



International Journal of PharmTech Research CODEN (USA): IJPRIF Vol.6, No.2, pp 641-645, April-June 2014

Ethnographic Study of Children under Five Diarrhea in Ponjo Bugis Ethnic in Pinrang Regency South Sulawesi Province

Arman¹, Dewi Yuliana^{2*}, Suharni¹

¹ Public Health Faculty, Universitas Muslim Indonesia. ² Pharmacology Laboratory, Pharmacy Faculty, Universitas Muslim Indonesia.

*Corres.author: dewi.yuliana@umi.ac.id; armanidris@yahoo.co.id

Abstract: The objective of this research is to examine how people point of view about diarrhea in children under five years old related to the cause, sign and symptom, diagnosis, treatment, prognosis, and its prevention in BugisPonjo ethnic culture viewpoint, South Sulawesi Province. This research is using qualitative research with ethnography approach which tries to understand the cultural aspect through a series of observation and interpretation human behavior. In more specific, an ethnography research focuses on what a group of people (cultural behavior) was performed, what they know (cultural knowledge), and what things that they make and wear (cultural artifacts). It is found that the diarrhea cause understood by BugisPonjo ethnic community is a result of supernatural factor as well as by nature and body disharmonisation. Through the understanding, it is identified the types of diarrhea which well known by the public namely sai, wolang, lenynyeisimulajajinna, urekeng, jambanglempu, and dyspepsia. Diagnostic, treatment, prognostic, and diarrhea prevention in children under five are an empiric norm and have become a pattern in the BugisPonjo ethnic community. The sign and symptoms of diarrhea become a basis to determine diarrhea types. Treatment will be conducted using traditional medicine plants like guava leave (Psidiumguajava), turmeric concoction (Curcuma domestica), candlenut concoction (Aleuritismoluccana), pepper (Piper betle), pepper concoction (Piper betle), bangle concoction (Zingiberofficinalepurpureum).

Key words: diarrhea, children under five, etnomedisin, traditional medicine.

Introduction

According to World Health Organization data (WHO, 2005), diarrhea is the number one cause of mortality rate among children under five in all over the world. WHO estimated that 4 billion cases occurred in the world in 2000 and among 2.2 million patients died which most of them are under 5 years old children. Mortality rate due to diarrhea reaches 5 million children under five per year in the world. UNICEF estimates that in 5 seconds there is one child died because diarrheal disease

In the developed countries, even though there is social health and economic improvement but the incidence of diarrhea infections remains high. In England, 1 of 5 people is suffering from diarrhea infection each year and 1 of 6 patients that get treatment from a general practice clinic was suffering from diarrhea infections. In developing countries, diarrhea infections cause 3 million of population die every year. In Africa, under five years old children attacks by diarrhea infections 7 times in every year while in other developing countries, the attack occurs 3 times in every year.¹

In Indonesia, diarrhea is still one of the public health problems. This is caused by still high pain rate and evokes many deaths mainly in infants and children under five, which often causes an extraordinary incident. Republic Indonesia Ministry of Health data indicate that in every 1,000 babies born, there are 50 who die because diarrhea. It is the second killer disease in children under five after Acute Respiratory Infection.²

In South Sulawesi, the number of diarrhea case findings in 2007 was as many as 175,243 patients. In 2009, the number of patients increased to 226,951 patients and from 102,375 of those included children under five that were not counted with undetected patients by health officials, unreported incident, or patients who performed treatment in their houses.³

Based on the data, it is appeared that diarrhea frequency was still high especially in the children under five years old. Until now, it can not be explained yet the main factors which played the most role in the children diarrhea even though Bugis ethnic community in South Sulawesi has been familiar to the diarrhea disease as it has been persisted for a long time and become endemic. The main cause that can be presented is germs spread which evoke diarrhea (through food, water, and air), factors from a patient him/herself that increase the vulnerability to diarrhea, and environmental and behavioral factors.² However some of research results indicate that the number of diarrhea incidents remains high in the people with low-risk factors for the main cause. It is properly suspected that there are other factors that also have a role in the increasing frequency of diarrhea incidences beside this main cause. The possibility factor is the view point and interaction of understanding between diarrhea disease, environment, and society and its existence to the Bugis ethnic community based on the culture.

Research Method

Research Type

The research is using a qualitative type with ethnography approach. The Ethnography Method tries to understand culture or cultural aspects through a series of observation and human behavioral interpretation that interact with other people.

Research Location

The research was carried out in the BugisPonjo ethnic community in Kassa village, Pinrang Regency, South Sulawesi Province.

Source and Type of Data Research

Informers

A key informer is required as the source of main data information in this research. The most important thing is an informer must be an active heir of his/her culture (active bearer), has sufficient knowledge, able to explain the actual situation or able to show what he/she told about the examined research object.⁴

Researcher as an Instrument

A researcher position as one of the key instrument in the research process because he/she has a role as a planer, data collector, data analyzer, interpreter, involved in the observation participation, and at the end to arrange the research report. In order to carry out his/her role the researcher should be free values and able to catch the meaning of each piece of information and have to pay attention to context in which the conversation was taking place (setting).

Field Note

Field note is a backbone of ethnography action research as a necessary starch that has been shortened which contains the core, phrase, fundamental topic of conversation or observation, picture or sketch, diagram, and other records. This also contains about things that a researcher seen, heard, smelled, felt, experienced, touched, or thought⁵.

Processing, Analysis and Presentation of Data

Data processing

Several steps that have been performed in organizing and processing data in this research are checking, editing, labeling, and coding.

Analysis and Presentation of Data

The principle key of data analysis techniques used is processing and analyzing all the data that have been collected to a systematic, organized, structural, and meaningful data with organizing data procedure, making category, determining themes, making pattern, testing the availability to develop a hypothesis, and looking for alternative explanations⁶.

Research Results

Cause and Type of Diarrhea in Children under Five

According to Helman (1985: 74-82), the theory about a disease cause is a part of larger concept about all aspects of human life. The determination of disease cause in most culture is based on a faith that acquired through folktales that have been bequeathed from generations. This belief often influenced by a concept which borrowed from modern medical model. In general, a man health or sick condition is based on; (1) in each individual-self, (2) natural environment (biological and non-biological including whether), (3) social environment, and (4) supernatural world.

Various elements can be the caused of a diarrhea cause in children under five according to the point of view and the understanding of BugisPonjo ethnic community. They could be *to alusu* (supernatural creatures), natural, and body disharmonisation. A diarrhea which is caused by body disharmonisation can be *lenyeisimulajajinna*, *urekeng* (muscle strain), and childrenunder fiveyears old growth influence such as milk teeth growing process and standing learning or balancing body process. The cause related to natural balancing influence is known by the strong effect of hot weather (*wolangpella*) and cold weather (*wolangcekke*). Othercausesare related to food factors that are not or still not yet proper to be consumed by the children^(7,8).

Equality Analysis of Ethnography Findings with Modern Medical Science

Specifically, ethnography findings are based on the understanding of BugisPonjo ethnic community can be analyzed and synchronized according to the modern health science. The explanation about the characteristics of each kind of diarrhea as follows:

1. *Cika* Diarrhea Type

This research produces a basic thing of the equality analysis between the understanding of BugisPonjo ethnic community (ethnography) with modern medical science view point ofcause, sign and symptom, diagnosis, treatment, prognosis, and *cika* diarrhea type prevention in the children. The cause of *cika* diarrhea type according them is due to a supernatural creature.

According to its signs and symptoms such as diarrhea with peristalsis, vomitus, high fever (febris), sepsis, and *makamummu* facial skin (cyanosis), *Cika*diarrhea type is medically diagnosed as a diarrhea and vomiting type and a bacillary dysentery type that are caused by eltor, vibrio cholera, and/or amebiasis^(9,10).

Healing efforts to the diarrhea are conducted by giving turmeric concoction (*Curcuma domestica*), candlenut concoction (*Aleuritisholuccana*), lime and betel leaves concoction to a patient with this diarrhea type. It is scientifically found that only turmeric concoction (*Curcuma domestica*) has been identified to give therapy effect for diarrhea as a medicine material (*Curcuma domesticaextractumsiccum*)

2. Wolang Diarrhea Type

A *wolang* diarrhea type is believed to be a result of nature disharmonisation influence. Based on its accompanied signs and symptoms, namely diarrhea which accompanied by *peristalsis, nausea*, high fever (*febris*), *sepsis*, decreasing appetite (anorexia), and sharp smell of feces as rotten egg therefore according to modern medical science, this type of diarrhea is bacillary dysentery which is caused by *shigella* or *amebiasis*^(9,10)

Traditional medicine to treat *wolang* diarrhea type is using pepper concoction (*Piper betle*), bangle (*Zingiberofficinalepurpureum*), green mango (*Mangiferaindica*), rello leaf, and lanra leaf. Medical modern science has been providing that it is only concoction pepper pharmacology effect has been proven to be useas diarrhea therapy drug in *Piper betle folium extractumsiccum* form.

3. LenynyeiSimulajajinna Diarrhea Type

LenynyeiSimulajajinna diarrhea cause is believed as the consequences of body fluid disharmonisation. The identification signs and symptoms of this diarrhea are a diarrhea which is accompanied with disappearance of *Aorta abdominalis* stimuli, limp, and listless feeling. These symptoms are caused by cramps in the stomach while limp and listless feeling as a result of dehydration.

It is not yet been found a traditional medication to treat this type of diarrhea. Healing efforts is conducted by massaging a patient in order to restore the lost or shift organs (*simulajaji*). This diarrhea is not considered dangerous and will be healed by itself without giving certain treatment (fausta).^(9,10)

4. *Urekeng* diarrhea type

Urekeng diarrhea cause is considered to be a result of fluid imbalance in a patient's body (body disharmonisation). The signs and symptoms of this diarrhea which can be identified and become a basic maintenance diagnosis namely are patient's feces which mixed up with mucus and his/her leg muscles become harden. In medical modern science, the feces which are usually mixed up with mucus are found in patients with amoeba dysentery that is caused by *Entamoebahistolytica*.

A conducted therapy measure for this diarrhea is massaging patient's abdomen which is intended to normalize the *Aorta abdominal* function. A patient with this type diarrhea is not treated using traditional medication and he/she can be left because it is believed that the diarrhea will heal by itself and has no death impact for who sufferers it^(9,10).

Traditional medication to treat the diarrhea is by palm of hand root concoction (*Elephantopusscaber*), betel leaves concoction (*Piper betle*), and pinang fruit concoction (*Areca catechu*). The pharmacology effect of betel leaves and pinang fruit has medically been proven as a drug for diarrhea therapy⁽¹¹⁾.

5. *Jambanglempu* diarrhea type

Jambanglempu diarrhea cause is convinced as the influence of body fluid imbalance of a patient (body disharmonisation) because a child under fiveyears old is beginning to grow his/her milk teeth or studying to stand by his/herself. These identification diarrhea signs and symptoms at once as a basis maintenance diagnosis for the diarrhea cause are the child diarrhea patient feces which have no smell and/her appetite to breastfeeding is still high. Medically, it is likely that the *Jambanglempu* diarrhea type is a diarrhea which is caused by Entamoeba coli bacteria^(12,13)

A traditional medicine to treat this diarrhea is using guava leaves (*Psidiumguajava*), cooked palm oil (*Oleumcocosnuciferae*), and pulai concoction (*Alstoniaspectabilis*). The pharmacology effect of guava leaf concoction has medically been proven as a drug for diarrhea therapy in *Psidii folium extractumsiccum* form.

6. Diarrhea which is cause by dyspepsia or food factor

This diarrhea cause is considered as an consequences of body fluid imbalance in patients body (body disharmonisation) which is evoked by fat malabsorption, carbohydrate, protein or lactose intolerance.

Guava leaves concoction (*Psidiumguajava*) and pulai concoction (*Alstoniaspectabilis*) is used as traditional medicine to treat this diarrhea type. The pharmacology effect of guava leaf concoction has medically been proven as drug therapy for the diarrhea in *Psidii folium extractumsiccum* form.

Conclusion

Every kind of diarrhea suffered by children under five years old has its special sign and symptoms and has become its basic maintenance diagnosis. The treatment is performed using traditional medicinefrom plants which grown around their environment. Several kinds of traditional medicine plants that have been used are guava leaves (*Psidiumguajava*), pulai (*Alstoniascholaris*), candlenut (*Aleuritismoluccana*), turmeric (*Curcuma domestica*), sirih (*Piper betle*), and pepper (*Piperisnigri*).

Acknowledgment

The authors were grateful to DirektoratJenderalPendidikanTinggi (DIKTI) and Moslem University of Indonesian for financing this research through Dikti fundamental grant.

References

- 1. Jones ACC dan Farthing MJG, 2004. *Management of infectious diarrhea*. Gut, An International Journal of Gastroenterology and Hepatology; 53:296
- 2. Depkes , 2007. ProfilKesehatanNasionalTahun 2011. Jakarta.
- 3. DinkesSulsel, 2011. ProfilKesehatanProvinsi Sulawesi Selatan Tahun 2009. Makassar.
- 4. Dyson L, 2003. *MetodaEtnografi*. JurnalMasyarakat, KebudayaandanPolitik, Th XVI, No. 1, Januari 2003, 29 38.
- 5. Spradley JP, 1980. Participant Observation. Holt, Rinehart and Winston, Inc., Orlando, Florida.
- 6. Lofland and Lofland, 1984. *Analyzing Social Settings: A Guide to Qualitative Observation Analysis*. Wadsworth Publishing Company. Belmont, California.
- 7. Brewer JD, 2005. *Ethnography*. Open University Press. Celtic Court 22. Ballmoor Buckingham.
- 8. Pelras C, 1996. *The Bugis*. First Edition .Blackwell Publishers Ltd. Cambridge, Massachusetts, USA.
- 9. Ciesla WP, Guerrant RL, 2003. *Infectious Diarrhea*. In: Wilson WR, Drew WL, Henry NK, et al., ed. *Current Diagnosis and Treatment in Infectious Disease*. Lange Medical Books,225 68. New York.
- 10. Guerrant RL, Gilder TV, dan Steiner TS, 2001. Practice Guidelines for the Management of Infectious Diarrhea. Clinical Infectious Diseases
- 11. Ahmed IS, 1994. Knowledge, Attitudes And Practices Of Mothers Regarding Diarrhea Among Children In A Sudanese Rural Community. East African Medical Journal.
- 12. Bukenya GB, 1990. The Relationship of Mothers' Perception of Babies' Faeces and Other Factors to Childhood Diarrhoea in An Urban Settlement of Papua New Guinea. Annals of Tropical Paediatrics
- 13. Lee KK and Choi JD, 1999. *The Effects of Areca Catechu L Extract on Anti Inflammation and Anti Melanogenesis*. International Journal of Cosmetic Science 21(4):275-284.
- 14. Lung E, 2003. Acute Diarrheal Disease. In, Friedman SL, McQuaid KR, Grendell JH, ed. Current Diagnosis and Treatment in Gastroenterology. Lange Medical Books. 131. second edition. New York.