

Utilization of Medical Facilities by Children in Japan at Night and during Holidays

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Disclosures

I (Akira Ehara) have no financial relationships to disclose concerning the content of this presentation.

Background

- Population of children under 6 years in Japan has been decreasing from 6,761 thousands in 2005 to 6,031 thousands in 2015.
- Compared with the past, today's parents are raising fewer children.
- It is probable that they do not have an enough experience with treating children's illness and that they bring their children even with a mild illness to medical facilities including emergency rooms not only in daytime but also at night and holidays.
- In this analysis, I tried to clarify the number of children's first visit to medical facilities in Japan in day- and night-time and their hospitalization rate between 2007 and 2017.

Methods

- Japan has a universal health insurance system, and **only 1.3% of medical expenses were not covered by medical insurance** in 2016.
- Therefore, I used data from Statistics of **Medical Care Activities in Public Health Insurance**, 2007, 2012, and 2017 published by the Ministry of Health, Labour and Welfare of Japan.
- I calculated **the number of the fee charged for a first visit** of children under 6 years old **in** and **out of** medical hours.

Results(1)

- The number of the fee charged for a patient's first visit under 6 years old increased from **576.36** (/1000 person-months) in 2007 to **606.17** (/1000 person - months) in 2017. The increment was **highest in daytime** (Table 1).

Table 1. The number of the fee charged for a patient`s first visit.(First visit/1000 person-months)

First Vist/ 1000 person-months	2007 Yr	2012 Yr	2017 Yr	2017/2007
Daytime	487.50	514.87	530.79	108.9%
6 p.m. to 10 p.m. & 6 a.m. to 8 a.m. of Weekdays	35.47	36.96	33.98	95.8%
Holidays (6 a.m. to 10 p.m.)	46.49	47.72	34.86	75.0%
10 p.m. to 6 a.m. (Weekdays&Holiday)	6.90	7.40	6.54	94.7%
Total	576.36	606.95	606.17	105.2%

Results(2)

- Hospitalization of infants and toddlers under 6 years old was also growing from 0.48% in 2007 to 0.86% in 2017, and the rate was highest at **midnight** (from **3.55% in 2007** to **7.59% in 2017**, Table 2).

Table 2. Hospitalization rate of infants and toddler at first visit

Hospitalization Rate	2007 Yr	2012 Yr	2017 Yr	2017/2007
Daytime	0.33%	0.58%	0.60%	182.1%
6 p.m. to 10 p.m. & 6 a.m. to 8 a.m. of Weekdays	1.51%	1.88%	2.79%	184.5%
Holidays (6 a.m. to 10 p.m)	0.78%	1.01%	1.68%	215.0%
10 p.m. to 6 a.m. (Weekdays&Holiday)	3.55%	4.95%	7.59%	213.6%
Total	0.48%	0.75%	0.86%	180.2%

Conclusions

- Most of parents bring their children to medical facilities in daytime, and they tend to refrain from utilizing medical facilities at night and during holidays when their children have a mild illness.

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