PERBEDAAN PARADIGMA SEJARAH DAN SAAT KESEHATAN MASYARAKAT DALAM RANGKA TACKLE KESENJANGAN DARI KEMATIAN BAYI ANTARA YOGYAKARTA DAN PROVINSI NUSA TENGGARA BARAT: SEBUAH REVIEW NARASI

The Difference Paradigm of History and Current Public Health in Order to Tackle Inequity of Infant Mortality Between Yogyakarta and West Nusa Tenggara Province: A Narrative Review

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ABSTRAK

Menurut ketimpangan kematian bayi antara Yogyakarta dan Provinsi Nusa Tenggara Barat disebabkan oleh kesenjangan yang ekstrim pendidikan ibu antara provinsi yang telah terjadi selama sepuluh tahun terakhir, kesehatan masyarakat perlu dilaksanakan untuk mengatasi masalah tersebut. Namun, ada dua paradigma kesehatan masyarakat, yaitu sejarah dan kesehatan masyarakat saat ini. Sejarah kesehatan masyarakat yang berfokus terutama pada menyalahkan perilaku ibu, yang makan makanan sehat untuk bayi mereka, sebagai penyebab utama kematian bayi yang tinggi di provinsi Nusa Tenggara Barat. Sementara, kesehatan masyarakat saat ini menggambarkan masalah yang harus dianalisis dengan pandangan yang lebih luas dan multi-dimensi, karena hal itu berkaitan dengan determinan sosial kesehatan seperti ketimpangan dalam kebijakan sosial ekonomi, pendapatan rendah, pelayanan kesehatan yang tidak memadai dan fasilitas pendidikan dan terjangkau sehat makanan. Oleh karena itu, menurut perbedaan ini Pemerintah perlu untuk mengatasi masalah kesehatan ini dari saat pandangan kesehatan masyarakat.

]Kata Kunci : Sejarah kesehatan masyarakat, kesehatan masyarakat saat ini, kematian bayi

ABSTRACT

According to the inequity of infant mortality between Yogyakarta and West Nusa Tenggara province caused by an extreme gap of maternal education between those provinces that has happened for the last ten years, public health need to be implemented in order to tackle those problem. However, there are two paradigms of public health, namely history and current public health. History of public health focusing mainly on blaming mother's behavior, who feed unhealthy food for their babies, as the main cause of high infant mortality in West Nusa Tenggara province. While, current public health describes that problem should be analyzed with the broader and multi-dimensional view, since it is related to the social determinant of health such as inequality in socioeconomic policy, low income, inadequate health care service and education facilities and unaffordable healthy foods. Therefore, according to this difference the Government needs to tackle this health problem from the current public health view.

***Keywords**: history public health, current public health, infant mortality*

BACKGROUND

Health inequity defines as inequalities in health that consider to be unfair, and it derives from social injustice (including political, economic and social factors) (Ward 2008, pp.270-274; Kawachi et.al 2002, pp.1-2). Indonesian Bureau of Statistics (2007) informs that there are many health inequities that Indonesia has, but the extreme inequity is disparities of infant mortality between its provinces. While, public health explained from Ottawa Charter (cited in Baum 2008, pp.586-587) as activity, mainly to protect people from diseases; prolonging life and promote health

organized by societies collectively. There are two models of public health approaches. Those are history of public health and current public health. This essay will describe about Infant Mortality Rate (IMR) and its inequity between two provinces in Indonesia, it will then compare between histories of public health to current public health model in understanding how this health inequity is produced.

METHODE

The method used is a literature study approach, the approach taken by the study of literature by examining the appropriate information, by collecting the required data through reference books, articles and journals that fit the theme is taken, where the results will be analyzed descriptively.

RESULTS AND DISCUSSION

What is infant mortality rate (IMR)?

To begin with, Infant Mortality Rate (IMR) is defined as the number of baby's death under one year of age per thousand live births, included total death rate and death by sex, male or female. It is commonly used as an indicator of level of health in a country and as a part of standard living evaluation in economic status (Sullivan & Sheffrin 2003, pp. 510-512). In addition, King and Zeng (2001) state that IMR has a strong correlation with and is the best predictor for the state's failure, that is why it is useful as an indicator of country level of health and is a component of physical quality of life index. Performance Indicator Reporting Committee (2002) has said that it reflects the health status and health care of the population, the effectiveness of preventative care and the attention paid to child and maternal health, as well as broader social factors such as maternal education, smoking and other risk factors and socioeconomic deprivation. Moreover, Healy (2006) argues that the higher level of IMR reflects the lower level of health quality in a country.

Health Inequity of Infant Mortality Rate (IMR) Between Yogyakarta and West Nusa Tenggara Province

Indonesia is a country in Southeast Asia, and it is an archipelago comprising approximately 17,508 islands. It has 33 provinces with over 238 million people, and is the world's fourth most populous country (ASEM Development Conference 2010). Based on the report of Central Intelligence Agency (CIA) World Fact book (2008) about field listing of infant mortality from 222 countries all over the world, Indonesia was ranked 151st with 26, 69 deaths a year per 1000 live births, which made of male babies for 31, 54 deaths per 1000 live births and female babies for 22, 21 deaths per 1000 live births.

Unfortunately, there is a wide gap between its provinces. According to Indonesian Bureau of Statistics (2007), West Nusa Tenggara became the province with the highest infant mortality rate with 103 deaths a year per 1,000 live births, comparing to Yogyakarta province, as the lowest infant mortality, provides 26 deaths a year per 1,000 live births. It seems an extreme gap since the infant mortality in West Nusa Tenggara is almost five times higher than Yogyakarta.

The National Development Planning Agency (2007) also informs that there were several main causes of infant mortality, especially in West Nusa Tenggara Province: 29,95 percent with vomiting and abdominal distend on known as the symptoms of intestinal obstruction (SIO); 24,39 percent caused by diarrhea; 8,45 percent caused by neonatal tetanus and 10,14 percent suffered from acute respiratory tract infection. The proportion of its deaths due to the SIO was higher than that of neonatal tetanus. Together those accounted for 75 percent of infant deaths in it.

Moreover, Ministry of Health in Indonesia (2001) also report that one-third of infant deaths happens within the first month after birth and approximately 80 per cent of these during the first week of life. According to the research by Wiryo (2007), the highest rate of infant mortality in West Nusa Tenggara especially happened in rural areas with low-income and illiterate mother. It reports that infant mortality mainly caused by improper consumption given to the baby by their mother since it reports that most of the infant in West Nusa Tenggara (85 percent) was died, less than 28 days, because they had been fed with early solid food such as bananas at the age of seven days and were not fed with colostrums. It is suspected to be the one that causes intestinal disorder. This is due to several reasons.

First of all, bananas are given continuously throughout neonatal and infant's period. Second, bananas contain starch polysaccharide (SP) with certain crystalline patterns (A type crystalline pattern) and non-starch polysaccharide (NSP) that is hard to be digested by Alfa amylase. The indigestible materials are fermented by microbes in the intestinal tract and produce H2-and CH4- (Caspary 1992). These gas cause abdominal distension symptoms. Third, bananas also contain serotonin, dopamine, and noradrenalin, which influence the peristalsis of the intestinal tract (Gass et al. 2007). Fourth, bananas are solid mass (fiber) that quite probably can obstruct the intestinal tract of neonates because the peristalsis of its tract in early neonates is not yet matured. At last, the absence of colostrums can foster infection in gastro enteric tract, because it is important in carbohydrate digestion, especially for infants given early feeding containing a lot of carbohydrate like a banana, (Caspary, 1992).

Moreover, when there is a health problem with their babies, they could not easily to get to the health care service since they live in the remote area, and it takes at about 15 kilometers to get to the nearest hospital in the city. Besides that, the price of the health care service is not affordable for them, and they did not cover with community health insurance. So, they prefer to give the herbal medicine for their babies, although sometimes it is inadequate for them. As a result, it keeps increasing the infant mortality in West Nusa Tenggara province (Wiryo 2007).

Conversely, in Yogyakarta province, which is located in the Central District of Java and most of the citizens are educated person, usually they will feed their babies with additional foods after they are three months old because they have understood that breast milk is the only food that can be digested for newly born baby. Additionally, based on the data from Indonesia Ministry of Health (2002), most of the mother (65%) still gives their babies with breast milk continuously, until they are six months old. That is why; the incidence rate of SIO is quite low in that area. Furthermore, if they need health care service, they could easily access on it since there were many hospitals and clinics in that area.

Besides that, The State Government designed some program for the poor people to increase their access to the health services by giving subsidiaries 50 percent in Community Health Insurance Program (CHIP). In fact, they can easily access on it. As a result, United Nations Administrative Committee on Coordination - Subcommittee on Nutrition (1992) report that Yogyakarta is one of the best province with improvement in nutritional and health status.

According to the examples, it shows health inequity between two provinces. It will discuss further, how history of public health and current public health model in understanding how is it produced.

History of Public Health Model

History of public health or can be called old public health model can be defined as directed largely toward communicable

diseases and other externalities, such as pollution, with negative health impacts (Epstein 2002). Pulvirenti (2012) and Baum (2008) said that it was focusing on the individual personal hygiene, prevention of infectious and contagious diseases. Leeder (2005) report that old public health model discussing mainly about prevention disease from individual behavior.

Then, based on the explanation above, the history of public health can be expressed from the Annual Report of Ministry of Health (2007) that they blame on mother's behavior in West Nusa Tenggara Province, which they feed their babies with insufficient food, as the main cause of a high number of infant mortality and low nutritional status in that province. Therefore, the Government arranged some prevention and promotion health programs in order to increase knowledge and change mother's behavior by making flyer and pamphlet about nutritious food for baby; giving nutrition counseling and providing medication, especially in rural areas. These programs last for one year. Finally, they hope that through these programs not only it will reduce infant mortality in their province, but also it will increase the nutritional status of the babies.

Unfortunately, this program is no longer succeeded because two years after that program has finished, the number of infant mortality in that province remains high, since there is no follow-up program from their government (Developed Nation 2011). As author have shown above, history of public health that had been held by the Government, have narrow perspectives on criticize some health problem, since it only focused on changing mother's behavior related to the feeding pattern without looking for the main reason why it is can be happened.

Current Public Health

On the other hand, current public health can be defined as concerned with the interplay between affluence, social well being, education and health, social capital and health (Leeder 2005). Then UNESCO (2002) describes it as socio-ecological health, and it is not only a positive view of health but also a broader, multi-dimensional view. Then, it pays attention to the economic inequalities, social problems and environmental issues that cause many diseases and so address the root causes of disease. It does this by establishing policies, services and education programs that can prevent many diseases from occurring in the first place (UNESCO 2002; Baum 2008). Basically, based on Pulvirenti (2012), it is stressed mainly with social determinants of health concepts.

Social determinants of health are the conditions in which people are born, grow, live, work and age, including the health system and are shaped by the distribution of socioeconomic factors, which are themselves influenced by policy choices (WHO 2011). Based on the explanation above, the author tried to figure out the health inequity between two provinces using plausible causal pathways to health inequities from AP-Health GAEN Report Executive Summary (2011) with social determinants of health approaches as shown in the figure below.

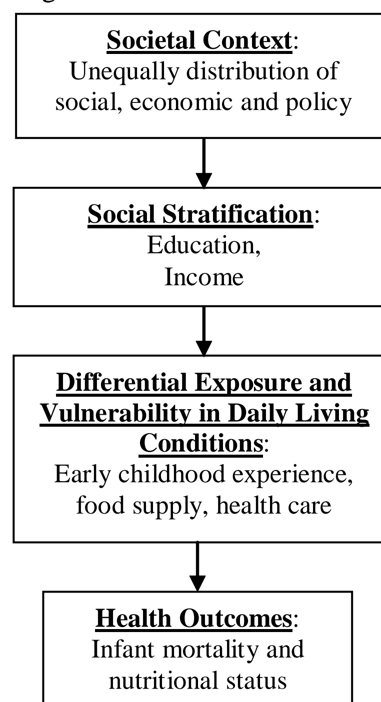

Figure 1. Causal pathways to health inequities

To begin with, based on the figure shown above, it describes that "the cause of the causes" on health inequity between two provinces are inequalities in social, economy and policy that had been applied in the two provinces. Together they affect on unequally distribution on education and income across the two provinces. Then, those affect them in experiencing of difference exposure and vulnerability in daily living conditions such as access on food supply and health care services. At last, together all of these factors and daily living conditions constitute the determinants of health and health inequities, including infant mortality and nutritional status (AP HealthGEN 2011).

In this situation, because of unequally distributions on socioeconomic policy, it impacted on less income and low education level for people in West Nusa Tenggara. Consequently, it limited their access to healthy food and health care services since they are inaccessible and unaffordable for them and their babies. Moreover, there is unfairness about community health insurance programs between two provinces. Therefore, it will affect on reducing their nutritional status and increasing infant mortality in that areas.

Moreover, socioeconomic factor can be explained as factors that influenced on a person ability to act as free agent and to engage with and influence the society around them. It includes income, wealth, level of education and social influence (Kelleher & Murphy 2004, pp. 12-13). Income, wealth, poverty are strongly related to health, since poor people tend to have worse health outcomes than people who are rich (Kelleher & Murphy 2004, p.12; Brown & Pollit 1996). Based on the research by Australian Institute of Health and Welfare (AIHW) (2004) report that areas with more socio economically disadvantage tend to have poorer health than areas that are less socio economically disadvantage. Moreover, with low income will limit the educational opportunities of the parents, affecting their knowledge of how to feed appropriately to their babies; limit the parents to provide a safe living environment for their children and also limited their ability to afford appropriate health care, including preventive and curative care for their babies. As a result, poverty is a part of socioeconomic factors that can be classified as social determinants of health, too.

Definitely, if the Government wants to solve the problem regarding to this health inequity permanently, they should not analyze them from the narrow view such as blaming their citizen behavior, but it is suggested to criticize them from the broader view with the multi-dimensional paradigm. It means that they should pay more attention to produce equal and equitable socioeconomic policy across provinces and islands in Indonesia in order to increase their wealthy and tackle poverty among them by providing enough jobs opportunity; equip them with appropriate education facilities; provide them with community health insurance, especially for the poor people; serve them with available, accessible and affordable health care facilities and nutritional food. As a result, it will help them not only reducing their infant mortality rate but also increasing their health status nationally.

CONCLUSION

All in all, based on the explanations above, it has explained that there is health inequity concerning infant mortality between two provinces in Indonesia. Then, there are two paradigms of public health try to explain with this situation. Those are history of public health and current public health. History of public health explains the health phenomenon from narrow perspectives, because it only blames on mother's behavior, who feed unhealthy food for their babies, as the main cause of high infant mortality in West Nusa Tenggara province. While, current public health describes that problem should be analyzed with the broader and multi-

dimensional view, since it is related to the social determinant of health such as inequality in socioeconomic policy, low income, inadequate health care service and education facilities and unaffordable healthy foods.

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