Efforts in Improving the Degree of Maternal and Child Health in Indonesia-Timor Leste Border Area

Aplonia Pala*
Timor University
Kefamenanu, Indonesia
*aploniamonteiro@yahoo.co.id

Abstract—The rate of maternal and child mortality is an indicator to measure the degree of maternal and child health in North Central Timor, East Nusa Tenggara which is directly adjacent to the Timor Leste. The fluctuation in maternal and infant mortality shows that the health level of border communities does not meet health standards. The government’s efforts are to improve the quality and health services access through the provision of mobile health centres, maternity homes in health centres (Puskesmas), birth waiting homes and placement of midwives in the village. In addition, with the existence of Regional Regulation Number 4 of 2012 concerning Maternal and Newborn Babies Health (KIBBLA), each delivery must be carried out at an adequate health facility or at Puskesmas. Although various efforts have been carried out, but the problem of maternal and child health in North Central Timor remains a separate problem. The causes of maternal and infant mortality are related to maternal health conditions since the process of pregnancy, childbirth, postpartum. While indirect causes are the socio-economic, geography, and behaviour-culture of the people which are covered in 4T (too-young, too-old, too-much, too-offen) and 3T (too-late in making decisions, too-late in carrying and too-late in getting health service).

Keywords—effort; health; border

I. INTRODUCTION

Health development is an integral part of national development in order to realize the fifth vision and implementation of nawa cita that is improving the quality of human life in Indonesia. In order to realize the degree of public health, individual health efforts and public health efforts are carried out in a promotive approach, preventive, curative and rehabilitative which are integrated, comprehensive and sustainable. One of the success indicators in health sector development is maternal mortality and infant mortality. These problems can be overcome through maternal and child health programs because the aim of the maternal and child health program is the achievement of the ability to live healthy through increasing the optimal health status for mothers and their families towards the norms of happy and prosperous small families. Maternal and child health efforts are efforts in the health sector which involves the service and maintenance of pregnant women, maternity mothers, nursing mothers, infants, children under five and pre-schoolers.

Health's Strategic Plan of the Indonesian Ministry 2015-2019 explains that maternal mortality has decreased, but is still far from the target of Millennium Development Goals (MDGs) in 2015, although the number of deliveries helped by health workers has increased [1]. Those problems are likely caused by insufficient quality of maternal health services, conditions of unhealthy pregnant women and other determinant factors. The main causes of maternal death are hypertension in pregnancy and post-partum haemorrhage. This problem can be minimized if the quality of antenatal care is carried out properly. There are some conditions can cause the pregnant women becoming unhealthy such as handling complications, anaemia, pregnant women who suffer from diabetes, hypertension, malaria and “Four T” (too young <20 years, too old >35 years, too close to 2 years, and too many children >3 years). There are 54.2 per 1,000 women under 20 year’s old childbirth, while women who gave birth above the age of 40 were 207 per 1,000 live births. This was confirmed by data showing that there was still a first marriage age at a very young age (<20 years) as much as 46.7% of all women who married.

North Central Timor Regency (TTU-Timor Tengah Utara) in East Nusa Tenggara Province is the border area of Indonesia - Timor Leste that has a fluctuating rate of maternal and infant mortality in the last five years (2013-2017) [2]. This case shows that the health status of these border communities has not met standards. Some efforts that have been made by the regency government in improving health status are; improving the quality and access to maternal and infant health services through the provision of mobile health centres, maternity homes in health centres, birth waiting homes and placement of midwives in the village. In addition, with the existence of Regional Regulation Number 4 of 2012 concerning Maternal, Newborn, Infant and Child Health (KIBBLA), every delivery must be done at an adequate health facility or at least in the puskesmas [3]. This case is to minimize the shortage of health workers who help deliveries in the village, lack of equipment to help with childbirth and to facilitate referral of pregnant women if conditions are not possible to deliver at the puskesmas. The provision of a birth waiting home is also intended to prepare pregnant women in facing childbirth and postpartum.

The cause of maternal death in the North Central Timor regency is a direct and indirect factor. Direct causes are related to maternal health conditions since the process of pregnancy, childbirth and postpartum. While indirect causes are the socio-economic, geographical, behavioural and cultural conditions of
the people covered in 4T (too old, too young, too much, too often) and 3T (too late in making decisions, too late in bringing / referring and too late in getting service). Hard work and continuous efforts are needed in increasing the understanding of pregnant women and their families so that they are always checked the pregnancy at health facilities and maternity at an adequate health facility.

### TABLE I. HEALTH DEGREE OF NORTH CENTRAL TIMOR REGENCY IN 2013-2017 [2]

<table>
<thead>
<tr>
<th>No</th>
<th>Health Degree Indicator</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of Infant Deaths</td>
<td>101</td>
<td>122</td>
<td>61</td>
<td>98</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>Number of Under-Five Children Deaths</td>
<td>23</td>
<td>17</td>
<td>11</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Number of Maternal Deaths</td>
<td>14</td>
<td>7</td>
<td>11</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>AKB</td>
<td>19.7/1,000</td>
<td>23.81/1,000</td>
<td>11.96/1,000</td>
<td>18.69/1,000</td>
<td>15.80/1,000</td>
</tr>
<tr>
<td>5</td>
<td>AKABA</td>
<td>4.5/1000</td>
<td>3.32/1,000</td>
<td>10.15/1,000</td>
<td>5.34/1,000</td>
<td>1.58/1,000</td>
</tr>
<tr>
<td>6</td>
<td>AKI</td>
<td>273.22/100.000</td>
<td>136.64/100.000</td>
<td>215.64/100.000</td>
<td>133.49/100.000</td>
<td>39.50/100.000</td>
</tr>
</tbody>
</table>

The data in Table I illustrate that maternal and child health status in North Central Timor Regency has not met health standards because the number of maternal, infant and under-five deaths fluctuated in the last five years. The causes of maternal mortality in North Central Timor Regency in 2017 include postpartum infection and sepsis postpartum, causes of infant mortality include febrile seizures, diarrhea, pneumonia, heart abnormalities and aspiration of breast milk while the causes of death for infants under five years include febrile seizures, bronco pneumonia, hepatitis and heart disorders.

### II. RESEARCH METHODS

This research used an interview method with purposive sample technique [4]. Informants were pregnant, maternity and postpartum patients from Napan health centres, Wini health centres and regency government hospitals. Interviews were also conducted with midwives, nurses, doctors, doctor specialists and other health workers as health care workers in the border area, including the head of the health service of North Central Timor Regency and the Head of Public Health as a health policy maker. The supporting data is done through document observation on research sites related to maternal and child health services at the puskesmas Napan, Wini health centre which is located directly adjacent to Timor Leste, a government hospital in the town of Kefamenanu and the Health Service of North Central Timor District.

### III. RESULT AND DISCUSSION

The maternal mortality rate and infant mortality rate is one indicator to see the public health status of North Central Timor regency. Maternal mortality is the death of a woman during pregnancy or within 42 days after the end of pregnancy, without considering the duration and location of the pregnancy, of all causes related or aggravated by pregnancy and its management, but not because of the cause of an accident or incident [5]. While infant mortality is death that occurs between the times after the baby is born until the baby is not exactly 1 month old (28 days). Broadly speaking, in terms of its causes, infant mortality consists of 2 types, namely endogenous (neonatal) and exogenous (1 month to 12 months). In 2017, the regency of North Central Timor occurred 2 cases of maternal death or equivalent to 39.50 / 100,000 live birth. The maternal mortality rate tends to fluctuate which indicates that this cannot be controlled properly. After soaring in 2012, it gradually declined until 2014, but increased again in 2015 and declined again in 2016. There are 3 kinds of delays that must be prevented, reducing maternal mortality cases, namely: 1) delays at the family level in recognizing signs danger and make a decision to get help, 2) delay in reaching health care facilities, 3) delay in health facilities to get the help needed [6]. Low level of education and flow of decision-making that must involve families because local culture is a factor causes of high mortality of pregnant women, childbirth and postpartum mothers. Delays in making such decisions result in late reaching health facilities because the distance to the health centre and hospital is far enough with limited transportation facilities and the impact of this is too late to get the help needed. This is because of the limited health facilities and also medical personnel in handling pregnant, maternity and postpartum patients.

In the last three years, cases of exogenous infant deaths in North Central Timor Regency experienced a significant decline, where in 2013 there were 101 cases of deaths from 5,124 live births to 61 cases out of 5,101 live births. The infant mortality rate in 2016 was 18 per 1,000 live births or 98 cases of death. The number of infant deaths in 2017 was 29 cases or 5.73 deaths / 1,000 live births. The causes of infant mortality in North Central Timor included low levels of maternal education, unhealthy sanitation, geographical conditions and low family income. In addition, the mind-set and behaviour of the people of North Central Timor are still influenced by cultural factors in providing assistance to mothers and babies where more family help and shaman help than medical help. Other behaviours as a cause of high maternal and infant mortality rates are the presence of pregnant women who have never had a pregnancy check-up, there are still many pregnant women who have a pregnancy check-up but less than 4 times and there are still many pregnant women who choose childbirth helpers not by health workers.

The efforts that have been made by the regency government in improving the health status of mothers and children are improving the quality and access to maternal and infant health services through the provision of mobile health centres, maternity homes in health centres, birth waiting homes and placement of midwives in the village. This is reinforced by the Regional Regulation Number 4 of 2012 concerning Maternal and Newborn Babies Health (KIBBLA) which requires that every delivery should be carried out at an adequate health facility or at least at the puskesmas.
Various efforts have been made by the government of North Central Timor regency in improving the health status of mothers and children, but to date the maternal and infant mortality rates are still fluctuating, indicating that the health status of the people of North Central Timor has not met the standards. This problem can be overcome. Efforts to improve the health status of the people of North Central Timor are not only the responsibility of the government but are the responsibility of all components in the community because health problems are very complex problems in the community. Collaboration between governments, non-governmental organizations and communities (traditional leaders, religious leaders, community leaders and female leaders) will certainly help the government in improving the health status of mothers and children in the area.

The efforts that can be done include: 1) conducting maternal and child health counselling continuously so as to increase the awareness and knowledge of mothers about the importance of maternal and infant health. Thus, it is not too late to take decisions, not too late in reaching health facilities, not too late to get help when needed in health facilities. This will also increase maternal knowledge about the principles of 4T (too old, too young, too much, and too often) pregnancy and childbirth; 2) intensity of home visits for village midwives in pregnant, maternity and postpartum women is increased so can reduce childbirth assistance by a family or traditional healer; 3) need cross-sectoral collaboration between the Regency Health Office and its staff with sub-district officials, village officials, religious shops, community leaders, religious leaders and female leaders; 4) bring services to mothers and children closer with the method of community-based health efforts by streamlining the integrated services, alert villages and village health posts.

IV. CONCLUSION

Maternal and child health degrees in North Central Timor regency have not met the standards due to the fluctuations in maternal and infant mortality. Most people lack access to health services at health centres and hospitals. Due to lack of intensity of maternal and child health counselling. Low levels public awareness of the importance of maternal and child health. There are still strong community culture in the decision-making process for handling cases of pregnant women, childbirth and postpartum mothers. In addition, the community-based health efforts such as integrated service posts, alert villages and village health posts are not functioning well.

V. SUGGESTIONS

1) Continuous improvement of maternal and child health counselling; 2) promoting community empowerment and active involvement in maternal and child health programs through integrated service posts, alert villages, village health posts as community-based health efforts; 3) increasing cross-sectoral collaboration in maternal and child health services.

REFERENCES