THE RELATIONSHIP BETWEEN THE CHARACTERISTICS AND LEVEL OF KNOWLEDGE OF PARENTS ABOUT KAWASAKI DISEASE

Rodiyanah*, Mustajidah, Titi Permaini, Haryati, Desi Rusiana Alviani

Sekolah Tinggi Ilmu Kesehatan Banten, Jl. Raya Rawa Buntu No.10, Rw. Buntu, Serpong, BSD, Banten 15318, Indonesia

*dian22rodiyanah@gmail.com

ABSTRACT

Data obtained from RS X, pediatric patients with Kawasaki disease within three years (2019 – 2021) were 1,705 cases, where the average visit for the last 3 months was 140 cases. The purpose of this study was to determine the relationship between the characteristics and level of knowledge of parents about Kawasaki disease in RS X. The design of this study was to use a cross-sectional correlation analytical design with the type of research used quantitative associative research. In this study, the independent variable is the characteristics of parents including gender, age, education level, and employment status while the dependent variable is the level of knowledge. 4 variables namely gender (p-value = 1,000), age (p-value = 1,425), education (p-value = 0,326) and employment status (p-value = 1,000) The conclusion of this study is that it cannot prove there is an association with the level of parental knowledge about Kawasaki disease in RS X.

Keywords: childcare; characteristics; kawasaki disease

INTRODUCTION

Kawasaki disease (KD), also known as mucocutaneous lymph node syndrome, is an acute and limited moderate vascularity of blood vessels that has a predilection of the coronary arteries. This disease is the leading cause of acquired heart disease in developed countries and is slowly replacing rheumatic heart disease in developing countries The etiology of Kawasaki disease (KD) is still unknown and may be related to wind or waterborne pathogens. However, in recent years there have been studies that show certain genetic markers (such as HLA-B51 and HLA-Bw22j2 serotypes, CCR2-CCR5 chemokine receptor gene cluster haplotypes and FCGR3A polymorphisms of IgG IIIa receptors) indicate a predisposition to the disease. In fact, siblings are 10-20 times more likely to develop the disease than the general population. There is no evidence to suggest that the disease is transmitted from person to person. Various organisms derived from bacteria and viruses are suspected as the cause of this disease, but to date, no single agent has been identified as the main cause.

However, there is evidence to suggest more than 40% of children diagnosed with KD test positive for respiratory pathogenic viruses. The disease is most common in children under the age of five, however, it can appear at any age, even in adults. There is less male dominance (male to female = 1.5 bandin Boys are also more likely to suffer complications and death Kawasaki disease is rare in children younger than 4 months, likely due to protection from maternal antibodies.   It is most commonly seen in children of Asian descent, particularly

Japanese, and least common in Caucasian children. It seems that the prevalence of the disease is also higher in winter and spring The incidence rate varies from 10 to 20 out of 100,000 children aged <5 years in the U.S. and Canada to 50 to 250 out of 100,000 children in Japan, Taiwan, or Korea. (Owens & Plewa, 202 3) RS X is the center hospital for Kawasaki disease, data obtained from RS X visits of pediatric patients with Kawasaki disease within three years (2019 – 2021) were 1,705 cases, where the average visit for the last 3 months was 140 cases. This disease is still rarely diagnosed in Indonesia because it is considered still rare and not widely known.

METHOD
This research method is to use a cross-sectional correlation analytical design with the type of research used quantitative associative research. In this study, the dependent variable studied was parental knowledge about Kawasaki disease. While the independent variable that influences it that will be studied on the dependent variable is the characteristics of parents, so researchers want to know the relationship and direction of the two variables. The sampling technique in this study was carried out by the Total sampling method The sample in the study was all parents who had children with Kawasaki disease who met the inclusion criteria

RESULTS

Table 1
Frequency Distribution of Respondent Characteristics

Gender	f	%
Male	3	14,3
Woman	18	85,7
Age		
17-25	2	9,5
26-35	15	71,4
36- 45	4	19,1
Education		
SMA	5	23,8
PT	16	76,2
Work		
Work	17	81
Not Working	4	19
Knowledge		
Good	14	66.7
Bad	7	33,3

Based on the characteristics of respondents, the most data were obtained namely gender, namely women (85.7%), age of 26-35 years (71.4%), education, namely Higher Education (76.2%) and employment status, namely work (81.0%) and respondents who have good knowledge of 66.7%. So the majority of RS X parents have good knowledge.

Table 3.
Relationship between respondents' age and knowledge of Kawasaki disease

Age		Knowledge				P-Value
		Good		Less		
		f	%	f	%	
17–25 years		2	100,0	0	0,0	
26-35 years		9	60,0	6	40,0	1,425
36–45 years		3	75,0	1	25,0	
Man	2	66,7	1	33,3	3	100,0	
Woman	12	66,7	6	33,4	18	100,0	1,000

Table 4.
Relationship between Respondents' Education and Knowledge of Kawasaki Disease

Age	Knowledge				P-Value
	Good		Less		
	f	%	f	%	
SMA	2	40,0	3	60,0	
PT	12	75,0	4	25,0	0, 326
Total	14	66,7	7	33,3	

Based on the results of the study, the results of the test were obtained *Fisher Exact* obtained that value *p-value* 0.05 i.e. gender (p = 1.000), age (p = 1.425), education (p = 0.326) and employment status (p = 1.000). Based on the results of the study, the results of the test were obtained *Fisher Exact* obtained that value *p-value* 0.05 is gender (p = 1.000), age (p = 1.425), education (p = 0.326) and employment status (p = 1.000).

Table 5.
Relationship between respondents' occupation and knowledge of Kawasaki disease

Work	Knowledge				p-value
	Good		Less		
	f	%	f	%	
Work	11	64,7	6	35,2	
Not Work	3	75,0	1	25,0	1,000

According to the results of the study (Huang et al., 2019) . The 185 KD-caregiver patient pairs in this study used questionnaires of two categories: child characteristics, consisting of age at onset of disease, sex, gestational age at delivery, birth weight, delivery method, and breastfeeding status, and caregiver characteristics, consisting of parents or not, education level, age of mother at delivery, number of children, and family income. We analyzed the association of these factors with CAL formation (coronary artery lesions) and IVIG treatment response of KD. KD patients with CAL formation had a higher maternal age than non-CAL patients (32.49 ± 3.42 vs 31.01 ± 3.92 years, p = 0.016). We also found that the maternal age group ≥ 32 years had higher rates of having KD patients with CAL (39/81 vs 24/74, odds ratio 1.935, 95% confidence interval [1.007, 3.718], p = 0.047). The maternal age group ≥ 35 years had higher rates of having KD patients with IVIG resistance (6/31 vs 6/116, odds ratio 4,400, 95% confidence interval [1.309, 14.786], p = 0.01). There were no significant differences in CAL formation or IVIG resistance in KD with respect to patient age at disease onset, gestational age, birth weight, method of delivery, breastfeeding, type of caregiver, caregiver education level, number of offspring, or family income (p > 0.05). The study is the first to report that maternal age is significantly associated with CAL formation and IVIG resistance in KD. We hypothesized that a maternal age of less than 32 years would benefit KD's offspring.

DISCUSSION
According to , the study consisted of 176 KD patients (mean age: 5.5 years, 60.8% males) and 85 healthy children (mean age: 6.4 years, 54.1% male). Based on the children's ages, each patient with KD and control subjects were assessed using the Early Learning Mullen Scale or Wechsler Intelligence Scale, and their caregiver caregiving function was assessed using the Parenting Stress Index. PSI)-Short Form. We observed no significant differences in developmental indexes, cognitive function or caregiving stress between patients with KD and controls. Among children with KD, (Wang et al., 2021) IVIG or CAL administration was associated with children's cognitive scores. However, caregivers of patients who had CAL experienced greater total PSI scores than patients without CAL. In addition, caregivers who had a master's level or more of education showed lower parenting stress than those with a college education level or

lower. According to. Parental uncertainty is associated with missed diagnoses, higher income, and maternal education. Higher uncertainty scores among children were associated with the absence of chest pain and a lower number of echocardiograms. High rates of impairment among the elderly are associated with earlier cardiac catheterization, anticoagulant use, lower parental education and income, and missed diagnosis. High grades of impairment among children are associated with high paternal education. The children's total self-efficacy scores improved with chest pain and larger aneurysm size. (Chahal et al., 2017) Parents are frustrated by the lack of information available in layman's language and the limited scientific knowledge about the long-term consequences of Kawasaki disease (Chahal et al., 2021) . Studies carried out (Takeuchi et al., 2022) . Maternal age with Kawasaki incidence rate of 51.1% is 32 years old. Maternal Education with a Kawasaki incidence rate of 41.8% is secondary educated and Dad Education 44.1% is highly educated.

CONCLUSION
The conclusion of this study is that it cannot prove there is an association with the level of parental knowledge about Kawasaki disease in RS X.

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