Research Article

The relationship between knowledge, attitude, and family support with mother's behaviour in treating of acute respiratory infection on children under five at Desa Bangunjiwo, Kasihan Bantul

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ABSTRACT

Background: Acute respiratory infection (ARI) is a disease that often affects infants and children (Depkes RI, 2008). The prevalence of ARI in Indonesia was 25.0 percent (Riskesdas, 2013. Mothers have an important role in controlling ARI in infants. However, there are many women who are poorly behaving when dealing with children who suffer from respiratory. Mother's behavior is influenced by the knowledge, attitude and family support. The purpose of this study was aimed at determine the relationship between knowledge, attitudes and family support with mothers 'behavior in handling of ARI in children under five years old.
Methods: This is a correlative study, using a quantitative method with cross sectional design. Bivariate analysis was used to determine the relationship between knowledge, attitudes and support for families with mothers 'behavior using the Spearman test. The four variables are numeric variable with $\alpha < 0.05$ and 95 % CI. Linear regression analysis was used to determine the independent variable that most strongly linked with the dependent variable.
Results: The results showed an association between attitudes and behavior with p=0.001 and r=0.393. Family support is also related to the behavior with p=0.001 and r=0.400. Knowledge does not have a relationship with the mother's behavior. The results of linear regression analysis, family support is the variable that mostly linked to behavior (p=0,003).
Conclusions: There is a relationship between attitudes and family support with mothers 'behavior. Family support is the variable that most strongly linked to the mothers 'behavior.

Keywords: ARI, Knowledge, Attitude, Family support, Behavior

INTRODUCTION

Acute respiratory infections (ARI) is a disease that is often suffered by infants and children.[1] ARI disease is the leading cause of morbidity and mortality of infectious diseases in the world. Nearly four million people die from ARI each year, 98% of which are caused by infection of the lower respiratory tract.[2] ARI caused the deaths of infants and toddlers are high enough that roughly one out of four deaths that occurred. Each child is estimated to have 3-6 episodes of ARI annually.[1] Puskesmas Kasihan 1 Bantul record the number of ARI in infants in the village Bangunjiwo (January 2013- January 2014) as many as 1468 children. According to data from the Puskesmas Kasihan 1 Bantul, the incidence of ARI in the village Bangunjiwo ARI higher than Tamantirto village. Both are the coverage area of Puskesmas Kasihan 1 Bantul.

The family has an important role in prevention and treatment of children suffering from ARI. This is because children under five have not be enable to meet their own needs and require help from others, especially the mother. Mother is the primary caregiver for children with chronic

illness.[3] Behavioural treatments can be performed by the mother during the children suffer from ARI is to provide proper nutrition during and after a hospital sick children, give enough fluids during a fever and do not let children thirsty, give potions safe for the throat and relieve cough, treatment for fever, and observation of signs of pneumonia.[4]

In reality, there are still many mothers who are less appropriate behaviour when dealing with children who suffer from ARI. This is supported by the results of a preliminary study conducted by us at three mothers in the village Bangunjiwo. Researchers found there was still breastfeeding mothers who reduces during the children suffer from respiratory infections, maternal behaviours that bring a sick child to a "dukun" if within 3 days of the child's body heat does not go down, some mothers allow their children to play unattended, do not keep children from patients with ARI, and carrying a child in the kitchen using firewood.

The incidence of ARI in the village Bangunjiwo still relatively high and there are some mothers who do not appropriate behavior, researchers focused this study on behavior and the factors that influence behavior in the handling of ARI such as knowledge, attitudes, and family support. So that the formulation of the problem in this study is whether there is a relationship between knowledge, attitudes, and support the family with the mother's behaviour in the handling of ARI in infants in the village Bangunjiwo, Kasihan, Bantul. This study aims to determine the relationship between knowledge, attitude and family support with the mother's behavior in the handling of ARI and the factors most strongly linked to them other's behavior. The benefits of this researchare expected to be used as a basis to provide education on ARI, can increase the participation of nurses in the prevention and treatment of ARI casesinthe community.

METHODS

Design

This research is a correlative study, using a quantitative method with cross sectional study design.

Sample and setting

The study was conducted on 99 respondents in the village Bangunjiwo, Kasihan, Bantul, Yogyakarta, Indonesia. Respondents in this study were selected based on kirteria as follows: Inclusion criteria: 1) the mother has children is being / been diagnosed with ARI aged 1-5 years within the past 6 months, 2) the mother is the primary caregiver of children, 3) mother live and settle in area of research, and 4) the mother willing to become respondents. Exclusion criteria: the mother has physical limitations, such as disabled, deaf, and blind.

Instrument

This study uses four questionnaires and one form that contain the data of the respondents. The questionnaire validity and reliability test by researchers in 30 respondents. Respondents' knowledge was measured using a questionnaire containing 16 items of knowledge questions. The validity of test results is the highest value of test validity is 0.868 and the lowest value is 0.364, while the reliability of test results is α = 0.884.

Respondents' attitudes were measured using an attitude questionnaire containing 16 items statement. The validity of test results is the highest value of test validity is 0.856 and the lowest value is 0.399, while the results of reliability test α = 0.873. Family support was measured using a questionnaire that has been in the family support validity and reliability by researchers. Questionnaire containing 11 items statement. The validity of test results is the highest value of test validity is 0.662 and the lowest value is 0.377 and reliability test α = 0.836. Respondent behavior was measured by a behavior questionnaire containing 18 items statement. The validity of test results is the highest value of test validity is 0.802 and the lowest value is 0.371, while the value of the reliability test α = 0.902.

Data analysis

Univariate analysis was used to describe the frequency and percentage of respondents. While the bivariate analysis using Pearson product moment correlation test and Spearman test were used to determine the relationship between the dependent variable with the independent variable. Linear regression analysis was utilised to determine the independent variable that most strongly linked to the independent variables.

RESULTS

Most of the respondents were aged 18-40 years (95.9%), junior high school graduates as many as 42 people (42.4%), working as a housewife as many as 44 people (44.4%), had income < Rp 1,125,500,00 as many as 69 people (69.7%), living in a large family as many as 53 people (53.5%), and have experience in caring for children ARI more than one time as many as 73 people (73.7%). This information is presented in table 1.

The result showed that the mean value of the respondents' knowledge is 1.8755 with a standard deviation of ± 0.11284, the mean value attitude of the respondents is 3.7986 with a standard deviation of ± 0.29634, the mean value of family support is 3.1763 with a standard deviation of ± 0.48590, and the mean value of the respondent's behavior is 4.0999 with a standard deviation of ± 0.54940. This information is presented in the table 2.

The bivariate analysis, as showed in table 3, indicated an association between attitudes and behavior with p=0.001

and r=0.393. Family support was also related to the behaviour with p=0.001 and r=0.400. Knowledge was not related to the mother's behaviour.

Table 1: Characteristics of respondents.

Characteristic	Frequency (f)	Percentage (%)
Age		
< 18	1	1.1
18-40	95	95.9
>40	3	3.0
Job		
Civil servants	8	8.1
Entrepreneur	14	14.1
Laborer	30	30.3
Housewife	44	44.4
Another	3	3.1
Education		
Elementary school	16	16.2
Junior high school	42	42.4
Senior high school	30	30.3
Bachelor	11	11.1
Income		
0 – Rp 1.125.500,00	69	69.7
>Rp 1.125.000,00	30	30.3
Family type		
Nuclear	46	46.5
Extended	53	53.5
Experience to handling children with ARI		
First time	26	26.3
More than one time	73	73.7
Age of child		
1- < 3	71	71.7
3-<5	28	28.3

Source: Primary data

Table 2: Average value of knowledge, attitude, family support and behaviour respondents in the ari management in the village of bangunjiwo 2014 (n=99).

	Minimum value	Maximum value	Mean±SD
Knowledge	1.31	2.00	1.8755± 0.11284
Attitude	3.00	4.56	3.7986± 0.29634
Family support	1.91	4.00	3.1763± 0.48590
Behavior	2.61	5.00	4.0999± 0.54940

Source: Primary data

The results of linear regression analysis, family support is the variable that mostly linked to behaviour (p=0,003) as indicated in table 4.

Table 3: Results of bivariate analysis (Spearman) correlation between knowledge, attitude and family support with the mother's behaviour in the handling of ARI in infants in the village of Bangunjiwo 2014 (n=9).

Independent variables	Dependent variable (the mother's behavior)	
	Correlation coefficient (r)	Significance (p)
Knowledge	-0.093	0.36
Attitude	0.393	0.001
Family support	0.400	0.001

Source: Primary data

Table 4: Multivariate linear regression analysis results.

Variables	Coefficient (B)	Correlation coefficient (beta)	Significance (p)
Attitude	0.522	0.281	0.005
Family support	0.340	0.301	0.003
R Square=0,208			

Source: Primary data

DISCUSSION

Mother's knowledge in the handling of ARI in children

Overall, respondents' knowledge is good. We can see it on the table 2 which shows that the mean value of the respondents' knowledge is 1.8755 with a standard deviation of ± 0.11284. The highest percentage of existing knowledge on the items the question of prevention of ARI is distancing children from burning fumes and cigarette smoke. Excessive exposure to smoke and in the long term will affect the incidence of pneumonia in infants.[9] Results showed no statistically significant association between knowledge and behaviour (p = 0.36). Based on the analysis of researchers, it can happen because respondents lack of motivation of health workers. This is supported by the statement of the respondent that the public rarely get visits from health workers. So that people are not getting the motivation of health workers. Motivation can be a compliment to the mother if the child is healthy or give confidence and an opportunity to prove his ability in maintaining the good health.[13]

Mother's attitude in handling ARI in children

Overall, the attitude of the respondents is sufficient. It can be seen from table 2, which shows that the mean attitude of the respondents is 3.7986 with a standard deviation of ± 0.29634. Based on analysis of respondents 'answers, attitudes that need attention as many as 41.59% of respondents consider that taking care of children

suffering from ARI was an easy action. It has a difference of only 0.01% to the respondents who did not agree that the care of children with ARI is an easy action. Based on interviews with respondents, indeed respondents complained that caring for children is an act that ARI was "*Gampang-gampang susah*".

Researchers assume that the respondents are less precise attitude influenced by the individual's experience in caring for children with ARI. Mothers who consider that the care of children with ARI is a simple act may have had more experience in treating ARI compared with mothers who considers that the care of children with ARI is a difficult action. The absence of experience at all with a psychological object will tend to form a negative attitude towards a particular object.[16] A total of 73.7% of respondents in the village Bangunjiwo have experience taking care of ARI more than 1 times.

The results showed that there was a significant relationship between attitudes and behaviour of the respondents (0,001), of these results indicate a weak correlation (r = 0.393) and a positive value means that the higher the score the better the attitude of respondent behavior of respondents in the handling ARI. By understanding the individual attitudes, behaviours or responses can be expected to be taken by the individual concerned. However, the relationship between the two is weak; it is very difficult to prove because of the apparent link between behaviour and human behaviour. If the individual is in a situation that is truly free from any form of pressure or obstacles that may interfere with the expression of his attitude, it can be expected that other forms of behavior that looks an expression of his true .[8]

Family support to mothers in the treatment of ARI in children.

Overall, respondents receive sufficient support from the family. The results showed a mean value of family support is 3.1763 with a standard deviation of ± 0.48590. Support the most widely accepted by respondents is information support. A total of 100% of respondents never get support information, although different frequency (always, often, rarely). Help information will help people to find the right alternative for resolving the problem someone.[16]

The support is still lacking obtained by the mother is the appraisal support. The Based on the respondent's answer is as much as 7.92% of the respondents never get support in the form of an assessment of the family. Appraisal support is providing feedback and reinforcement that can be used by the individual concerned as a means of self-evaluation and the drive for progress.[17] The one of appraisal support is appreciate the effort that has been done for example to give a compliment if the mother of healthy children.

The presence or absence of family support will influence

the behaviour of the mother in providing treatment of ARI in infants. The results showed significant correlation between family support with maternal behaviour (0.001), had a weak correlation (0.400), positive value means that the higher the score the better family support behaviour of respondents in the handling of ARI. People who are considered important as husband and parents will influence the behaviour of someone.[13] Family support is the ability of family members to provide reinforcement to each other and family acceptance towards the patient.[17] If there is no support then the confidence will grow and motivation to tackle the case will be increased.[18]

The majority of respondents are not only getting support from her husband, but from the parents/ in-laws as well because as much as 53.5% of respondents live in a big family. Researchers observed, if a mother living with parents or other relatives, most likely this will affect the mother's behaviour in the handling of ARI. Mother will get more information and more attention than mothers who only lived with her husband.

Mother's behaviour in the handling of ARI in children

The majority of respondents have good behaviour and sufficient in preventing and caring for infants who suffer from respiratory diseases. The mean value of the respondent's behaviour is 4.0999 with a standard deviation of ± 0.54940. According to the research, the behaviour that still need attentions are as much as 6.93% of respondents never prevents children playing with ARI patients. If the mother does not keep children from other sufferers will facilitate the transmission of respiratory diseases. Bacteria and viruses that cause contagious respiratory infection, for example when people sneeze or cough without covering your mouth and nose will easily pass germs to others. Thus preventing to prevent children playing with people who suffered ARI is very important.[19]

Based on the research results as much as 77.23% of respondents always and often ask the most potent drugs when going to the doctor. A caring in home is enough to handle the ARI. Caring in home including providing nutritious food, adequate rest, giving a sweet soy sauce and honey if a child coughs, and clean the nose so that breathing is not disturbed.[20] Unless the child has signs of pneumonia, which is rapid breathing, difficulty breathing, and cough and cold accompanied by fever High should be immediately taken to the health service. The behaviour of the administration of drugs to the child must be considered again in accordance with the age of the child. Based on the results of the study found that as many as 71.72% of respondents had children aged 1 to less than 3 years? There are differences in the dose of the drug for ages 1 to less than 3 years with 3 to 5 years of age. The younger child, give the smaller the dose.[21] Therefore, mothers should be given sufficient information related to the administration of drugs in children. Behaviour is formed in a person of the two main factors that stimulus

is a factor of in outward (external factors), and the response is a factor of the person concerned (internal factors).[13] The external factors one of which is the family support. And the internal support is knowledge and attitude that determine a person's response to stimulus from the outside.

Results of linear regression analysis, attitude and family support are simultaneously (together) affect the behaviour of the mother in the treatment of acute respiratory infection in infants by 20.8%, while knowledge does not have a significant relationship with the mother's behaviour in the handling of respiratory infection in infants. Nominally, this result is still low. There are still 79.2% are other factors that influence the behaviour of the mother in the treatment of acute respiratory infection in children. A person's behaviour is very complex. Behaviour is also an overall totality of understanding and activity of a person who is a joint product between internal factors and external factors.[13] In addition to the attitude and family support, there are many internal factors and external factors that influence maternal behaviour.

Family support is the variable most strongly linked to the mother's behaviour in the handling of ARI. According to researchers, this is because the majority of respondents live with a large family (53.5%). Large family is a nuclear family plus other family members who still have blood ties (grandparents, uncle-aunt).

CONCLUSION

There are a relationship between attitude and support the family with the mother's behaviour in the handling of ARI. Family support is the variable most strongly linked to the mother's behaviour in the handling of ARI in children.

ACKNOWLEDGEMENTS

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