

## Research Article

# The Transcultural Factors and Health Seeking Behavior of Families of Under-five Children with ARI in Lhokseumawe

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### Article History

Received: 08.01.2020

Accepted: 18.01.2020

Published: 31.01.2020

### Journal homepage:

<https://www.easpublisher.com/easjnm>

### Quick Response Code



**Abstract: Aim:** This study aimed to examine the relationship between transcultural factors with health care seeking behavior of families of under-five children with ARI in Lhokseumawe. **Methods:** quantitative approach with a cross sectional study was conducted. The population in this study was all mothers who have children (1 - 5 years) who suffer from ARI. The number of samples in this study was determined by estimation, so as many as 321 mothers were participated. The research instrument consisted of 105 statement lists to measure transcultural variables. Data were analyzed by chi-square test and binary logistic regression with the stepwise method. **Results :** The results showed that out of 7 transcultural variables, There were 4 variables ; technological factor (P-value: 0.037), religious and philosophical factor (P-value: 0.007), kinship and social factor (P-value: 0.002), cultural values, beliefs and ways of living factor (P-value: 0,0001) and educational factor (P-value: 0,0001), Cultural values, beliefs and ways of living and educational factors are the most dominant predictors influencing health care seeking behavior in families of children under five with ARI. **Conclusions:** Cultural values, beliefs and ways of living and educational factors are the most dominant predictors of health care seeking behavior in families of children with ARI.

**Keywords:** Transcultural Factors, Health Seeking Behavior, Under-five Children, Acute Respiratory Infection.

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## INTRODUCTION

Acute Respiratory Infection (ARI) is classified as upper respiratory infection or lower respiratory tract infection. The upper respiratory tract consists of airways from the nostrils to the vocal cords in the larynx, including the paranasal sinuses and middle ear. The lower respiratory tract includes the continuation of the airways from the trachea and bronchi to the bronchi and alveoli. The Effect of ARI is not only limited to the respiratory tract but also has a systemic effect due to the possibility of expanding microbial infection or toxins, inflammation, and decreased lung function (Unicef, 2016). ARI continues to be a major cause of morbidity and mortality worldwide increasing a substantial burden on the health, economic and psychological care system at the household level (Mahmood, Khan & Saleem Abbasi, 2017).

Globally the United Nations Children's Fund (UNICEF) states that ARI is a cause of death due to

infectious diseases in infants and kills 2,500 children a day (Unicef, 2016). ARI contributes for 15% of all under-five deaths and killed 920,000 under-fives in 2015. In Indonesia in 2015 ARI has caused the death of 49,999 children under five. UNICEF also said that death due to ARI in infants is strongly associated with poverty factors such as malnutrition, clean water and sanitation, indoor air pollution and lack of access and behavior towards health services (Unicef, 2016).

ARI cases were high in Aceh in 2015. ARI cases in infants were reported at 3% with a total of 1,527 cases being found and treated. The total ARI cases in infants in Aceh are estimated at 56,557. In the city of Lhokseumawe reported that there were 7,466 under-five children suffer from of ARI in in 2015, and it was very high and ranked first in 10 infectious diseases. The perception of the community that consider ARI or usually known as cough and cold diseases as an usual and mild disease caused by the seasonal changes, makes an significant contribution to

the increasing prevalence of ARI. Whereas ARIdisease if not treated seriously can lead to fatal complications, especially in infants (Health Office, 2016).

The incidence of ARI in children under five is closely related to habits or culture of community related to health behavior. Families with children under five who suffer from ARI assume that cough and colds are common in children and tend to do the self-medication, such as buying cough and colds medicine at the drugstore or providing traditional treatment and remedies. Family behavior in seeking health services is strongly influenced by the culture of the community where the family lives (Ministry of Health, 2012). Astale and Chenault (2015) state that the factors that influence the behavior of seeking health care for children with ARI include environmental factors such as the availability of health care facilities, the availability of transportation, the access to health care facilities including the distance and the time needed to reach the health facility. Mahmood *et al.*, (2017) stated the main cause of the delay in the behavior of seeking health services for infants suffering from ARI is the lack of family knowledge about the severity of the disease. The results of research conducted in Nepal, Bangladesh and Pakistan on the practice of care seeking in rural communities for the care of babies with ARI, found that danger signs are not understood by the families. Therefore, most people seek treatment from local healers, such as homeopaths or practitioners who do not qualify in treated such conditions. Furthermore, traditional beliefs about the influence of evil spirits, lack of understanding and awareness about illness, distance from health care facilities, and high medical costs are barriers to seeking health care behavior.

Borah, Gogoi and Saikia (2017) in their research found that the behavior of mothers in seeking health services for children sufferfrom ARI was 41.8% of mother were consulting with government doctors, 9.6% with private doctors, 17.5% with health workers others, 16.8% with older family members and 32.5% did nothing. Health seeking behavior for children with ARI is found to be low among illiterate mothers. Borah *et al.*, (2017) concluded that there was a significant relationship between literacy status and health seeking behavior ( $p < 0.05$ ) among mothers with ARI child. Ignorance is cited as the most common reason for not seeking health services.

Sharma and Sahu (2014) in their research on health care seeking behavior in addressing ARI problems in children, found that 46% of caregivers took their children to the doctor, 32.4% brought to traditional healers, 10% bought drugs at drug stores, 5.7 % self-medication at home on the advice of family and friends and 4.7% with an alternative treatment system. This study concludes that the delay in providing effective treatment for children with ARI is because the child's caregivers prefer the intervention that are easy and

available at home by ignoring the fact that delay in providing the right care can cause serious consequences.

The economic status (wealth index) of households positively influences the behavior of seeking treatment in parents with ARI. Parents who belong to higher socioeconomic groups have higher health care control than parents who have lower socioeconomic groups. This is due to people who have a low wealth index facing financial constraints and low levels of education resulting in ignorance about the treatment of children suffer from ARI (Prakash, 2014).

In addition, Praptiningsih *et al.*, (2016) stated that factors related to health seeking behavior for infants with ARI in Indonesia include age and socioeconomic status, access to health care facilities and the severity of perceived illness. Understanding the behavior of seeking health services for respiratory diseases can help improve the process in estimating the burden of disease as well as public health interventions to control respiratory diseases in Indonesia.

The attitude of not treating children under-five with ARI in the community were caused that such conditions do not interfere their daily activities or works. The community assumes that without treatment for ARI symptoms in infants, like cough and colds will heal by itself. People even take self-medication for children with ARI. The reason for this action is because the community already believes in themselves and already feels that based on past experience, self-medication has brought healing. The form of community efforts to self-treat child suffers from ARI is to treat traditional remedy facilities and seek treatment by buying medicines at drug stalls, including herbalists (Hermawan, Anggraeni & Setianingsih, 2017).

Le, Ottosson, Nguyen, Kim and Allebeck (2011) in their study said that self-medication in the community is common in most countries. However, the use of drugs that should be prescribed without contact with professional service providers is a problem in most low and middle income countries. Several studies have shown the use of antibiotics that are inappropriate and without doctor's instructions for cases of common colds or upper respiratory infections practiced by the community and contribute to the occurrence of antibiotic resistance.

Furthermore Le *et al.*, (2011) said that the factors that influence the practice of self-medication are the perception of disease in children. Many mothers reported that they do self-medication for children as the first choice when their child was ill. Mothers often practice self-medication when they perceive that a child's illness is a mild disease or symptoms of a disease similar to the previous condition. Mother

perceives several symptoms, such as cough and runny nose are as mild illness symptoms.

The results of a preliminary study through interviews conducted by researchers on 10 mothers who have children with ARI or cough and colds in the District of Muara Dua District Lhokseumawe showed that most mothers who have children with symptoms cough and colds did the self-medication using drugs bought from a drug store. Mothers assume that ARI is a disease that is often experienced by children and indicates that their children want to grow up.

The results of this preliminary study reflect family behavior in seeking health services (health seeking behavior) which is strongly influenced by the cultural and structural dimensions of the family. One model that describes the cultural and structural dimensions of health, especially children with ARI, is the transcultural theory from Sunrise Model put forward by Madeleine Leininger (1981). The Sunrise Model identifies socio-cultural factors of individuals, families, groups and communities in the concept of healthy-sick (Allgood, 2017). This model is often used by nurses in evaluating public health culture with a systemic approach to identifying values, beliefs, behavior and habits (Albougami, Pounds & Alotaibi, 2016).

Furthermore, the results of Karo, Bakhtiar and Tahlil (2015) research show that transcultural factors; technology, culture and lifestyle, regulations and policies, economics and education, are predictors of perceptions for mothers of children under five who suffering from ARI, while other transcultural factors, such as religious and philosophical life, social and kinship are not predictors.

Sari and Prastianty's research (2017) that uses Transcultural Nursing theory with Sunrise Models concludes religious factors and philosophy of life, social factors and family attachment, cultural values and lifestyle factors, technological factors, applicable policy and regulatory factors, economic factors and educational factors, related to healthy and sick behavior as well as efforts to seek treatment in the Jambi Malays. Furthermore Kusumadewi, Yunitasari and Alit (2014) in their research also stated that there was a relationship between educational background, cultural values, economic, social, political and legal factors, religion and philosophy, and technology with knowledge, attitudes and actions of drinking herbal medicine on mothers puerperal.

Pratiwi, Zuhriyah and Supriati (2018) in their research on media exposure and mental illness with the Sunrise Model approach showed a significant relationship between mass media exposure (technological factors), spiritual well-being (religious and philosophical factors), interpersonal contact (social factors and kinship), attitudes and knowledge with

public stigma about mental illness. The results of multiple logistic regressions showed that the low mass media exposure had the highest OR value at 26.744.

Henry *et al.*, (2010) in his research aimed to analyze the main socio-cultural factors with the Sunrise Models approach that affects the practice of breastfeeding low-income mothers, reveals that family and economic factors have the most significant influence on the mother's decision to breastfeed.

The above description illustrates the link between health care seeking behavior of children with ARI families with the cultural and structural dimensions of the families. However, the authors did not find any related research linking the transcultural dimensions with the behavior in seeking for health services in families of under-five children with ARI. Therefore, reflecting on this problem and the paucity of research with regard to transcultural nursing in this country, this study sought to further identify the relationship between transcultural factors with the behavior of health care seeking in families of children with ARI in Lhokseumawe.

## METHODOLOGY

The quantitative research using a cross sectional study approach was conducted to examine the relationship within the variables. 321 mothers who have children (1-5 years) who suffer from ARI were participated. The Data were collected using instrument in the form of a Likert Scale consisting of 105 lists of statements to measure transcultural variables and 15 statements to measure health service seeking behavior. Data were analyzed by chi-square test and binary logistic regression with the stepwise method.

## RESULT

Table 1 shows that from 321 mothers of children under-five with ARI, 211 respondents (65.7%) were in early adulthood (20 - 35 years), 277 respondents (86.4%) graduated from high school (secondary education level). and 213 respondents (66.4%) were with a monthly family income at the middle level.

Table 2 shows that all transcultural variables are partially significantly related to health care seeking behavior of families of children with ARI ( $p = 0.0001$ ).

Based on the results of logistic regression analysis (Table 3) it is known that out of 7 transcultural variables, 4 variables; technological factor (P-value: 0.037), religious and philosophical factor (P-value: 0.007), kinship and social factor (P-value: 0.002), cultural values and lifeways factor (P-value: 0.0001) and educational factor (P-value: 0.0001), are significant predictors of health care seeking behavior in children with ARI families. Cultural values and lifeways and

educational factors are the most dominant predictors influencing the behavior of health service seeking of children with ARI families, with an odd ratio (OR) of 82.078 and 249.457, respectively. While the political

and legal variables and economic factors did not significantly influence the behavior of health care seeking of the families of children under-five with ARI.

**Table 1.** The Characteristic of Respondents

No	Characteristics	f	%
<b>Age</b>			
1	Early Adult	211	65,7
2	Middle Adult	76	23,6
3	Late Adults	34	10,7
<b>Education Level</b>			
1	Higher Education	32	10
2	Secondary Education	277	86,4
3	Basic Education	12	3,6
<b>Income per Month</b>			
1	Low	39	12,1
2	Intermediate	213	66,4
3	High	69	21,4

**Table 2.** Relationship between transcultural variables with health care seeking behavior of children with ARI families (n = 321).

Variabel	Health care seeking behaviour				Total		P Value
	good		poor		f	%	
	f	%	f	%			
<b>Technological</b>							
Good	143	94,1	9	5,9	152	100	0,0001
poor	10	5,9	159	94,1	169	100	
<b>Religious and Philosophical</b>							
good	119	78,3	33	21,7	152	100	0,0001
poor	30	17,8	139	82,2	169	100	
<b>Kinship and Social</b>							
good	135	88,8	17	11,2	152	100	0,0001
poor	13	7,7	156	92,3	169	100	
<b>Cultural Values and Lifeways</b>							
good	123	80,9	29	19,1	152	100	0,0001
poor	27	16,0	142	84,0	169	100	
<b>Political and Legal</b>							
good	113	74,3	39	25,7	152	100	0,0001
poor	47	27,8	122	72,2	169	100	
<b>Economic</b>							
good	89	58,6	63	41,4	152	100	0,0001
poor	61	36,1	108	63,9	169	100	
<b>Educational</b>							
good	149	98,0	3	2,0	152	100	0,0001
poor	7	4,1	162	95,9	169	100	

**Table 3.** The result summary of the binary logistic regression analysis using stepwise methods for transcultural variables as predictors of health care seeking behavior of children with ARI families.

Variabel	OR	P value	95% CI	
			Lower	Upper
Technological	30,301	0,037	1,229	746,819
Religious and Philosophical	0,007	0,007	0,000	0,250
Kinship and Social	14,714	0,002	2,630	82,328
Cultural Values and Lifeways	82,078	0,0001	8,667	777,303
Educational	249,457	0,0001	25,239	2465,560
Constant	0,007	0,0001		



## DISCUSSION

The results showed that transcultural factors influence health care seeking behavior in families of under-five children with ARI. Based on these results it is known that from 7 transcultural variables, 4 variables; technological factors, religious and philosophical factors, kinship and social factors, cultural values, beliefs and ways of living factors, and educational factors are significant predictors of the behavior of seeking health services in the family of children with ARI.

The results of the above research are in accordance with those studied by the Ministry of Health (2012), the benefits of technology in the health sector for the community are to obtain health information and health services. Nowadays, many people seek information about health through technological sources such as electronic media and the internet (Astale & Chenault, 2015). Therefore nurses need to facilitate patients in finding quality health information or appropriate sources using health information technology. The public can search for health information through electronic media and social media and communicate with others and even join in social networks about health. Information technology plays an important role in the health sector. Therefore it is very important for the community to increase their ability in mastering information technology (Giger, 2016).

De Melo's research (2013) shows that technological factors in transcultural nursing benefit the community to gain access to information technology, communication access, access to print and electronic media and access to health care technology.

Moreover, Potter, Perry, Stockert and Hall (2016) stated that practices related to health services have religious significance for a part of the community or family. Spirituality influences community or family behavior in the health field. Allgood (2017) further said that the socio-cultural aspects of health care, especially nursing, were to apply an anthropological approach that crossed cultural diversity both across cultures and cross-culture towards nursing care that did not distinguish between cultural differences and was carried out with the hearts and in accordance with standard of application regardless of ethnicity, race, culture, etc.

Shen (2015) said that the socio-cultural aspect of health care, especially nursing, is to apply an anthropological approach that is across cultural diversity, both intra-cultural and cross-cultural, to nursing care that does not distinguish between cultural differences and is carried out with heart and according to standards of application without distinguish the difference in ethnicity, race, culture, and others. Bell (2013) said that the family has an important role in maintaining the health of family members. Health care

activities, health beliefs, and health values are parts that are learned from the family. Health and sickness is a part of life and can be learned by individuals from families.

Edelman and Mandle (Viner *et al.*, , 2012) stated that one's belief in health is partly formed by intellectual variables, which consist of knowledge (or misinformation) about various bodily functions and diseases, educational background and past experiences. These variables affect one's mindset. Cognitive abilities will shape a person's way of thinking, including forming the ability to understand the factors associated with illness and use knowledge about their health and illness to maintain their own health. Cognitive abilities are also related to a person's developmental stage (Allgood, 2017).

Golden and Earp (2012), said that the higher the level of one's education, the higher the awareness of health, both for themselves and others and their families. Educational background affects a person in thinking and acting. The higher the education level, the higher the motivation to utilize health facilities. Because they already have broader knowledge and insight compared to people with low education (Mirowsky, 2017). One's education can increase intellectual maturity so that they can make better decisions in acting. The level of education is believed to influence the demand for health services. Higher education will enable a person to know or recognize the initial symptoms of an illness, so that he wants to get treatment immediately (Allgood, 2017).

## CONCLUSION

Based on this research, it is known that cultural values and lifeways, and educational factors are the most dominant predictors influencing health care seeking behavior of families of children with ARI.

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