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Selection of Antenatal and Childbirth Care in Rejang Ethnic Group Based on Rational Choice Perspective

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Abstract
The focus of this research is the rationality of Rejang Ethnic community in the Pagar Jati subdistrict in Bengkulu Tengah Distric, Bengkulu Province in choosing antenatal care and birth attendants services according to the perspective of Coleman's rational choice theory. The study used qualitative methods with ethnographic approach. The data was collected by participant-observation technique through direct observation and in-depth interview to obtain data that cannot be observed with participant-observation. In addition, to complete the data, documentation was done by using the camera. The data was analyzed inductively with an interactive model based on qualitative interpretation with emic approach. The study found that people still put TBAs (Traditional Birth Attendants) services for antenatal care and delivery assistance. The role of TBAs cannot be replaced completely by medical midwife personnel. Coleman's rational choice theory says that the actor seeks to reduce costs and maximize the purpose. The endeavor is also determined by the resources and social institution, preferences and external conditions. The effort to take into account the costs in decision making raised by Coleman has been proven by the fact that more actors choose TBAs for antenatal care and childbirth assistance. However, the cost is not the major consideration, as people all have health insurance cards for the poor that can be used to obtain medical services. The rationality of the society considers TBAs to be the first choice because; trust in the TBAs are still very high, the type of service received more and more satisfying, lower costs, payment terms are not specified, the service time is not limited and can be adjusted in accordance with the wishes of pregnant women, examination and help always start with a prayer or mantra, comfort in speech in the local language, and the strong relational and kinship between TBAs and the community. While most of these considerations are not owned by the medical officers (midwives and village midwives). Resources, social institution, preferences and external conditions are necessary for the actors and taken into consideration in determining the service selection. While, the rational action of the community belongs to value oriented- rational action.
Keywords: Traditional Birth Attendant, Medical Officer, Resource, Social Institutions, Preferences, external conditions, Rational Choice.

1. Introduction

1.1. Background of the Study

One of the health issues is the bad indications of Maternal and Child Health (MCH) nationally. This issue is still a health issue that is being discussed and pursued in various parts of the world, especially in developing countries, including Indonesia. High maternal mortality, infant mortality and child mortality are the indicators. MCH issue requires an integrated treatment from related sectors because the real issue is not only about health care but also related to economic issues, social culture, and the ability of policy makers who really aim to the improvement of public health conditions.

Rejang ethnic group is spread in various areas in the Province of Bengkulu. Bengkulu Tengah is one of the districts in which most of the indigenous population of Rejang ethnic group lives. Pagar Jati is the largest subdistrict in Bengkulu Tengah in which all the villagers come from Rejang ethnic group. Rejang has its own traits or characteristics that are different from other ethnic groups in terms of language, customs and social systems.

In Bengkulu Tengah district, health care facilities in 2011: a type C hospital which is still in the development stage, twenty health centers consisting of two health centers for treatment and eighteen non-treatment health centers, 141 midwives stationed in the villages, while there is at least one TBA in each village has at least one person . It means that the ratio of health center services is approximately 0.53 per 10,000 population., while the ratio of midwife or nurse is 199 per 100,000 population.

Health Profile Data of Bengkulu Tengah District in 2011 shows that there were 2,008 deliveries in Bengkulu Tengah district as much as births. 1,772 (88.2%) deliveries were attended by health personnel (midwives, nurses and doctors), while 11.8% more birth deliveries were assisted by shamans and family members. While the data antenatal care performed by pregnant women to health workers reached 88.9%, while

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11.1% was unclassified. In connection with these data, Chief of Medical Officer Bengkulu Tengah argued that the data was not valid and the actual utilization of TBAs for antenatal care and childbirth assistance was relatively still larger than the existing data on the health profile (May 1, 2012).

Pagar Jati is the only sub-districts in the district of Bengkulu Tengah in which all the villagers come from Rejang ethnic group. Pagar Jati sub-district consists of 14 villages which are all definitive. This sub-district has two health centers; one of which is the hospital PHC. Health resources already reach all villages in the district area, consisting of four general practitioners and fourteen Village Midwives. Each village has at least one TBA who was still active and even some villages have three TBAs. In 2011, there were 144 deliveries. This was the second highest birth rate in Bengkulu Tengah. Most of the 144 deliveries were assisted by TBAs. In the same, there was one case of baby mortality. This case was a case of handover from the district's health center to the General Hospital of Bengkulu Province.

The fact that there was still high preference to TBAs for antenatal care and birth attendants raised the question of why the Rejang Ethnic communities in Pagar Jati prefers to choose TBAs for antenatal care or as birth attendants although health care facilities and health resources closer to community. The village midwife had been placed in all villages in Pagar Jati. There are two main health centers, while an integrated health activity in each village regularly was held once a month.

This condition implies that there were some reasons that had not been excavated from the public so that the most of the people still choose TBAs as the main alternative service of antenatal care (ANC) and birth attendants. It also showed that the increasing of health care programs, especially in mother and child health (MCH) through the placement of human resources (village midwife) to the villages, coaching integrated health care (Posyandu) performing in all rural health centers in Puskesmas have not shown significant results regarding the purpose of the program implemented by the government. In other words, there was a rational reason you need to know from the community regarding their decision to choose a antenatal care service and childbirth assistance rather than health professionals.

The selection process of pregnancy and delivery services in the community is necessary in order to improve public health services, especially for pregnant women and childbirth. Thus, the current study is expected to provide feedback or improvement for the programs implemented by the government which in turn will improve the health of society as a whole and particularly maternal and child health (MCH). To assess the public choice, rational choice theory of Coleman (1989) was used.

1.2. Research Questions

Based on the preliminary overview, the main question are formulated as follows: (1) How is the rationality of pregnant women and delivering mothers in the determination of antenatal care and birth attendants in Pagar Jati sub-districts in Bengkulu Tengah District ? (2) How do pregnant women and delivering mothers consider resources and social institutions in the decision making antenatal care and birth attendants' selections in Rejang ethnic group in Pagar Jati sub-districts in Bengkulu Tengah District ? (3) How do pregnant women and delivering mothers face external conditions and preferences in determining the choice of antenatal care and delivery attendants in Rejang ethnic group in Pagar Jati sub-districts in Bengkulu Tengah District ?

1.3. Research Purposes

This research was conducted to: (1) investigate the rational consideration of pregnant women and delivering mothers in determining the choice of antenatal care personnel and birth attendants in Rejang ethnic group in Pagar Jati sub-districts in Bengkulu Tengah District? (2) find out the considerations for resource and social institutions of pregnant women and birth mothers in the decision making antenatal care and birth attendants' selections in Rejang ethnic group in Pagar Jati sub-district in Bengkulu Tengah District. (3) investigate how pregnant women and delivering mothers face the external conditions and the use of preferences in choosing a antenatal care and birth attendants in Rejang ethnic group in Pagar Jati sub-districts in Bengkulu Tengah District.

2. Literature Review

2.1. Pregnancy and Childbirth

Pregnant or pregnancy is a period in which a woman carries an embryo or fetus in the body. Human pregnancies occur for 40 weeks in between the last menstrual period and birth (38 weeks from fertilization). The medical term for a pregnant woman is *gravida*, while the man in it is called embryo (early weeks) and then fetus (until birth). A woman who is pregnant for the first time called primigravida or gravida 1. A pregnant woman who has never been pregnant is known as gravida 0.

In many societies, medical and legal definitions of human pregnancy are divided into three trimester periods, as a way to facilitate the different stages of fetal development. First trimester carries the highest risk of miscarriage (natural death of embryo or fetus), whereas during the 2nd trimester of fetal development can be monitored and diagnosed. 3rd quarter stage marks the beginning of 'viability', which means that the fetus can

survive in the event of a natural birth or a forced early birth.

Delivery or parturition is a delivery process of the product of conception that can live from the uterus through the vagina to the outside world. Partus prematurus is a delivery process of the product of conception that can live but not yet the due time (not enough time of pregnancy) and the fetus weighs from 1000 to 2500 g or gestational age of 28 - 36 weeks. Partus postmaturus/serotinus is a parturition occurring two weeks or more than the estimated time of parturition. Abortion is the termination of pregnancy before the fetus is viable, the fetus weight less than 1000 g and the gestational age is less than 28 weeks (Prawirohardjo, 1991: 180-181).

Inpartu is a woman who is in a state of delivery. Normal parturition or spontaneous parturition is when a baby is born with a presentation back of the head without using tools or special help and it does not hurt the mother and baby, and generally takes place in less than 24 hours. Extraordinary parturition or abnormal parturition is when the baby is born vaginally with pliers, or a extractor vacuum, version and extraction, decapitation, embriotomi and so on.

Parturition or childbirth is divided into 4 stages. In the first stage is the opening up when the opening up of services until10 cm. It is also called the opening. The second stage is also called the expenditure in which the fetus pushed out until birth due to the contraction and power of pushing. The third stage is when the placenta separated from the uterine wall and born. Stage IV ranges from the delivery of the placenta until the duration of one hour. It is the observation time whether there is postpartum bleeding or not.

The comparison of various parts of the newborn's body is very different from the proportion in fetuses, infants, big kids or adults. The newborn baby has relatively larger head size, round face, small mandible and the chest is more rounded and less forthcoming posterior anterior margin, relative subscription bulge, relatively shorter limb (Markum, 1991: 18-19). Newborn baby's weight is approximately 3000 grams; usually boys are heavier than girls. Approximately 95% of term infants have a weight between 2500-4500 grams. The average body length at birth is 50 cm, approximately 95% of them show a body length of about 45-55 cm and the head circumference ranges between 34-35 cm.

2.2. Antenatal Care Giver and Childbirth Attendant

Alternative choices become very important in this study because the alternative options for antenatal care and birth attendants by pregnant women and birth mothers become the objects of the research. Rationality in choosing will not appear if there are no alternatives. Conceptually, based on the alternatives of choices of “actors” of that do antenatal care and birth attendants including in the area of research are: Docter, midwife, nurse and TBAs. However, from the results of the study, it was found that people of Rejang ethnic group only know Midwives (midwives in Puskesmas and village midwives) and TBAs as “actors” of antenatal care and birth attendants.

2.2.1. Traditional Birth Attendant (TBA)

Many limitations and opinions expressed on various literatures on limitations or definitions of TBA. According to Kusnada Adimihardja (2005), TBA is a woman or a man who helps in delivering process. This ability is hereditary obtained from mother to child or other close family. These skills are gained through an internship of their own experience or at the time he/she helps someone giving birth. Meanwhile, the Ministry of Health provides limitation that TBAs are those who give aid at the time of birth or in matters related to childbirth assistance. TBAs are considered skilled and trusted by the public for attending births and maternal and child care according to the needs of society (Dep Kes RI. 1994: 2). TBA is a member of the public, in general, a woman who gains the confidence and skills to help traditional birth and acquires the skills hereditary by learning practically or any other way such as learns from health worker that leads towards the progressive improvement in the skills.

TBA is a profession in which the activities include helping one's labor, caring for babies ranging from bathing, holding, learning to communicate and so forth. Besides being equipped with vocational skills, TBAs are also helped by various special spells learned from their predecessors. The mentoring process runs up to 2 year old baby. However, a routine mentoring is held around 7-10 days postpartum.

Another opinion expressed that TBAs are considered skilled and trusted by the public for attending births and maternal and child care according to the needs of society. There are various criteria of midwife in the community. Suparlan (1999) in Rina Anggorodi (2009: 12) said that some of the criteria of a traditional birth attendants are generally located in rural communities that have characteristics as follows: 1) they are generally ordinary people , 2) their education does not exceed the usual education, generally illiterate, 3) they work as a shaman not for the purpose of making money, but because of the 'call' or through dreams, with the goal to help others, 4) in addition to being TBAs, they have other jobs, such as farmers, laborers or small that it can be said that the shamans work only part-time job, 5) fee to be paid is not specified, but according to the affordability of each person being helped, so the amount of money received is not the same every time, 6) they are generally respected in the community or in general an influential figure, for example, traditional birth attendants were given a respectable position in society.

Some research shows that people's familiarity with traditional birth attendants or TBAs as delivery assistant inherited from generation to generation. TBAs are those who give aid at the time of birth or in matters relating to the aid of birth, such as bathing, ceremony on the ground, and the other ceremonies. For assisting delivery, the TBA is usually an old woman who had experienced assisting deliveries and then directs the ceremonies associated with birth (Koentjaraningrat, 1992).

2.2.1.1. Characteristics of TBA

TBAs have the following characteristics:

a. In general, is a well-known member of the community in the village.
b. Education does not exceed the usual education, generally illiterate or only completed primary school.
c. Work as a shaman is generally not for the purpose of making money, but because of the 'call' for the purpose of helping others.
d. Besides being a shaman, they have more work remains. For example, farmers or laborers, so that it can be said that the shamans work only part-time jobs.
e. Fee to be paid is not specified, but according to the affordability of each person being helped so the amount of money received is not the same every time.
f. Generally, they are respected in the community or in general is an influential figure, for example, the position of TBAs in the community.

According to Sarwono Prawiroharjo (1999), the characteristics of TBAs are:

a. TBAs are usually a woman, just in Bali there are male TBAs.
b. TBAs are generally aged 40 years and older.
c. TBAs are usually people who are influential in society.

d. TBAs usually have a lot of experiences in the field of social, self-care, the economy, culculture and education.
e. TBAs are usually hereditary.

2.2.1.2 Distribution of TBAs

According to the Ministry of Health of the Republic of Indonesia, TBAs are divided into two, namely:

a. Trained TBAs; TBAs who have been trained by health workers who have passed.
b. Untrained TBAs; traditional birth attendants who have not been trained by health workers
c. Or trained traditional birth attendants and have not graduated.

2.2.1.3 Errors Frequently Done By TBAs

In doing so often delivery aid, TBAs may cause maternal and infant mortality, among others are:

a. The occurrence of uterine tears because of the actions to encourage the baby in the womb from the outside while doing aid on maternal
b. The occurrence of post-partum hemorrhage that is caused by massaging the uterus during the third stage.
c. The occurrence of parturition is not developed, for lack of abnormalities parturition signs and do not want to be handed over to the clinic or hospital. To prevent error of action done by TBAs, there should be guidance for the TBAs.

2.2.1.4 Function of TBAs

Aligned with the skills; TBAs have two kinds of functions which are the main function and additional functions. The main function is to carry out TBAs aid delivery properly and safely. To support its primary function, the additional function can be developed in their local community, in accordance with the needs of society and the development of health services. Within the framework of the MCH program, TBAs' functions include:

a. Treatment of normal pregnant women
b. Introduction and referral of pregnant women with high risk pregnancies and complications
c. Referral of pregnant women to receive an injection of TT
d. Safe delivery
e. Postnatal care
f. Introduction and referral of postnatal mother and baby to be immunized

In order TBAs can perform its function properly. They are expected to be actively involved in the local neighborhood health center. The type and degree of involvement of TBAs in Integrated Health Center (Posyandu) are up to the TBAs themselves and TBAs in the community setting.

Improvement of social welfare including infant and child mortality reduction, will be more successful if the public participation. TBAs are one of the citizens who are very potent in these efforts.

2.2.1.5 Role of TBAs

a. Tell pregnant women to give birth at health professionals. Aid delivery by health personnel are safe delivery conducted by health personnel, such as midwife, because midwife:
b. Can determine exactly that labor has begun and can provide adequate services and monitoring by observing the needs of mothers during the labor process.
c. Can perform safe delivery assistance.

d. Midwives do expulsion of the placenta by the proper umbilical cord stretching
e. Midwives accurately recognize the signs of fetal distress in labor and hazard signs and can perform appropriate referral.
f. Recognize the hazard signs in pregnancy and childbirth reference
g. can recognize earlier the neonatal tetanus BBL and its reference

2.2.1.6. Advantages And Disadvantages of Labor assisted by TBA

The role of TBAs is very difficult to be eliminated because they won the trust of society. There are advantages and disadvantages of births attended by shamans:

1. Strength
a. Shaman care for mother and baby until the umbilical cord fall off.
b.Contact mother and baby earlier and longer
c.Delivery is done at house
d.Low cost and not fixed.
2.Weakness
a. Shamans do not understand the techniques of septic and anti-septic in attending births.
b.Shamans do not know pathology and pregnancy, labor, postnatal and newborns.
c.Shamans have limited knowledge and difficult to train and participate in overnment programs. (Pedoman Supervise Dukun Bayi, 1992)

2.2.2. Midwife

2.2.2.1 Functions of Midwife

The function of village midwives is to provide health services, especially maternal care health (MCH) services including family planning in the village of their duties. In carrying out its functions, the village midwives are required to stay in the village and actively give services, so they do not settle or wait in a particular place for giving service. They also undertake ambulatory care or activities and home visits as needed.

Specifically, village midwives' functions are related to their functions as midwives, i.e. services for pregnant women, birth mothers, postpartum mothers, fertile mother and baby. For the function to run properly, it needs to be supported by good management of MCH programs and community participation, especially TBAs.

2.2.2.2. Main Duties of Midwives

Village midwives are prioritized to perform MCH services, particularly in antenatal care, delivery and postpartum and newborn health services, including coaching the TBAs. In this regard, village midwives also take care baby's health and family planning programs which are in line with the main task in maternal health care.

Midwives' tasks in moving and increasing community participation in MCH programs, particularly in training the TBAs and cadres are:

a. clean 3 deliveries and obligation to give report to health workers.
b. Introduction to pregnancy and at risk childbirth.
c. Newborn care, particularly umbilical cord care and exclusive breastfeeding.
d.The introduction of at risk neonates, in particular Low Birth Weight Babies and tetanus neonaturum and first aid before it is handled by health workers.
e. Reporting births and maternal and infant mortality
f. Rounseling for pregnant women (nutrition, breast care, hazard signs) and Family Planning.

In performing the main task, midwives need to establish a good relationship with the local community, particularly local officials, community leaders and the target. Given the role of TBAs in the community, good cooperation between traditional birth attendants and health workers need to be encouraged to help smoothing the daily tasks of midwives and help to plan other tasks that become the responsibility of the midwife.

2.2.2.3. Privileges of Midwives

a. Midwives have the authority to provide information and counseling about pregnancy, labor, childbirth, breast-feeding and breast care, family planning, infant care, pre-school child care, and nutrition.
b. Midwives implement guidance and training of other health professionals who also work in midwifery services with lower capabilities, including the TBAs.
c. Midwives serve the case of the: supervision of pregnancy, normal delivery assistance, including help breech in multiparous, episiotomy and perineal suturing wounds level I and level II, childbirth and nursing care, uterotonic administration, the use of a particular contraceptive method in accordance with government policy.
d. Midwives serve infants and pre-school children: newborn care, growth and development monitoring, immunization care, feeding instructions.
e. Midwives also have the authority to provide drugs although only limited and roboransia, specific treatment in the field of obstetrics, to the extent not by injection, the provision of free medicines is limited only when necessary.

With this authority, the midwives are entirely responsible for any unwanted cases. If there is a lawsuit concerning the midwives' actions in their authority, the ones that will be sued are the midwives.

2.3. Rational Choice Theory

Rational choice theory departs from the theory of action proposed by Weber with four forms of action, namely: (1) The act of rationality means or purpose or Instrumental (purpose or use oriented), (2) the act of rationality value (value-oriented) action by the full faith awareness on the value of ethical, aesthetic, religious behavior or other forms of behavior, regardless the prospects of success (3) The action specified by the affective emotional state of the actors. This action has received little attention from Weber. (4) Traditional action prescribed by the actor acts which is familiar and commonly done (Weber, 1921/1968; 24-25).

Furthermore, in its development, there are a few figures and thinkers of Rational choice theory: Kenneth Arrow with his Social Choice and Individual Values (1951), Antoni Downs with his work An Economic Theory of Democracy (1957), William Riker with The Theory of Political Coalition (1962), Mancur Olson in The Logic of Collective Action (1965), Mc Gill James Buchanan and Gordon Tullock with The Calculus of Consert (1972), but it also Samuel L. Popkin with Rational Peasent: The Political Economy of Rural Society in Vietnam (1978), and James Colemans published journal Rationality and Society (1989), the latter with his Broadhead Heckathorn and Rational Choice, Public Policy and AIDS was published in the Journal of Rationality and Society 8 (1996), the last Douglas D. Heckathorn and Robert S. Broadhead with institutional policies on AIDS prevention.

Coleman's rational choice theory starts with the purpose or purposes of the actor or actors, but at least there are two major limitations that restrict such actions. The first limitation is resources. The actors have different resources as well as different access to other resources. For actors who have a lot of resources, achievement of goals may be relatively easier. However, for those who have little resources, the final results achieved may be more difficult or even be something that is not possible. Resource or resources is a potential value that is owned by a particular material or element in life. Resources are not always physical, but also non-physical (intangible). The resources that exist can change, either becoming increasingly larger or gone, and there is also a source of eternal power (always fixed). In addition, there are also two known terms: renewable resources and non-renewable resource.

The second limitation is the social institutions (social institutions). Social institutions provide negative and positive sanctions which emphasize the need for specific actions and vice versa. Paul B Horton and Chester L. Hunt (1988), states that social institutions are the norm system to achieve a goal or activity, which is considered important by the community, or in the form of habits and behavior system that revolves around the activities of the human subject. While Bruce J. Cohen (2009) suggested a system of social organization that is highly formalized social patterns and relatively permanent (fixed, last a long time) and contains certain robust and integrated behaviors for the sake of satisfaction of basic human needs. Meanwhile, according to Koentjaranigrat (2004), social institution is a unit of the system that organizes the series of specific patterned norms of actions for special needs of people in public life. The core of the third definition of social institutions is: social institutions are institutions whose activities are related to the basic human needs in society. The needs are in the form of material (material), social, mental and spiritual. Social institution is an organization that is fixed, because addressing human needs that are fixed anyway. Social institution is an organization that is structured and arranged that consists of patterns of behavior, roles and tasks of social with permanent interrelations. Social institution is a way of governing how individuals and groups act which binds to expect no action that may interfere with the safety and stability of society

Rational Choice Theory assumes Rationality. Rational Choice Explanations is part of itentional explanations, and the rational choice theory of attributing the rationality on social action. Rationality here means that when we move and act, an individual has a coherent plan, and tries to maximize the satisfaction of himself according to his own preferences, and as far as possible to minimize the costs involved. Rationality proves "assumption linkage", which states that individuals have an order of preference of the various options available. Social scientists infer that the choice of the sequence there is the existence of a 'function value (utility function)' which attributes a number on each option according to the levels in order of preference.

3. Research Methods

This research employs qualitative research approach or ethnography method. Ethnographic research approach is used to describe, interpret and understand the characteristics of the social setting with symptoms of diverse cultures and various interpretive or expression and adopts emic approach, in a way that the researchers interpret the data from the perspective of people in culture setting being studied. The researcher used of this ethnographic method because the theme and setting suited to the characteristics of ethnographic research, namely (1) the activity of the maternal care (ANC) and the delivery process associated with social and cultural phenomena (2) researchers conducted observations and unstructured data collection (3) data analysis based on explicit interpretation of the meaning and functions of an action based on emic approach, then the result of the process is a description of a social phenomenon. Data collection began in February 2012, during the 56 days staying at the site. The data was collected by using participant observation techniques, in-depth interviews and documentation.

The data analysis was carried out starting from the collection of data in the field, with the stages of the analysis conducted by three (3) processes of reduction, presentation and conclusion that moved back and forth between the three processes in an interactive loop.

4. Results of the Research

Pregnant in the native language community of Pagar Jati sub-district is called "*tenie lei*", which means a big belly or belly bulge. It describes the condition of a pregnant woman with a big belly or bulge. In contrast, a pregnancy that occurs on animal is usually called "*nyelemen*" which means the same that is used for animal stomach. Pregnancy has its own value in society. If a wife cannot get pregnant or husband cannot give offspring, then this is a disgrace to the family. Therefore, pregnancy or *tenie lei* is an initial stage to get a descent or a condition that is very valuable for a household or family. If there is a wife or husband who cannot give birth, in local parlance he/she is called *temanang* by the society and this is a disgrace for being called as *temanang*.

Communities in Pagar Jati call childbirth or maternity, among others, by the term: *belpas, banak, beselen* and *tepu'uk*. The most often used terms are *belpas* and *beselen*. Actually, there is no difference in meaning and object in using the four words. They all mean fetal birth or descent as the successor to the biological life of the mother's womb. *Belpas* is also commonly used to explain the occurrence of miscarriage or premature birth. *Banak* is also word that is used to describe animals that give birth, while the word *belpas, beselen* and tepu'uk never be used to describe animals give birth. In a society, even though *banak* is used to describe animals giving birth, it can also be used for human labor. The women and their families are not offended when a woman in the family is giving birth, because in general the term is also used by people in the research population.

It was also found that the people only know two options of antenatal care service and childbirth assistance; they are either done by traditional birth attendants or medical personnel, especially midwives and village midwives. They are the two types of alternatives used by pregnant women in this study to perform antenatal care and birth attendants. All the villages in the area of research have at least 1 active TBAs. Even some villages have up to three active TBAs. Among the existing TBAs in the study area, there is one person who is male TBA. TBAs are still actively doing his job as a TBA. TBAs provide services whenever needed, no special time for TBAs in providing good services for antenatal care and delivery assistance. Likewise, an antenatal care can be done at TBAs' home or at pregnant women's home by picking up or calling TBAs for antenatal care or deliveries at pregnant women's home.

In the society, there are four different ways to a person referred as TBAs, namely: (1) Because of offspring, these TBAs are close family members of the previous TBAs; skills "*ilmeu*" owned by elder TBAs, usually in the age of 60 years or more, give their "*ilmeu"* to those they desire to continue as a midwife. (2) Provided by learning or internship to the previous TBAs; this could be from a family member or anyone else who wants. (3) Gift, one of the participants told that she became a TBA through this process. All will come with their own abilities when someone asks for help, otherwise they cannot remember what spell, and drugs used to help healing people. (4) Being TBAs because of necessity; it happened to one of the participants. At first, it happened because there are neighbors in the garden which bore with no help. Then, she was forced to assist childbirth and the news spread gradually began to anyone asking for help delivery.

Forms of community service that can be obtained from the TBAs include pre-pregnancy services, namely: treatment services in an effort to obtain offspring. These efforts done by TBAs by treatment using prayer or mantra, treatment with herbs or herbal formulated by the TBAs, massage or sorting to one or both of the couple that are believed to have problems in an effort to obtain offspring. Antenatal care services, namely: the care and treatment of disorders of pregnancy, such as fixing the position of the baby in the womb if it is known to be in not proper position. There is also examination of fetal growth through gentle massage "*tematep*", rubbing the abdomen and reading prayers and mantras. In addition, various efforts to maintain the pregnant mother and fetus from bad spirits, jinn and devils. TBAs are also able to make talisman or tattoo to be used by pregnant women, providing lime that will be used for the procession of lime bath or *belemeu*, making home guard "*takal semat bebudak*" so that the house was not entered by spirits who would disturb the pregnant mother and fetus. All activities in antenatal care performed by TBAs always begin with a prayer or mantra a ritual done by TBAs that is still considered very important and needed by the community in getting pregnancy care.

There is no fix amount of expenses for TBAs for treatment and services in order to obtain offspring and antenatal care. For the completion of the treatment process to obtain offspring, TBAs do not for payment, but there is a closing procession for couples who are already successful (pregnant) to provide a "*punjung*", which is a kind typical rice cone of Rejang people. If you feel bothered to provide the "*punjung*", the TBAs can still provide services to make the "*punjung*". TBAs can be called on to buy and make a "punjung" that is required to close the ritual treatment. A married couple can give money to TBAs for buying materials for making "*punjung*", amounting to Rp 150.000, -. As for antenatal care services or treatment of disorders of pregnancy and making of amulet or *rajah*, lime for belemeu, "*takal semat bebudak",* TBAs did not set fees for the services. However,

pregnant women usually give money around Rp 5,000, - up to Rp 15,000,-. The money was usually referred to *caci untuk temukua silei* (money to buy salt).This term tells how cheap or small the value is as it is just enough money to buy salt. The results of this study indicate the selection of TBAs as pregnancy service options is in line with what is proposed by Coleman (1989), that the actors, in determining the choice, try to reduce the cost to achieve the goal. In this case, the actor does not take into account the cost to obtain antenatal care, because it does not require the cost of services and transportation costs, while the provided services are satisfying as wished by the pregnant women.

Medical officer midwife or midwives do antenatal care through; checking the weight of pregnant women, checking blood pressure, listening to the heart rate of the baby / fetus in the womb by using doopler. If there is found any abnormality, midwives provide medical drugs. If it needs further examination, midwife will hand over to the nearest health center or hospital. People can check their health during the working hour of Puskesmas or Posyandu, which is 08.00 a.m to 12.30 p.m. They can also go to the nearby village midwife's home. The cost of antenatal care in a public health center is Rp 5,000, -. Examination service in Posyandu is free. If the examination is done in midwife's house, the service costs around Rp 25,000 to Rp 40,000, -

Similar to the antenatal care, there are two types of services available for birth attendance: TBAs and midwives or village midwives. Birth attendance done TBAs is still the main choice for people in Pagar Jati. TBAs provide labor service at pregnant women's home, starting from before delivery and postpartum. The TBAs sometimes stay in the house keeping and assisting pregnant women together with close family members of the pregnant women in order to assist the delivery process. TBAs are helping the delivery process accompanied by close family members. TBAs provide services to pregnant women who need longer delivery time. TBAs are able to help physically and psychologically. TBAs are believed to be able to provide ease childbirth with directly given prayer and mantra or by giving herb ranging from white water that has been prayed, massage and blended herbs made TBAs. Every time they give any forms of aid, TBAs always start with a prayer or mantra. TBAs maintain and provide aid to pregnant women ranging from signs of labor until delivery is complete, and even keep helping until after delivery or until the mother can work normally. In addition to delivery assistance, TBAs also help cutting the umbilical cord using sterile cutting tool, that is a razor blade, and use Betadine as medicine. TBAs also clean the placenta and perform a ritual of sweeping the placenta in the river, and bathing the baby until birth mothers can bathe the baby themselves.

TBAs do not set a benchmark for the cost of delivery assistance services provided. In general, expense spent by the mother for childbirth assistance services to TBAs is around Rp 200,000, - to Rp 350,000, -. Services do not have to be paid immediately after recovering. It even can be paid anytime the mother and families can afford to pay.

All labors in Pagar Jati that is assisted by medical personnel as birth attendants take place at home. There were no deliveries took place in health centers or at midwife's home. Midwives can predict the time of delivery to determine the degree of opening. If the results of the examination of labor show that it will take a long time or only an early opening, the midwife will leave pregnant women at home and she will come back in accordance with the predictions of delivery time. The delivery process is not recommended by midwives to be accompanied by many members of the family. Birth mothers are advised to save energy during the delivery process. Mothers should not cry, moan or scream. When performing delivery assistance, midwife wears gloves, gives stitches if necessary, cuts the umbilical cord with scissors, bins and treats the cord and wrap with gauze. Furthermore, the mother is also given maternal vitamin injections to restore the condition of the body.

Health Department and public health center officers do not determine the amount of aid delivery costs for services performed by a midwife. The results of the survey revealed that the cost incurred by the people who use midwives as birth attendants is around Rp 900,000, - up to Rp 1,500,000, -. Payments cannot be paid in installments and usually should be paid no later than one week after childbirth process. The cost is not only quite much, but also must be paid timely. Postnatal cares given by the midwife are only maternity care and bathing the baby for one to three days. Even the cleaning up and burying or washing away the placenta or umbilical cord are done by birth mothers' family members. After that, if there is no one thing that is considered harmful, the midwife go back home and will come back the next day for bathing the baby.

The relationship of the rationality of pregnant women in determining the choice of antenatal care and birth attendants is the calculation of the costs to obtain antenatal care and delivery assistance that can provide the desired services. In this regard, it is the ability of pregnant women or birth mothers to pay for antenatal care services or birth attendant services. Thus the greater the financial capability of pregnant women or birth mothers, the better the chances to get the expected service.

The important point found from this study is that the actors perform purposive selection antenatal care and birth attendants' selection in accordance with their expectation. The expectation is through the consideration based on the preference from learning in formal education, interaction with the environment and family experience and prior service users' environment and /or their own experience in using the previous service. Understanding the types of service, way of providing services and the duration and place of service come into

consideration.

The theory that the resources that became one of which limits the actions of individuals or actors in determining the choice proposed by Coleman in Ritzer (2012) is not entirely valid. Most of the people have the financial capability to pay and have the means of transportation. Most of the poor families who do not have financial capability have a good health insurance from national health insurance program and Districal health insurance program. The health insurance can be used if it is necessary to obtain the services of medical personnel both for antenatal care and childbirth assistance. However, among others, the people's trust in the ability of TBAs in various matters related to pregnancy and childbirth, method or manner of service and period of service, become the main consideration in choice determination. That is the cost issue is not fully taken into account in the choice determination. From this point, it appears that the emphasis of this theory does not fully applicable in the selection of pregnancy and delivery services of Rejang ethnic group in Pagar Jati sub-district.

Antenatal care at the public health center or in integrated health center (IHC) can only be performed during working hours or early morning. Most of the participants are housewives who also work with their husband in the farm or plantation. If you have to do antenatal care at the health center or neighborhood health center, then it means that the pregnant women must leave their work on farms or plantations. Pregnant women mostly just have checkups when there are problems with the pregnancy, such as lack of movement, or otherwise, too much movement. Besides, antenatal care to TBAs or to the medical staff is also performed if a woman gets accidents, such as falls, slips and so on. Financially, the people can afford to pay for services of medical personnel both for antenatal care to aid childbirth.

Although it appears that the cost to pay for services TBAs are much cheaper compared to the services of medical personnel, but the actual amount of fees for the services of a medical officer for most of the actors (pregnant women or women giving birth) is not a reason not to take advantage of the medical officers for pregnancy supervisor or childbirth attendants. All informants who use traditional birth attendants are actually able to pay for such services. The observed economic calculation is actually not on the costs incurred for antenatal care and delivery costs. However, the economic considerations that arise precisely from pregnant women's labor productivity; If they utilize the available time for antenatal care in IHC or in health centers, it means they must leave their work on farms or plantations for one day. Leaving the work shall be treated as losses on the work that can be generated for a day when working on farms or plantations.

Even so, some of the assumptions of rational choice proposed by rational choice theorists are evident in this study, namely; (1) Intentional explanation; it can be seen on how each actor (pregnant mother or birth mothers) acted intentionally or with specific intention by considering the social practices, such as faith / belief and expectation toward pregnancy supervisors or birth attendants. Pregnant women and birth mothers also know the possible risks of various options. (2) Rational explanation Choice which is part of the explanation that attributes the action of rationality in social action; it is shown that pregnant women and birth mothers who determine the choice of the service have a coherent plan. Plans were made based on the expectations or service satisfaction to be gained from the expected pregnancy supervision and delivery aid, including the readiness to pay costs. The selection is based on a reference-preferences gathered from various sources. The preference is ultimately a subjective preference owned by pregnant women and birth mothers before deciding or choosing the services to be used. (3) In deciding whether to choose a TBA or a midwife as antenatal care and aid delivery, pregnant women and birth mothers know and understand the consequences or risks that may occur. However, pregnant women and birth mothers believe that everything that happens is the will of God Almighty and they must get through it.

5. Conclusion

First, Rejang ethnic group has its own value on children. They have desire to get a descent and expectation abaut various types of services during pregnancy, normal childbirth, happy and healthy condition for the mother and the born baby. To achieve these desires, people still make TBAs as a top choice for service in an effort to obtain offspring, antenatal care and childbirth assistance. The percentage of people using medical officers in an effort to antenatal care and childbirth assistance is small. The selection of services done by the society considers the various types of services provided by service providers, TBAs and midwives. Services provided by TBAs include the services: (1) Before pregnancy, in the form of treatment performed by examination, massage, herbs, prayers, spells or mantra. This treatment does not require closing costs unless the treatment has been successful. The time used for treatment is flexible and can be tailored to the wishes of the patient with treatment period from three to six months. The place for treatment can also be tailored to the wishes, at TBAs' house or at the patient's house. (2) Services During Pregnancy; pregnancy check, starting with a prayer or mantra, gentle massage. If problems are found, then the TBAs will do curing efforts through medicine or gentle massage, self-made herbal medicine, water supplied with a prayer or spell. The treatment during pregnancy is performed in various rituals, such as *belangia* or *belemeu*, making amulets, protection from bad spirits in the house by using *takal semat bebudak*. The service time is tailored to the wish of pregnant women and can be performed anytime on the day.

The place for service can be tailored to the wishes of pregnant women; it could be at TBAs' home or at pregnant women's home. Service charge is not specified, depending on the ability of the pregnant women. TBAs do not mind to give service even though the pregnant women do not have money to pay. (3) Labor Service: the delivery process is completely done in their own house or at their parents' house. TBAs accompany the pregnant women since they are asked to help birth until the delivery process is complete. The delivery process is usually also accompanied by other family members since there are signs that the baby will be born. TBAs allow close family members who want to accompany the pregnant women since the birth signs appear until the delivery process is complete. TBAs do not prohibit pregnant women to complain or even scream during the delivery process. The roles of traditional birth attendants: assisting delivery, offering prayers and mantras, massaging and stroking it gently if desired or necessary, cutting the umbilical cord, cleaning and caring of the placenta, to postpartum care, including bathing the baby up to seven to ten days. In addition, they also perform the ritual of *mbin mai bioa*. The fees for services are not specified. It was found that the fee was around Rp 200,000, - to Rp 350,000. Payment can be made at any time the pregnant women can make payments.

Midwives do not provide medical services that help obtain offspring. If necessary, midwives refer patients to the hospital or doctor. Midwives only provide during pregnancy (antenatal care) services and birth delivery service. Antenatal care is done at the health center, IHC or at midwives' home. In health center or IHC, the services can only be performed at particular time (the working hours), while it can be done anytime the midwives are available at the midwives' house. The fees for services at the health center is Rp 5000, - plus the cost for transportation. In integrated health services, the services are free. Antenatal care services at midwife's home ranging from Rp 25,000 to Rp 40,000, - not including the price of medicines if needed. Costs of services are paid directly after the service received. Delivery services can be done at midwives' home, pregnant women's home and health centers. The service is conducted by checking the pregnant women to determine the opening. If it is just a beginning stage, the midwife will go home and will be back again at the predicted time approaching childbirth. Labor should not be accompanied by a lot of people. Pregnant women are not allowed expend a lot of energy before childbirth. The roles of the midwife: assisting labor by pushing or pulling the baby, cutting the umbilical cord, and giving injections, bathing the baby for only 3 days after the birth. The cost for attending delivery is not fixed, around Rp 900,000, - up to Rp 1,500,000, -. The payment must be made as soon as the services are performed or a few days after delivery.

Second, in deciding the pregnancy and delivery service personnel, the ability to pay for services is one of the considerations, particularly for transportation costs. However, cost considerations are actually not a major consideration. Most of the people have health insurance, either from national program or Districal programs. Social institution is not a consideration in the decision to select. Social institutions (traditional institutions, religious organizations and families) give freedom to pregnant mothers in determining the choice of good services for antenatal care and childbirth assistance. There is no social or institutional sanction whatsoever for the choices made on pregnancy and delivery care.

Third, preference is the result of a long process which is through the process of formal education, interaction with the social environment ranging from immediate family to the wider community. Preference becomes important as knowledge forming for pregnant women. The preferences reflect the idea or knowledge that a mother has for antenatal care giver and childbirth attendant. Preferences become an important part in making the decision to choose the service personnel for pregnancy and childbirth. External conditions provide opportunities and freedom for pregnant women to choose the service as they wish.

6. References

Ahin, J.C. Griffin. D. Gulthey et.al., dalam Behavioral Determinans of Maternal Health Care Choises in Developing Countries. Working Paper. 2. 1990.

Alhafiza Putra, Analisis Praktek Bidan Pada Pelayanan Ibu Bersalin dan Bayi Baru Lahir, Jurnal Kesehatan Masyarakat Nasional ,Volume 3 Nomor 1, Agustus, 2008

Alisyahbana, Anna. Integrasi Dukun Bayi Pada Pelayanan Kesehatan Ibu. Disampaikan pada Pertemuan ke IV. Jaringan Epidemiologi Nasional di Yogyakarta, Tanggal 2 – 5 Desember 1991.

Alisyahbana Anna dan Peters Maheus. TBA Can Identify Mother and Fetus at Riskes. Dalam World Health Forum, 1986.

A Report by The Director General WHO dalam Behavioral Determinants of Maternal Health Care Choices in Developing Counties. Working Paper: 2. 1990.

Bangsu, Tamrin , Hubungan Karakteristik Ibu, Status Ekonomi Keluarga dan Lingkungan Sosial Dengan Pemilihan Tenaga Penolong Persalinan, FKM UI, Thesis, 1995.

Basompra K., dalam Behavioral Determinan of Maternal Health care Choices in Developing Countries. Working Paper: 2.1990.

Besral, Pengaruh Pemeriksaan Kehamilan Terhadap Pemilihan Tenaga Penolong Persalinan, Jurnal Kesehatan Masyarakat Nasional ,Volume 1 Nomor 2, Oktober 2006

Buletin Epidemiologi Indonesia. Pendayagunaan Bidan di Desa. Buletin No. 4 Vol III Edisi tahunan 1991/1992.
Burns, A. August dan Ronnie Lovich, dkk, Pemberdayaan Wanita Dalam Bidang Ksehatan. Andi, Yogyakarta, 2000
Coleman, James S. Foundations of Social Theory, MA, Harvard University Press. Cambrige,1990
Coleman, James S dan Thomas J Fararo, Rational Choice Theory Advocacy And Critique, London; Sage Publication, 1992
Coleman, James S, Dasar-Dasar Teori` Sosial, diterjemahkan Imam Muttaqien dkk, Nusa Media. Bandung: 2011
Deliarnov, Ekonomi Politik, Mencakup Berbagai Teori dan Konsep Yang Komprehensif, Erlangga, Jakarta, 2010
Deti Adi Priati, Determinan Pemilihan Tempat Persalinan Di Kabupaten Cirebon Tahun 2004, Jurnal Kesehatan Masyarakat Nasional ,Volume 1 Nomor 4, Februari 2007
Dinas Kesehatan Propinsi Bengkulu. Profil Kesehatan 2009. Bengkulu, 2010.
Dinas Kesehatan Kabupaten Bengkulu Tengah . Profil Kesehatan 2009. Bengkulu : 2010.
Depkes RI. Peraturan Menteri Kesehatan No. 363/Menkes/Per/IX/1990 tentang Wewenang Bidan. Jakarta: 1990.
Depkes Ri. Pedoman Supervisi Dukun Bayi. Jakarta: 1992.
Depkes RI. Pedoman Penanganan Pertolongan Persalinan dan Nifas Bagi Petugas Puskesmas. Jakarta: 1992.
Edy Suprabowo, Praktik Budaya Dalam Kehamilan, Persalinan dan Nifas Pada Suku Dayak Sanggau, Jurnal Kesehatan Masyarakat Nasional ,Volume 1 Nomor 3, Desember 2006
Friedman, Debra and Michael Hechter, The Contribution of Rational Chaice Theory to Macrosociological Research. 1988
Green, Laurence W. at. All. Healt Education Planning a Diagnossi Approach. Maffield Publishing Company. California: 1980.
Harni, Hubungan Antara Karakteristik Demografi Pengetahuan dan Sikap Ibu dengan pemanfaatan Penolong Persalinan. Thesis S2, Depok : 1994.
Jones, Pip Pengantar Teori-Teori Sosial Dari Teori Fungsionalisme Hingga Post Modern, alih Bahasa Ahmad Fediani Saifuddin, Yayasan Obor : Jakarta , 2009
Jhon Lewis Gillin, John Phillip Gillin, Cultural Sociology: A Revision of An Introduction to Sociology, The MacMillan: New York, 1950
Koentjaraningrat, Manusia dan Kebudayaan di Indonesia, Edisi 13, Djambatan: Jakarta, 2004
Lapau, Buchari. Kegiatan Kesehatan Ibu dan Anak (KIA) dan Dukun Bayi. Dalam: Majalah Obstetri Gynekologi Indonesia. Vol. 5, No. 3, Jakarta: Juli 1979.
Lichbach, Mark I, Is Rational Chaice Theory All of Social Science ?, The University of Michingan Press: Micingan US, 2006
Martodipuro. Terobosan Lain Dalam Meningkatkan Persalinan Aman Yang Diawali oleh Bidan di Desa, dalam: Medika No. 11 Tahun ke 17, November 1991.
Mukti, A.G., Menjaga Mutu Pelayanan Bidan Desa, Penerapan Metode Belajar Berdasar Masalah, Pusat Penelitian Kependudukan UGM dengan Ford Foundation, Yogyakarta, 1998.
Paul B. Horton, Chester L. Hunt, Sosiologi: Alih Bahasa; Aminudin, Erlangga, Jakarta: 1989
Popkin, Samuel L.Petani Rasional (diterjemahkan oleh : Sjahrir Mawi), Yayasan Padamu Negeri, Jakarta: 1986
Purwanto. Beberapa Faktor Penentu Bagi Ibu-Ibu di Pedesaan Dalam Memanfaatkan fasilitas Kesehatan Puskesmas di Bengkulu Selatan. Bengkulu. 1993.
Ratna Hidayati,. Asuhan Keperawatan Pada Kehamilan Fisiologis dan Patologis. Salemba Medika, Jakarta : 2009
Rina Anggorodi, Dukun Bayi dalam Persalinan di Indonesia, MAKARA, KESEHATAN, VOL. 13, NO. 1, JUNI 2009
Ritzer, George dan Douglas J. Goodman, Teori Sosiologi Dari tori sosiologi klasik hingga perkembangan mutakhir teori sosial postmodern,Kreasi Wacana 2009
Ritzer, Geoge, Douglas J. Goodman, Teori Sosiologi Modern, Alih bahasa: Alimandan, Jakarta: Kencana Frenada, 2008
Ritzer, Geprge, Teori Sosiologi Dari Teori Sosiologi Klasik Sampai Perkembangan Terakhir Postmodern, Edisi Kedelapan, Yogyakarta: Pustaka Pelajar, 2012
Roesentoek, Irwin N. The Health Belief Model and Preventive Health Behavior. Dalam Marshall H. Becher (Eds) The Health Belief Model and Personal Health Behavior. New Jersey.
Rumaseb, E.,Hubungan Kualitas Pelayanan Antenatal dengan Pemilihan Penolong Persalinan di Kabupaten Purworejo , Tesis, Program Pascasarjana, Universitas Gadjah Mada, Yogyakarta, 2002
Spradley, James P, Metode Etnografi Edisi Kedua, Tiara Wacana, Yogakarta, 2007
Undang-Undang RI No. 10 Tahun 1992 Tentang Perkembangan Kependudukan dan Pembangunan Keluarga Sejahtera. Jakarta: 1992.
Utomo Budi dan Lily P. Kak. Masalah Kesehatan Maternal: Tinjauan Umum Dalam Budi Utomo Et Al. (eds).

Laporan Seminar Ibu Hamil Persalinan dan Perinatal. Depok: 1991.
Wibowo Adik, Pemanfaatan Pelayanan Antenatal: Faktor-Faktor Yang Mempengaruhi, dan Hubungannya Dengan BBLR. Disertasi Doktor, Universitas Indonesia, PPS : 1992.
Yulifah, Rita. Asuhan Kebidanan Komunitas, Salemba Medika, Jakarta : 2009.
Yulaikhah, Lily S. Si.T, Seri Asuhan Kebidanan Kehamilan, EGC, Jakarta: 2008
Tris Eryando, Alasan Pemeriksaan Kehamilan dan Pemilihan Penolong Persalinan, http://Jurnal.Pdii.Lipi.go.id/Admin/Jurnal/
http://id.wikipedia.org/wiki/Nilai (Diakses: 12 Januari 2014, 21:15 WIB)
http://dweysocial.blogspot.com (Diakses: 26 Maret2012, 13:48)
Revina : http://bidanku.com/usia-ideal-wanita-untuk-hamil-dan-melahirkan (diakses: 27 Februari 2012, 22:16)

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