

## DETERMINANTS OF THE UTILIZATION OF OUTPATIENT AMONG CHILD IN INDONESIA

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### ABSTRACT

**Background:** Child's health becomes the government concern in developing countries. Improving child's health is a challenge for developing countries due to poor health care. Children tend to need more health services as they are more susceptible to various diseases. This study was aimed to determine the determinants influencing outpatient services utilization on children in Indonesia.

**Method:** This research was a descriptive with cross-sectional design research using quantitative approach. The data were obtained from secondary data of the Indonesian Family Life Survey (IFLS) 2014. The dependent variable was the number of health service visits on children. In this study, the samples were 2,472 0-14 years old individuals selected according to inclusion and exclusion criteria. The data were analyzed using binomial negative regression.

**Result:** The study found out that child using health services at least one outpatient visit in the last 4 weeks was 75.77%. Woman, perception of ill, parental formal employment, parental education (high), economic status were statistically related to utilization of health service for outpatient

**Conclusion:** The perception of ill greatly affects the children in outpatient health service utilization, it is expected that government gives policy by family approach as the effort of family member caring, health protection and improvement especially for child.

**Keywords :** Health Service, Utilization, Child, Outpatient

## DETERMINAN PEMANFAATAN RAWAT JALAN PADA ANAK DI INDONESIA

### ABSTRAK

**Latar belakang:** Kesehatan anak menjadi perhatian pemerintah di negara-negara berkembang. Meningkatkan kesehatan anak adalah tantangan bagi negara-negara berkembang karena perawatan kesehatan yang buruk. Anak-anak cenderung membutuhkan lebih banyak layanan kesehatan karena mereka lebih rentan terhadap berbagai penyakit. Penelitian ini bertujuan untuk mengetahui faktor-faktor yang mempengaruhi pemanfaatan layanan rawat jalan pada anak-anak di Indonesia.

**Metode:** Penelitian ini bersifat deskriptif dengan rancangan penelitian cross sectional dengan menggunakan pendekatan kuantitatif. Data diperoleh dari data sekunder dari Survei Kehidupan Keluarga Indonesia (IFLS) 2014. Variabel dependen adalah jumlah kunjungan pelayanan kesehatan pada anak-anak. Dalam penelitian ini, sampel adalah 2.472 individu berusia 0-14 tahun yang dipilih berdasarkan kriteria inklusi dan eksklusi. Data dianalisis menggunakan regresi negatif binomial.

**Hasil:** Studi ini menemukan bahwa anak yang menggunakan layanan kesehatan setidaknya satu kunjungan rawat jalan dalam 4 minggu terakhir adalah 75,77%. Perempuan persepsi sakit, pekerjaan formal orang tua, pendidikan orang tua (tinggi), status ekonomi, status ekonomi memiliki hubungan dengan pemanfaatan layanan kesehatan rawat jalan.

**Kesimpulan:** Persepsi sakit sangat mempengaruhi anak-anak dalam pemanfaatan layanan kesehatan rawat jalan. Diharapkan pemerintah memberikan kebijakan dengan pendekatan keluarga sebagai upaya kepedulian anggota keluarga, perlindungan kesehatan dan peningkatan terutama untuk anak.

**Kata kunci:** Pemanfaatan, layanan kesehatan, anak, rawat jalan

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## INTRODUCTION

Child's health becomes the government concern in developing countries. Improving child's health is a challenge for developing countries due to poor health care. Health care is a basic right of the community that must be fulfilled in health development. In Indonesia, the main problem of health services today is the high disparity of health perception on socio-economic level, between urban and rural.<sup>1</sup> In Indonesia, improvements in health policy and legislation only focus on improving the delivery of child health main services such as controlling the diseases that often infect children. A strong health system improves health perception of the entire population, especially the poor, including poor health and poor access to health services. Improving child's health and reducing mortality rates are two of the important goals of Indonesian government policy.<sup>2</sup>

Indonesia's population in 2014 aged 0-17 years reached 82.8 million or 32.9 percent of the total population, by looking from a dependency point of view, then a third of Indonesia's population still needs protection by their families, communities, or countries. At the age of the child in the process of growth and physical and biological development, they are very susceptible to the diseases infection that requires optimal health care and quality to maintain health. Children need good health services, so that they can go through critical years early in their lives considering that they are very vulnerable to various types of diseases. This becomes one of the roles of the government to provide health insurance to improve access to health services.<sup>3</sup>

Several studies of factors affecting the utilization of health services in children show the results that education level, child health perception, health insurance ownership, economic status, influence the utilization of health services.<sup>4-6</sup>

Age affects individuals to take advantage of health services. Children have a higher risk of using outpatient health services for their age is in a period of growth

and development, making them highly susceptible to various diseases. Health insurance ownership affects individuals to utilize health services. By the existence of health insurance, it is expected to be able to increase the utilization of outpatient health services in children. Studies related to outpatient utilization in children in Indonesia are still limited. This is very important for the policy of utilizing health services in groups of children. The purpose of this study was to analyze the determinants influencing the utilization of outpatient services on child.

## METHOD

This study used data of Indonesian Family Life Survey 2014. IFLS is a survey that aims to provide a picture of health and also socio-economic conditions of households in Indonesia done in a sustainable manner. IFLS represents 83% of households and individuals in Indonesia and there are 13 provinces enumerated therein. The sample of IFLS was selected through random sampling.<sup>7</sup>

This study used cross sectional design, there were 2,472 individuals aged 0-14 years as the sample. The dependent variable in this study was the number of outpatient health service visit. Variables were formed based on information on child outpatient visits during the last month before the IFLS survey was conducted.

The independent variables in this study are child gender, region, residence, health insurance ownership, children's health perception, parent's job, parent's education and economic status. To analyze the data, statistical software with univariate, bivariate and multivariate analysis with binomial negative regression were used.

**RESULTS**

**General Characteristics**

**Table 1. Distribution Frequency**

Variable	n	%
<b>Gender</b>		
Female	1.182	47,8
Male	1.290	52,2
<b>Region</b>		
Sumatera	548	22,2
Java/Bali	1.556	62,9
Eastern Indonesia	368	14,9
<b>Residence</b>		
Urban	1.748	70,7
Rural	724	29,3
<b>Health Insurance Ownership</b>		
Own	1.558	63
Do not own	914	37
<b>Health Perceptions</b>		
Healthy	1.915	77,5
Ill	557	22,5
<b>Parent's Occupation</b>		
Formal	1.410	57
Informal	1.062	43
<b>Parent's Education</b>		
Middle	1.343	54,3
High	469	19
Low	660	26,7
<b>Economic Status</b>		
Poor	488	19,7
Middle	572	23,1
Rich	516	20,9
Very Rich	504	20,4
Very Poor	392	15,9

Table 1 shows the results of the cross-tabulation analysis of variables that have a significant relationship between the utilization of outpatient care on child which are gender (female), perception of health (ill), parent's occupation (formal), parent's education (high) and economic status (poor, middle, rich, and very rich).

**Bivariate Analysis**

Bivariate analysis shows the relationship between independent variables with the utilization of outpatient health service on child.

**Table 2 Bivariate Analysis Outpatient Visits**

Variable	Mean±SD	P	Prevalence Ratio (95%CI)
<b>Gender</b>			
Female	1,30±0,72	0,02	0,92(0,86-0,98)
Male	1,41±1,14	1	
<b>Region</b>			
Sumatera	1,36±0,76	0,27	1,06 (0,94-1,19)
Java/Bali	1,37±1,09	0,13	1,07 (0,97-1,19)
Eastern Indonesia	1,27±0,55	1	
<b>Residence</b>			
Urban	1,36±1,08	0,78	1,01 (0,93-1,08)
Rural	1,34±0,59	1	
<b>Health Insurance</b>			
Own	1,35±1,04	0,89	0,99(0,92-1,06)
Do not own	1,36±0,81	1	
<b>Health perceptions</b>			
Healthy	1,32±0,98	0,00	1,12(1,03-1,21)
Ill	1,48±0,91	1	
<b>Parent's Occupation</b>			
Formal	1,40±1,08	0,02	1,08(1,01-1,16)
Informal	1,29±0,77	1	
<b>Parent's Education</b>			
Middle	1,38±0,89	0,60	0,97(0,90-1,05)
High	1,20±0,56	0,00	0,84 (0,76-0,94)
Low	1,41±1,27	1	
<b>Economic Status</b>			
Poor	1,34±0,62	0,00	0,82 (0,73-0,91)
Middle	1,36±0,71	0,00	0,83 (0,75-0,93)
Rich	1,33±0,70	0,00	0,82 (0,73-0,91)
Very Rich	1,19±0,48	0,00	0,73 (0,65-0,82)

Very Poor

1,62±1,90

1

Table 2 shows the factors influencing outpatient utilization care on children. The results health services utilization for outpatients on children indicate that girls have a greater risk than boys to take advantage of outpatient care. The probability of children utilizing outpatient increases with perception of ill. Health perception has a significant relationship on the use of outpatient care on children.

Parent's formal occupation significantly affects children to take advantage of outpatient care; children whose parents are working in the formal sector have a greater risk than those in the informal sector to utilize outpatient care.

Economic status significantly affects the utilization of outpatient on children. Probability of outpatient utilization is increasing by the increasing household income. Children with poor, middle, rich and very rich economic status have a greater risk than those with very poor economic status to take advantage of outpatient care.

## DISCUSSION

This paper aimed to determine the determinants influencing the utilization of outpatient services on child. Based on the analysis results, the probability of girls to use outpatient care is greater than boys. The results of this study are in accordance with research which states that female is more often to use health services for general health checks than male.<sup>8-10</sup> Yet, this is in contrast to the results of research which states that male has a higher chance of receiving health care than female.<sup>11-13</sup> The results of this study are not in line with research which states that gender does not have a significant relationship on the use of dental and oral health services

## Multivariate Analysis

Multivariate analysis shows the relationship between independent variables and the utilization of outpatient health services on child.

**Tabel 3 Multivariate Analysis of Outpatient Visit**

Variable	P	Adjusted Prevalence Ratio (95% CI)
<b>Gender</b>		
Female	0,031	0,927(0,865-0,993)
Male	1	
<b>Health Perceptions</b>		
Ill	0,001	1,148(1,059-1,244)
Healthy	1	
<b>Parent's Occupation</b>		
Formal	0,004	1,106(1,031-1,185)
Informal	1	
<b>Economic Status</b>		
Poor	0,000	0,791(0,707-0,884)
Middle	0,000	0,815(0,733-0,906)
Rich	0,000	0,806(0,722-0,899)
Very Rich	0,000	0,710(0,635-0,795)
Very Poor	1	

for children, but the number of visits to dental health services is significantly associated with age. Oral health can increase in growing children and older children have more dental and more serious caries conditions if they do not receive timely treatment thus they need more visits to dental and oral care.<sup>14</sup>

Health perception has an important role in the utilization of health services; each individual has a different health perception.<sup>15</sup> A person's health perception affects the utilization of health services that those with poor health perception significantly have the opportunity to use health services compared to respondents with relatively good health perception.<sup>16-18</sup>

Differences in health perception by type of

work are not so conspicuous. However, when compared to other types of work, farmers are a population group that has a perception of poor health while civil servants have the best health perception. Those who work as farmers have the highest perception of poor health compared to other jobs.<sup>15</sup> Parents who work in the informal sector such as farmers tend to have lower income as, to utilize health services, they face financial constraints.<sup>19</sup> Economic status will affect in utilizing outpatient services. The results of this study indicate that outpatient utilization is influenced by household income. Compared to children who have income in the category of very poor all have a greater risk of utilizing outpatient care. The higher the economic status is, the better the perception of health will be.<sup>20</sup> Significant socioeconomic status related to residential areas has been shown to affect one's health and access to health services, those living in areas with higher poverty rates have fewer visits to services than those living in areas with rich economic status.<sup>21</sup> Outpatient visits are increasing in response to growth in economic status.<sup>22-24</sup>

Health perceptions is a major predictor in influencing children to use outpatient health services. Children who have a perception of ill have a greater risk of using outpatient care after being controlled by other variables. This study is in line with other studies that found that health perception have a significant relationship with the utilization of outpatient care.<sup>25</sup>

## CONCLUSION

Health perception is a predictor in the utilization of outpatient on children. The perception of ill on children is very influential in the utilization of health services for outpatient. It is expected that the government could provide policy with family approach as

the effort of family member care, health degree protection and improvement especially for child.

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