

Duration and Practices of Television Viewing in Thai Infants and Toddlers

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Background: Television viewing is discouraged in infants; however, its magnitude and pattern in Thailand is still unknown
Material and Method: Data on magnitude of TV viewing and viewing practices from 4,157 children in Prospective Cohort of Thai Children were obtained between 2001 and 2005.

Results: At 1, 2, 2.5, and 3 years of age, the percentage of children watching TV was 77%, 90%, 92%, and 95%, respectively. Viewing duration also increased with age from 10 minutes/day at 1 year to 60 minutes/day at 3 years. Bangkok children spent double the screen time than children in other provinces. The most popular programs were cartoons and entertainment while 4% to 7% watched children programs.

Conclusion: Most children in this cohort were exposed to TV by three years of age.

Keywords: Prospective Cohort of Thai Children, Infants, Media, Television

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Recommendations of the American Academy of Pediatrics (AAP) discourage television (TV) viewing of children younger than two years of age and limit screen time to less than two hours per day in older children⁽¹⁾. Watching TV more than two hours a day is associated with poor school performance, obesity, and behavioral problems in school aged children and adolescents^(2,3), and might affect development in infants and toddlers⁽²⁾ whose brain is rapidly developing⁽⁴⁾.

Despite the recommendations, the American children spend an average of three to six hours a day watching TV, more time than in any singular activity except sleeping⁽⁵⁾. Common reasons why many parents let their baby watch TV include the attitudes that TV is educational/enjoyable and it can help parents to get their routines done⁽⁶⁾. Studies in Bangkok, Thailand, also showed that a number of infants have been exposed to TV viewing. More than two thirds of parents in Bangkok have positive attitude towards TV viewing as they believe TV viewing is beneficial for baby's cognitive and social development⁽⁷⁾.

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The present study aimed to determine the magnitude, trend of TV viewing, and parental practices related to a children's TV viewing in Thai children from one to three years of age. Since the analyzed data came from a large birth cohort, our findings would provide the important information for physicians and the stakeholders who are responsible for media for children.

Material and Method

A Prospective Cohort Study of Thai Children (PCTC) was established in 2000 to study the dynamics of growth, development and its determinants in 4,175 Thai children born between October 2000 and November 2002, from five sites in four different regions of Thailand. Written informed consent was given by every main caregiver and ethical clearance was obtained from the Ministry of Public Health and Institutional Review Board.

When a child was 1, 2, 2.5, and 3 years of age, the caregiver was asked to estimate an average daily foreground TV viewing duration (i.e., a duration in which the caregiver perceived that a child was watching TV) of the child on typical days during the week prior to the interview.

The caregiver chose only one response from seven choices, 1) cartoons, 2) children's programs

(i.e., educational young child-oriented programs including live action and animated programs without violence), 3) documentaries, 4) entertainment (e.g., drama, variety/game shows), 5) advertisements, 6) sports, and 7) news.

Data about the co-viewing practices were collected at 2 and 2.5 years with four possible responses including 1) without companion 2) accompanied by children under 18 years of age 3) accompanied by adult(s) without guidance, and 4) accompanied by adult(s) with guidance.

Results

There were 4157 eligible children. They were from Songkhla (26%), Khon Kaen (20%), Kanchanaburi (19%), Nan (18%), and Bangkok (17%). Sex ratio was one to one, and 44% of children were the only child of their family. Median family income was 100,000 (interquartile range 48,000 to 195,600) Thai Baht per year. Buddhists, Muslims, Christians, and ghost believers accounted for 79, 18, 0.6, and 2.4% of parents, respectively. Mothers were the main caregiver (>70%) in every visit. Five percent of the mothers were illiterate, and only ten percent had a Bachelor degree.

Data of TV viewing duration were available in 4,020, 3,838, 3,805, and 3,802 children at 1, 2, 2.5, and 3 years of age, respectively. From Table 1, more than 75% of children have been exposed to TV since the infancy period, increased to 95% by three years of age. As expected, viewing duration also increased with age, and 17% of children watched TV for more than two hours per day when they were three years old. Children living in Bangkok have the median viewing duration 1.5 to 3 times longer than children in other

parts of the country. Regarding the parent practices, the percentages of parents selecting the TV program for their child has declined with age as well as the percentages of parental viewing guidance. Above half of the parents watched the same TV program with their child without any guidance related to TV content.

Additional data at one year of age showed that 15% of parents were heavy TV viewers (defined as viewing duration of greater than four hours per day), and 2.6% of parents let their baby watch TV until the baby went to sleep.

The three most popular programs were cartoons (32% to 36%), entertainment (32% to 48%), and advertisements (7% to 15%); whereas, the children programs accounted for only 4% to 7%. While the percentage of children watching entertainment program increased with age, children programs and advertisements declined. Percentages of other types of programs i.e. cartoons and documentaries were more or less the same across times.

Discussion

Ninety percent of infants and toddlers in our study cohort watched TV before two years of age. This is higher than the 74% of children in an American national survey⁽⁸⁾. It was possible that, in Thailand, there were no publicized recommendations about TV limits like in the US. Many Thai parents perceived that TV could promote their child's development⁽⁷⁾.

Regarding the viewing duration, we found a similar increasing trend as was reported from the Thai nation-wide survey in 2001. Nonetheless, toddlers in the PCTC cohort watched television for about 60 minutes per day or seven hours per week,

Table 1. TV viewing duration and parental practices

	Age			
	12 months	24 months	30 months	36 months
Watching TV; % (total n*)	77.0 (n = 4,020)	90.2 (n = 3,838)	91.7 (n = 3,805)	94.7 (n = 3,802)
Median (IQR) daily duration in minutes among viewers	10 (4-30)	40 (20-90)	60 (30-120)	60 (45-120)
Lived in Bangkok	30 (10-42)	60 (30-120)	90 (60-180)	120 (60-180)
Lived in other parts	10 (3-30)	30 (15-60)	60 (30-120)	60 (30-120)
Selection of program for a child by parent; % (total n)	38.7 (n = 4,029)	18.6 (n = 3,471)	12.6 (n = 3,524)	11.4 (n = 3,594)
Co-viewers; %		n = 3,473	n = 3,524	
None or with siblings	-	24.3	32.3	-
Watched with caregiver without guidance		55.3	51.0	
Watched with caregiver with guidance		20.4	16.7	

* Total n = total number of children with available data for the variable at each visit

which was less than half of the 2001 survey, of 15 hours per week⁽⁹⁾.

The limitation of the study was the information did not include the associated factors of parental TV viewing⁽¹⁰⁾, habit of parents, and family rules⁽¹¹⁾. According to the systematic review, the effects of TV viewing on behaviors and learning in very young children were still unclear due to the methodology flaws⁽¹²⁾, showing a need for further studies.

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Potential conflicts of interest

None.

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ระยะเวลาและการปฏิบัติของการดูโทรทัศน์ในทารกและเด็กวัยเตาะแตะไทย

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ภูมิหลัง: ทารกควรเลี่ยงการดูโทรทัศน์ ปัจจุบันยังขาดข้อมูลขนาดและลักษณะของการดูโทรทัศน์ในทารกไทย

วัตถุประสงค์และวิธีการ: เก็บข้อมูลระยะเวลาและการปฏิบัติของการดูโทรทัศน์ในเด็กไทย 4,157 คน ในโครงการวิจัยระยะยาวในเด็กไทย ช่วงปี พ.ศ. 2544-2548

ผลการศึกษา: เมื่ออายุ 1, 2, 2.5 และ 3 ปี สัดส่วนเด็กดูโทรทัศน์เท่ากับร้อยละ 77, 90, 92 และ 95 ตามลำดับ ระยะเวลาดูโทรทัศน์ต่อวันเพิ่มขึ้นตามอายุ จาก 10 นาที ที่อายุ 1 ปี เป็น 60 นาที ที่ 3 ปี เด็กในกรุงเทพมหานครใช้เวลาดูโทรทัศน์มากกว่าจังหวัดอื่นประมาณ 2 เท่า รายการยอดนิยมคือการ์ตูนและรายการบันเทิง ขณะที่เพียงร้อยละ 4 ถึง 7 ดูรายการสำหรับเด็ก

สรุป: เด็กส่วนใหญ่ของการศึกษาดูโทรทัศน์ก่อนอายุ 3 ปี
