	p	OR	95% CI.for EXP(B)	
					Lower	Upper
Step 1	Risky infant	-.596	.099	.551	.271	1.118
	Mother education	-1.209	.002	.299	.138	.646
	First child	-.400	.279	.671	.325	1.383
	Working mother	-.070	.889	.932	.349	2.491
Step 2	Risky infant	-.600	.096	.549	.271	1.112
	Mother education	-1.232	.001	.292	.145	.587
	First child	-.408	.264	.665	.325	1.361
Step 3	Risky infant	-.649	.069	.522	.259	1.052
	Mother education	-1.319	<0.001	.267	.135	.530

OR: Odds Ratio 95% CI. for EXP (B): 95% Confidence Interval for the Exponent of B.

Discussion

Our study is significant in terms of drawing attention to the importance of screen exposure, which negatively affects brain development as well as activities that are well known to have positive effects on brain development, such as reading and playing with the baby in early childhood and inquiring about mothers' plans for this period. The fact that a similar study has not been found in the literature with mothers of newborn babies in our region increases the importance of the study. With the results of our study, it is promising that almost all of the mothers plan to read with their babies, but that more than half of them do not plan to read at the first year of age, the ratio of those who do not have baby books and toys at home, and that some mothers think that television is a positive tool for development

Table 3. The relationship between maternal attitudes and demographics.

	<1 year old, book reading			TV viewing			Child book			Toy		
	Yes	No	p	Yes	No	p	Yes	No	p	Yes	No	p
Mothers' age												
<25	9 (37.5%)	15 (62.5%)		6 (25%)	18 (75%)		8 (33.3%)	16 (66.7%)		14 (58.3%)	10 (41.7%)	
25-35	45 (44.1%)	57 (52.9%)	.719	42 (41.2%)	60 (58.8%)	.663	57 (55.9%)	45 (44.1%)	.014	73 (71.6%)	29 (28.4%)	.333
>35	12 (42.9%)	16 (57.1%)		9 (32.1%)	19 (67.9%)		19 (67.9%)	9 (32.1%)		20 (71.4%)	8 (28.6%)	
Mothers' year of education												
<8	18 (31.6%)	39 (68.4%)		21 (36.8%)	36 (63.2%)		32 (56.1%)	25 (43.9%)		38 (66.7%)	19 (33.3%)	
8-12	30 (44.1%)	38 (55.9%)	.007	28 (41.2%)	40 (58.8%)	.545	38 (55.9%)	30 (44.1%)	.544	51 (75%)	17 (25%)	.896
>12	18 (62.4%)	11 (37.9%)		8 (27.6%)	21 (72.4%)		14 (48.3%)	15 (51.7%)		18 (62.1%)	11 (37.9%)	
First child												
Yes	33 (54.1%)	28 (45.9%)	.023	24 (39.3%)	37 (60.7%)	.629	13 (23.7%)	48 (76.3%)	<0.001	24 (39.3%)	37 (60.7%)	<0.001
No	33 (35.5%)	60 (64.5%)		33 (35.5%)	60 (64.5%)		71 (76.3%)	22 (23.7%)		83 (89.2%)	10 (10.8%)	
Baby's health												
Healthy	21 (32.3%)	44 (67.7%)	.024	22 (33.8%)	43 (66.2%)	.488	43 (66.2%)	22 (33.8%)	.014	49 (75.4%)	16 (24.6%)	.175
Risky	45 (50.6%)	44 (49.4%)		35 (39.3%)	54 (60.7%)		41 (46.1%)	48 (53.9%)		58 (65.2%)	31 (34.8%)	
Work status												
Yes	18 (62.1%)	11 (37.9%)	.002	7 (24.1%)	22 (75.9%)	.112	15 (51.7%)	14 (48.3%)	.736	19 (65.5%)	10 (34.5%)	.608
No	48 (38.4%)	77 (61.6%)		50 (40%)	75 (60%)		69 (55.2%)	56 (44.8%)		88 (70.4%)	37 (29.6%)	
Income level												
<Minimum wage	5 (27.8%)	13 (72.2%)		10 (55.6%)	8 (44.4%)		10 (55.6%)	8 (44.4%)		11 (61.1%)	7 (38.9%)	
Minimum wage	21 (38.9%)	33 (61.1%)	.075	21 (38.9%)	33 (61.1%)	.064	26 (48.1%)	28 (51.9%)	.470	35 (64.8%)	19 (35.2%)	.162
>Minimum wage	40 (48.8%)	42 (51.2%)		26 (31.7%)	56 (68.3%)		48 (58.5%)	34 (41.5%)		61 (74.4%)	21 (25.6%)	
Total	66 (42.9%)	88 (57.1%)		57 (37%)	97 (63%)		84 (54.5%)	70 (45.5%)		107 (69.5%)	47 (30.5%)	

and plan to watch it is thought-provoking. The fact that we determined the most important factor affecting shared reading in the first year was the mother's education has once again revealed the importance of education. In the study conducted by Berkule et al. in the United States, the thoughts of mothers who had just given birth about shared reading with their children in the first year were investigated. It was learned that 23.7% of the mothers did not make any plans about reading in the first year, and 42.2% did not have children's books at home [22]. Studies conducted in LMIC have shown that approximately 50% of families do not have books suitable for their children's age at home [23]. In a study conducted with the parents of children in the 0-6 age group in the capital of Turkey, the reading activities of the families with their children and the factors affecting them were investigated. As a result of the study, it was shown that the reading activities of parents with their children in early childhood are low in Turkey. In this study, the rate of those who read books to their children daily was 29.5%, and the rate of those who did not have children's books at home was 41.8% [24]. In our study, the rate of not having children's books at home was similar to the literature (45.5%), but the rate of those who did not plan to read a book in the first year (57.1%) was found to be much higher. In the study of Berkule et al., low maternal education was found to be re-

lated to not making plans about reading to their children in the first year, and not having a baby book at home was associated with being the first child [22]. Sanders et al., in a study of Latino families with children aged 2-60 months, showed that mothers with low education had a lower frequency of shared reading [25]. In the study of Çelik et al. conducted in Turkey, higher parental education levels and having more than 10 children's books at home were found to be associated with starting reading earlier and reading daily [24]. In our study, it was found that as the education level increased, mothers made significantly more plans to read with their children in the early period, in line with the literature. In addition, it was determined in our study that working mothers who had a first child and an at-risk baby planned to read significantly more in the first year. As a result of the multivariate regression analysis, the mother's with 10.5 years and more education years was found to be significant as an independent variable affecting the planning of shared reading in the early period. Considering that compulsory 12-year education has been in place in Turkey since 2012-2013, it is obvious that this will have positive effects on the development of children in the future [26]. In our study, the absence of baby books at home was associated with the age of young mothers and being the first child, while the number of baby books in the homes of healthy children was found to

be significantly higher. We think that as the age of the mother increases, the number of siblings in the house is significantly higher, which directly affects the increase in the number of children's books in the house. Similarly, the presence of toys in the house has increased in direct proportion to the presence of children in the house before. In our study, it was learned that approximately one third of the mothers did not have toys at home. It has been determined that 78.7% of those who do not have toys at home are families with their first child. If the newborn baby is not the first child of the family, the number of toys at home is statistically significantly higher. Karrass et al. showed that low income was associated with less shared reading in 8-month-old children [27]. In a study conducted in Turkey, it was determined that higher socioeconomic status was associated with performing daily reading activities with children [24]. In our study, it was determined that low-income families had fewer books at home, and no significant difference was found between the plans for reading books together. In a study conducted in the United States with approximately 1,000 parents, the parents cited that TV is educational and good for their children's brains as the reason for allowing children under the age of 2 to watch TV. Also, in this study, it was found that approximately 90% of children watch screens regularly when they reach the age of 2 [28]. Unfortunately, the age of screen exposure is decreasing day by day, and the time children spend in front of the screen is increasing [29]. In our study, 20.1% of the mothers stated that they thought that television would contribute positively to development, and 37% of them stated that they would allow their children to watch television before the age of 2. It is thought that this is due to the families' lack of knowledge on the subject. At the end of the study, all families were informed in detail about the negative effects of early screen exposure. Pediatricians have critical opportunities to shape parents' reading habits as part of their daily lives. The AAP has recommended that families be given counseling for reading with their children, starting in infancy [9]. It was determined that families who received information from pediatricians about shared reading in the early period and who were given books read more with their children [30]. In a study conducted in a high-income country with national programs to promote literacy and regularly informing families about shared reading from the neonatal period, it has been reported that the reading rate of parents with their 12-month-old children is over 97% and the rate of those with more than 10 children's books is more than 80% [31]. There are many studies in LMIC that provide evidence of the effectiveness of book-based early childhood interventions. The "Reach Out and Read" (ROR) program, approved for low-income families in the United States, has been successfully implemented in low-income regions of India, Taiwan, the Philippines, Israel, Canada, and Italy [32, 33]. In a recent study conducted in Brazil, programs that explain the importance of reading with their children to families were applied during the pregnancy period, and as a result, the awareness of the importance of early reading was found to be higher in the intervention group compared to the group not included in the program. In addition, the program was associated

with a decrease in screen time and an increase in vocabulary, especially in children from families with low parental literacy [34]. In the study of Çelik et al., it was found that parents who were informed about the beneficial effects of reading by a healthcare professional were significantly more likely to have at least one children's book at home, to start shared reading at an earlier age, and to read to their children every day compared to the parents who did not receive these recommendations [24].

The most important limitation of our study is that our data are based on the mothers' current thoughts and the possibility that the mothers provided emotional and biased responses. Following the participants and conducting a control study at the end of 1 year will be meaningful in terms of showing how much of these ideas are put into practice. However, our study is valuable in terms of showing the factors that can affect the attitudes and thoughts of mothers about the development of their babies, even in the newborn period.

Conclusion

As a result, the rate of those who do not plan to read with their children in the early period and who do not have suitable books for their babies at home is at a considerable level. It is hopeful that the most important factor affecting shared reading is maternal education. It is of great importance that families are informed about the contribution of reading and playing together, and the negative effects of early screen exposure, starting in pregnancy. The increase in the sensitivity of the physicians who will follow the mother and children on the subject will ensure the spread of preventive guidance services. Pediatricians can play a special role in this by encouraging families at low literacy risk to read routinely, as in the ROR program, by distributing books to children who come for examination, providing appropriate examples for book sharing, keeping books in waiting rooms, and producing similar interventions for early childhood literacy. Our study highlights the need for national strategies integrated into the health system, along with the individual implementation of programs to support early childhood development by physicians.

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Conflicts of interest

There are no conflicts of interest in connection with this paper.

Disclosure

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Ethical approval

The ethics committee approval of the study was obtained with the result of the session of İnönü University Scientific Research and Publication Ethics Committee dated 2.2.2016 and the decision number is 2016/3-11.

References

- Engle PL, Fernald LC, Alderman H, et al. Global Child Development Steering Group. Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *Lancet*. 2011;378(9799):1339-53.
- Britto PR, Lye SJ, Proulx K, et al. Early Childhood Development Interventions Review Group, for the Lancet Early Childhood Development Series Steering Committee. Nurturing care: promoting early childhood development. *Lancet*. 2017;389(10064):91-102.
- Council on Communications and Media, David Hill, Nusheen Ameenuddin, Yolanda (Linda) Reid Chassiakos, Corinn Cross, Jeffrey Hutchinson, Alanna Levine, Rhea Boyd, Robert Mendelson, Megan Moreno, Wendy Sue Swanson; Media and Young Minds. *Pediatrics* November 2016; 138 (5): e20162591. 10.1542/peds.2016-2591.
- Tamis-Lemonda CS, Bornstein MH, Baumwell L. Maternal responsiveness and children's achievement of language milestones. *Child Dev*. 2001;72:748-67.
- Winston R, Chicot R. The importance of early bonding on the long-term mental health and resilience of children. *London J Prim Care (Abingdon)*. 2016;8(1):12-4.
- Walker SP, Wachs TD, Grantham-McGregor S, et al. Inequality in early childhood: risk and protective factors for early child development. *Lancet*. 2011;378(9799):1325-38.
- Debaryshe BD. Joint picture-book reading correlates of early oral language skill. *J Child Lang*. 1993;20(2):455-61.
- Tomopoulos S, Dreyer BP, Tamis-LeMonda C, et al. Books, toys, parent-child interaction, and development in young Latino children. *Ambul Pediatr*. 2006;6(2):72-8.
- Council on Early Childhood, High PC, Klass P. Literacy promotion: an essential component of primary care pediatric practice. *Pediatrics*. 2014;134(2):404-9.
- Payne AC, Whitehurst GJ, Angell AL. The role of home literacy environment in the development of language ability in preschool children from low-income families. *Early Child Res Q*. 1994;9(3-4):427-40.
- Mendelsohn AL. Promoting language and literacy through shared reading: the role of the pediatrician. *Curr Problems Pediatr Adolesc Med*. 2002;32:183-210.
- Betty H, Risley TR. The early catastrophe: The 30 million word gap by age 3. *American educator*. 2003;27(1): 4-9.
- Golova N, Alario AJ, Vivier PM, et al. Literacy promotion for Hispanic families in a primary care setting: a randomized, controlled trial. *Pediatrics*. 1999;103(5 Pt 1):993-7.
- Ginsburg KR; American Academy of Pediatrics Committee on Communications; American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*. 2007;119(1):182-91.
- Glassy D, Romano J; Committee on Early Childhood, Adoption, and Dependent Care. American Academy of Pediatrics. Selecting appropriate toys for young children: the pediatrician's role. *Pediatrics*. 2003;111(4 Pt 1):911-913. doi:10.1542/peds.111.4.911.
- American Academy of Pediatrics. Guidelines for Health Supervision III. Amer Academy of Pediatrics, 2002.
- Anderson, Daniel R., and Tiffany A. Pempek. Television and very young children. *American behavioral scientist*. 2005;48(5):505-22.
- Domingues-Montanari S. Clinical and psychological effects of excessive screen time on children. *J Paediatr Child Health*. 2017;53(4):333-8.
- Christakis DA, Zimmerman FJ, Di Giuseppe DL, McCarty CA. Early television exposure and subsequent attentional problems in children. *Pediatrics*. 2004;113(4):708-13.
- Linebarger DL, Walker D. Infants' and toddlers' television viewing and language outcomes. *Am Behav Sci*. 2005;48(5):624-45.
- Zimmerman FJ, Christakis DA. Children's television viewing and cognitive outcomes: a longitudinal analysis of national data. *Arch Pediatr Adolesc Med*. 2005;159(7):619-25.
- Berkule SB, Dreyer BP, Huberman HS, et al. Attitudes about shared reading among at-risk mothers of newborn babies. *Ambul Pediatr*. 2007;7(1):45-50.
- Manu A, Ewerling F, Barros AJ, Victora CG. Association between availability of children's book and the literacy-numeracy skills of children aged 36 to 59 months: secondary analysis of the UNICEF Multiple-Indicator Cluster Surveys covering 35 countries. *J Glob Health*. 2019;9(1):010403.
- Celik P, Ozdereli Z, Bayram Sen M, et al. Shared reading: Parental attitudes, practices and barriers in Turkey. *J Paediatr Child Health*. 2023;59(2):264-70.
- Sanders LM, Gershon TD, Huffman LC, et al. Prescribing books for immigrant children: A pilot study to promote emergent literacy among the children of Hispanic immigrants. *Arch Pediatr Adolesc Med*. 2000;154:771-777.
- <https://www.resmigazete.gov.tr/eskiler/2012/04/20120411-8.htm> access date 11.05.2023.
- Karrass J, VanDeventer MC, Braungart-Ricker JM. Predicting shared parent-child book reading in infancy. *J Fam Psychol*. 2003;17(1):134-46.
- Zimmerman FJ, Christakis DA, Meltzoff AN. Television and DVD/video viewing in children younger than 2 years. *Arch Pediatr Adolesc Med*. 2007;161(5):473-9.
- Guellai B, Somogyi E, Esseily R, Chopin A. Effects of screen exposure on young children's cognitive development: A review. *Front Psychol*. 2022;13:923370.
- Rikin S, Glatt K, Simpson P, et al. Factors Associated With Increased Reading Frequency in Children Exposed to Reach Out and Read. *Acad Pediatr*. 2015;15(6):651-7.
- Sinclair EM, McCleery EJ, Koepsell L, et al. Shared Reading Practices and Early Literacy Promotion in the First Year of Life. *J Dev Behav Pediatr*. 2019;40(7):538-46.
- Zuckerman B. Promoting early literacy in pediatric practice: twenty years of reach out and read. *Pediatrics*. 2009;124(6):1660-5.
- Zuckerman, B., Elansary, M., & Needlman, R. (2019). Book Sharing: In-home Strategy to Advance Early Child Development Globally. *Pediatrics*, 143(3), e20182033. <https://doi.org/10.1542/peds.2018-2033>.
- Piccolo LR, Batista Araujo Oliveira J, Hirata G, et al. Supporting Reading Aloud Beginning Prenatally and in Early Infancy: A Randomized Trial in Brazil. *J Dev Behav Pediatr*. 2022;43(9):e590-e7.