

HEALTH MAINTENANCE BEHAVIOR AND THE INCIDENCE OF ILLNESSES IN FAMILIES LIVING IN RURAL AND URBAN AREAS OF PEKANBARU

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Abstract

Health maintenance behavior in the family will contribute to public health because the family is a part or subsystem of society. One factor that influences the health maintenance behavior is environmental factor whereas the characteristics of different residential areas will give an impact on the health behavior of the family. This study aims to identify the health maintenance behavior and incidence of illnesses in families living in urban and rural areas of Pekanbaru. This research uses descriptive design involving 600 families, 300 families residing in the urban area and 300 families residing in rural areas of Pekanbaru. Samples were taken using quota sampling technique. Researchers collected data by using questionnaires. The results shows the health maintenance behavior are mostly performed by the family residing in rural areas compared to urban Pekanbaru, except in the habit of doing physical activity with percentages of urban and rural are 58.7% and 28.4%. Comparison of the percentage of families who do not smoke at home in the rural and urban areas is 72.1% and 42.7%. Comparison of the percentage of families in rural and urban areas for children immunization, nutritious foods consumption and regular health examination are 64% and 59%; 92.8% and 65%; 85.8% and 78.3%. Health maintenance behavior in the family is linear with the incidence of illnesses in the family whereas the incidence of illnesses in urban households is higher than the percentage of rural households with 76.7% and 50.5%. Based on the results, it is recommended to community nurses to make efforts to promote family health maintenance behavior, especially on aspects that require improvement through health education activities in order to increase the motivation of the family in maintaining good health.

Keywords: family, health behavior, incidence of illness

BACKGROUND

The family has a role and a very important function in shaping a healthy community members because the family is a subsystem or part of the community. The health of family members is the determinant of public health. Therefore, in creating a healthy society, the family is obliged to help the family members to live a healthy life and care to family members who are sick (Friedman, 1998).

The behavior of the family in relation to illness and disease is a response to internal and external family in response to pain and disease, both in the form of a closed responses such as attitudes and knowledge, as well as in the form of an open response that manifests itself in the form of behavior. One of the aspects that are part of the family in the field

of health behavior is the behavior of health care. This behavior is based on the context of health care, nutrition, health promotion and disease prevention is done by family (Notoatmodjo, 2003).

Basic Health Research (Riset Kesehatan Dasar) in 2013 shows some data related to the behavior of people. Immunization coverage had risen from 41.6 percent (2007) to 59.2 percent (2013), however 32.1 percent of children were immunized but still incomplete, and 8.7 percent who were never immunized. Smoking behavior of the population 15 years of age is likely to increase from 34.2 percent in 2007 to 36.3 percent in 2013. The proportion of physical activity was classified as less active in general is 26.1 per cent. The proportion of the population of Indonesia with



sedentary behavior 6 hours per day is 24.1 percent. The proportion of the national average of fruit and vegetables consumption is 93.5 percent. The proportion of people consuming high-risk food such as risky seasonings is 77.3%. followed by food and sugary drinks (53.1%), and fatty foods (40.7%) [Ministry of Health of the Republic of Indonesia (Ministry of Health), 2013].

Furthermore, the data from Basic Health Research 2013 showed that from 22 provinces in Indonesia, Riau Province has the highest number of people with sedentary lifestyles (39.1 percent) (MoH RI, 2013). Furthermore, the data from Riau Province Health Profile in 2013 showed that some of the highly prevalence diseases are influenza, diarrhea and hypertension (Riau Province Health Department, 2014). These diseases are diseases that can be prevented by improving family health behaviors in society.

One of the factors that can influence the behavior of family is environmental factors that also relevant to the social, cultural, economic and political aspects. Maulana (2007) states that the environmental factor is a dominant factor on the behavior of a person. This suggests that environmental factors are also a dominant factor in influencing family health care behavior.

Environmental factors as determinants of family health behavior can be influenced by geography and socio-cultural region. Kishk (2002) states that the level of knowledge, attitudes, and behavior of urban areas better than rural areas. Suggestion (2003) also states that there are differences in the characteristics and behavior of urban and rural communities in environmental health behavior.

Based on preliminary studies in *Tuah Karya* that is located in a suburb of the city of Pekanbaru, it is known that families tend to have not been able to practice the behavior of health care in the form of promotional activities and preventive, coupled with some constraints in utilizing health services, so this affects the family health conditions. While most people in *Cintaraja* that located in the center of the city of Pekanbaru have already been practicing promotive and preventive health behaviors, although still found a few

families who have not been able to independently carry out the maintenance of health actively. Based on these descriptions, the researchers are interested in doing research with the title "Health maintenance behavior and incidence of illnesses in families living in urban and rural areas of Pekanbaru".

METHODS

This study is a descriptive study to identify the behavioral aspects of family health maintenance behavior and the incidence of illnesses in urban and rural regions. Research conducted at the *Tuah Karya* as rural area and *Cintaraja* as urban area. The study was conducted for 6 months, starting from March to September 2015. The study involved 300 families in rural areas and 300 families in urban areas. Samples taken by stratified random sampling.

Data collection tool was questionnaire. At the beginning of the sheet there are questions to collect data related characteristics of respondents, include: the age of the head of the family, gender, education, occupation, income, number of family members. Furthermore, a questionnaire containing five questions to identify family health maintenance behavior and one question to identify the incidence of the disease in the family. Analysis of the data used in this research is the analysis of univariate data presentation will be made in the form of frequency distribution (Burn & Grove, 2009).

RESULTS

Table 1: Frequency Distribution of Health Maintenance Behavior in families residing in urban and rural areas (n = 600)

No	Variables	Rural		Urban	
		n	%	n	%
1.	Physical Activity				
	a. Yes	85	28,4	176	58,7
	b.No	215	71,6	124	41,3
	Total	300	100	300	100
2.	Smoking at home				
	a. Yes	84	27,9	172	57,3
	b.No	216	72,1	128	42,7
	Total	300	100	300	100



3	Child Immunization				
	a. Yes	192	64	177	59
	b. No	108	36	123	41
	Total	300	100	300	100
4	Nutritious Foods Consumption				
	a. Yes	278	92,8	195	65
	b. No	22	7,2	105	35
	Total	300	100	300	100
5	Regular Check Up				
	a. Yes	257	85,8	235	78,3
	b. No	43	14,2	65	21,7
	Total	300	100	300	100

Table 1 shows that of the 600 respondents surveyed families, physical activity is mostly done in urban area (58.7%) than in rural areas is as much as 28.4%. The number of family smoking t home is higher in urban areas (57.3%) than in rural areas (27.9%). Child immunization is more regularly carried out by families in rural areas (64%) than in urban areas (59%). Behavioral health care includes family habits in consuming a nutritious diet consisting of vegetables and fruit regularly is mostly done by families in rural areas (92.8%) than families in urban areas (65%). Habits of families in a medical examination in health care facilities such as health centers, clinics, and hospital are mostly done by the family in both rural and urban regions. When analyzed further, families in rural areas do regular medical examination at a health facility (85.8%) than families in urban areas (78.3%).

Table 2. The Incidence of Illness in Families Residing in Urban and Rural Areas (n=600)

No	Variables	Rural		Urban	
		n	%	n	%
1.	Incidence of illness				
	a. Yes	152	50,5	230	76,7
	b. No	149	49,5	70	23,3
	Total	300	100	300	100

Table 2 shows that the number of incidence of the disease in the last 6 months suffered by families in urban areas is higher than the number of diseases in families in rural areas with percentage 76.7% compared to 50.5%. In rural areas, families who did not experience disease incidence in the last 6 months that most of as much as 49.5%, while the urban areas, families who did not

experience disease incidence in the last 6 months is as much as 23.3%.

DISCUSSION

Ministry of Health (2008) states that physical activity is to perform the movement of the limbs that causes energy expenditure which is essential for the maintenance of physical health, mental and maintaining quality of life in order to remain healthy and fit throughout the day. Physical activity should be as much as 2 x 30 minutes a day, at least 3 days a week. Physical activity and exercise is preceded with a light warm up before exercising and closed with cooling. Regular physical activity can nourish the heart, lungs, and other organs.

The results showed that physical activity is mostly done in the urban area (58.7%) than in rural areas 28.4%. In urban areas, many facilities are available for physical activity or sport that allows people to do sports (Lovastatin, 2006). In addition, in some institutions/ government institutions, facilitated physical activity or sport every week before they did the job. This supports the findings that the urban community in more physical activity than people in rural areas of Pekanbaru.

The results showed that smoking at home is mostly done in families in urban areas (57.3%) than in rural areas (27.9%). The habit of smoking in the home was dominated by the head of the household, the husband. His wife and other family members function as passive smokers.

According to Cabot (2005), 66% of Indonesian women are passive smokers. Those who inhale other people's smoke is more dangerous than smoking cigarettes themselves. Even the danger of passive smoking to be borne tripling of the dangers of active smoker, causing health problems for the family. This is also reinforced by research conducted Sugiharto (2007) that a woman who has a husband smoke 1-9 cigarettes a day (passive smokers) have 1.28 times the risk of having health problems of hypertension.

Health hazards that lurk families as passive smokers due to cigarette smoke contains carbon monoxide and nicotine as well



as various other toxic materials. Cigarette smoke increases the occurrence of atherosclerosis, especially in the carotid artery. There are allegations that carbon monoxide plays an important role in the occurrence of damage to the endothelial cells of arteries. Cigarette smoke also causes some changes in the blood, such as increased platelet adhesions, shortened life of platelets, accelerates blood clotting, and increases blood viscosity (Kurniati, 2010).

The results showed that immunization more regularly carried out by families in rural areas (64%) than in urban areas (59%). Muchtar (2010) stated that the completeness of basic immunization status of children is influenced by the level of knowledge. Good knowledge to make the family know the correct information about the benefits and objectives of immunization that will affect the completeness of basic immunization of children.

Immunization is one of the Government's program to reduce morbidity, mortality and disability due to Preventable Diseases With immunization (PD3I), is determined by the immunization coverage is high and evenly distributed in all villages / wards which can be judged from the achievements of the Universal Child Immunization (UCI) village. UCI is a condition where there is 80% of babies sector in the village had five complete basic immunization that include hepatitis B, BCG, DPT-HB, Polio, and Measles (Ministry of Health, 2012).

The results showed that the behavior of health care includes family habits in consuming a nutritious diet consisting of vegetables and fruit regularly is mostly done by families in rural areas (92.8%) than families in urban areas is as much as 65%. Results of this study are supported by Gina (2009) which states that the bustle and high activity in the community who work and live in urban lifestyle demands the very practical and instant, one source of food. Urban populations tend to consume fast food such as hamburgers, pizza, fries, etc. which has a high calorie content, but low in fiber and nutrient-poor.

According to Nugroho (2008), the terms menu nutritious food for the family, among

others: 1) contains nutrients diverse food ingredients consisting of energy substances, builder substances, and regulators; 2) the amount of calories is good for consumption is 50% of a carbohydrate which is a complex carbohydrate (vegetables, nuts, and seeds); 3) protein and fat 10-25 % of total calories; 4) recommended to contain high in fiber (cellulose) which is based on fruits, vegetables, and a variety of starch, which are consumed in large quantities in stages; and foods containing high iron (Fe), such as nuts, liver, meat, spinach or green vegetables; and avoid foods that contain high alcohol.

Results of research conducted in the respondents' families about the habits of the family in a medical examination in health care facilities such as health centers, clinics, Medical Clinic and Hospital, mostly done by the family in both rural and urban regions. The results are consistent with Hermawatty (2010) which states that as many as 14.4% of families have been able to utilize health care facility as a means in checking their health.

Health care facilities is a tool or a place that used to organize health services, both promotive, preventive, curative and rehabilitative conducted by the government, local government, and society. Utilization of health services is any organized effort alone or together in an organization to maintain and improve the health of individuals, families, groups, and communities. Health services are grouped into medical and non-medical. Good health care will be held, if the conformity with the needs of society, so that the development of health services in general is influenced by the size of the needs and demands of society which is actually a picture of the health problems facing the community. This relates to the health care task fifth family, the family is able to use the health facilities (Maulana, 2009).

When analyzed further, families in rural areas more a medical examination at a health facility (85.8%) than families in urban areas is as much as 78.3%. Rural areas Pekanbaru is village Tuah work and Sidomulyo West have health facilities such as health centers, clinics and clinics are affordable so many families who use the facility.



The results showed that the incidence of the diseases in the last 6 months are more suffered by families in urban areas (76.7%) compared to families in rural areas (50.5%). In rural areas, families who did not experience disease incidence in the last 6 months are as much as 49.5%, while the urban areas, families who did not experience disease incidence in the last 6 months are as much as 23.3%.

CONCLUSION

Behavioral health care consists of physical activity (exercise), smoking, child immunization, eating nutritious foods and health checks to health facilities. Physical activity in urban areas is mostly done by families (58.7%) than in rural areas (28.4%). Family smoking habit at home is mostly done in urban areas (57.3%) than in rural areas (27.9%). Immunization activities are complete and more regularly carried out by families in rural areas (64%) than in urban areas (59%).

Behavioral health care includes family habits in consuming a nutritious diet consisting of vegetables and fruit regularly is mostly done by families in rural areas (92.8%) than families in urban areas (65%). Habits of families in a medical examination in health care facilities such as health centers, clinics, Medical Clinic and Hospital are mostly done by the family in both rural and urban regions. When analyzed further, families in rural areas more a medical examination at a health facility (85.8%) than families in urban areas (78.3%).

SUGGESTION

Based on the results, it is recommended to community nurses to make efforts to promote family health maintenance behavior, especially on aspects that require improvement through health education activities in order to increase the motivation of the family in maintaining good health.

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