MANAGING HUMAN RESOURCES FOR HEALTH INDONESIA'S COUNTRY BORDER

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ABSTRACT

Indonesia is an archipelago country comprises of 17.508 islands. The country shares land borders with Papua New Guinea, Timor Leste, and Malaysia. Seeking the health need, people cross the country border to meet the health care services. One of Indonesia's priority development is improving the health status in the country border. This paper will present the current health situation and health workers who work in health centers in the remote country border areas in the eastern part of Indonesia i.e East Kalimantan province, East Nusa Tenggara province and Papua province. Further emphasize is on the management aspect which is retention strategy to fulfill the adequate number of health workforce availability. A desk study was performed from relevant published materials. Literature was reviewed from databases of the Ministry of Health The Republic of Indonesia. A clear understanding of health country border situation and retention strategy is critical to face tomorrow challenges to improve health worker distribution and performance in that area.

Keywords: retention, human resources for health

1 INTRODUCTION

Human resources for health (HRH) is an important asset for health systems and health care in any country. In fact, health systems can't function without the health workforce including doctors, nurses, midwives, allied health personnel, administrative and support staff (NHRHO, 2009). They are all critical to the management and delivery of health care to population. Indonesia is an archipelago country extending 5,120 kilometers from east to west and 1,760 kilometers from north to south. It encompasses an estimated 17,508 islands and only 6,000 of which are inhabited (Indonesia State Secretary, 2009). Administratively this country is divided into 33 provinces which cover 440 districts/cities. There are 44 districts/cities in 12 provinces that share continent and or sea boundaries with other countries i.e. Malaysia, Singapore, Vietnam, Timor Leste, Philippines, Papua New Guinea (PNG), Australia, India and Palau. The continent border is shared by 4 provinces in West Kalimantan, East Kalimantan, East Nusa Tenggara and Papua.

According to the Indonesian President Regulation No. 7 year 2005 on the National Medium Term Development Plan, the country border areas is one of the development priorities (Bappenas, 2005). The development of the country border areas is considered very crucial as these are strategic areas in the most front position to protect the unity, sovereignty and security of the country, and also as the economic gate to achieve the prosperous community. Health sector is one of the main agenda in developing the prosperity of the community in the country borders.

Ministry of Health (MoH) (2007)[a] stated there are 101 health centres located in the country border areas, 39 of them in outer islands. About 95% is categorized as less developed areas. There are 54 health centres with in-patient facilities and supplied with minimum required number of health staffs. However, based on the available data from 79 health centres, about 25 health centres suffering shortages of health personnel and require additional 1 -2 doctors for each. Some of those health centres also still require additional number of nurses, midwives and other health personnel in accordance with the Index Staffing List of the MoH.

To counter those problems, the development of health sector in the country border areas has been focused to the availability of medical doctors, midwives, nurses, nutritionists and sanitarians; the upgrading of health centres with in-patient facilities; development of infrastructure and operational cost; and the mobile health service. Using the contract scheme, since year 2006 the MoH have consistently recruited doctors, dentists and midwives to be placed in remote and very

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remote areas including in the country border areas. The doctors and dentists are contracted for duration of 6 months or 1 year depending on the criteria of the location and can be prolonged upon request. With shorter period of contract, it is expected that more doctors will be more interested to join as this is not a compulsory program. Thus shortages in some remote and very remote health centres can be fulfilled. The districts/cities have responsibility for the distribution, providing facilities and other support as well as monitoring the availability and performance of health personnel in their regions.

Overall, through this contract scheme, the percentage of health centres without doctors has been decreased from 30% in year 2006 to 11% in year 2007 (MoH, 2007)[b]. However, as admitted by the District Health Offices, the most difficult problem is to recruit and retain health workers in the remote outer islands or mountainous areas in the country border. Some financial incentives and other benefits offered by some local government do not always interest health workers. This paper focusing on human resources for health and aims to address the following questions:

- What is the current condition of the health situation in the country border area?
- What was the implemented strategy and the future alternative strategies to retain the health workforce in the country border area?

2 METHODOLOGY AND CONCEPTUAL FRAMEWORK

2.1 Methodology

A desk study was performed of published and grey material. Literature was searched by means of the databases of The Center of Planning and Management of Human Resources for Health, Ministry of Health The Republic of Indonesia.

2.2 Conceptual Framework

Many factors influence the willingness of health workers to stay working in country border areas such as communication, transport, security, social facilities, etc. To address this complicated field, the authors modify a framework that simplifies the concept of retention as in fig 1.

Qualified and motivated human resources (HR) are essential for adequate health service provision, but HR shortages have now reached critical levels in many resource-poor settings, especially in underserved areas (World Bank, 2008). Factors influencing retention are rooted into the following:

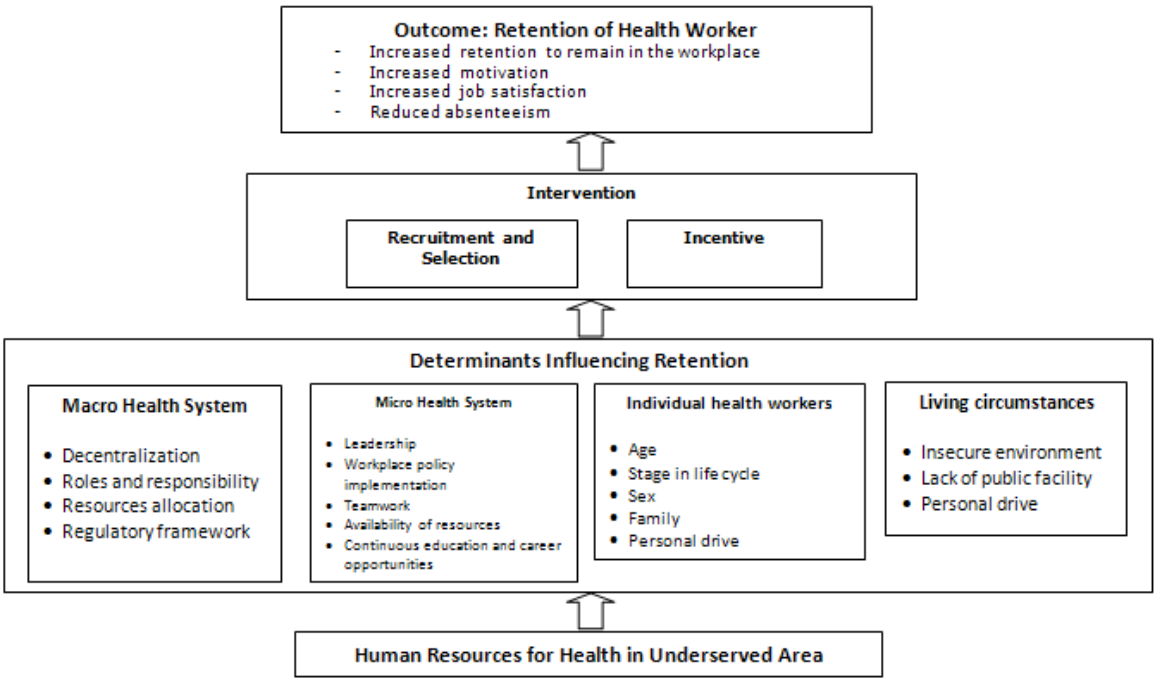

Figure 1. The concept of retention

INDICATORS	East Kalimantan (2006)	East Nusa Tenggara (2006)	Papua (2006)
IMR per 1000 live birth	39,71 (year 2001)*	72	56,65 (year 2001)*
MMR per 100.000 live birth	49	554	396
Life Expectancy (years)	69,95	65,1	66,2

Source: (MoH, 2006)[abc]

- Macro level or the overall health system such as resources allocation, planning and deployment of health workers, current regulatory framework, communication and decision-making processes, and accountability mechanisms. These can be influenced by policy-makers and planners in the health sector, as well as local government as the consequences of decentralization.
- Micro level, or the workplace itself (district or facility, etc.), such as availability of equipment, drugs and supplies, teamwork and human resources management activities. In principle these can be influenced by local managers, colleagues, patients and other local partners *(health facility level)* (Dieleman M & Harnmeijer JW, 2005).
- Individual characteristics and living circumstances, such as living in conflict areas or being a woman or a newly graduated professional. These require specific group strategies and can be developed locally by managers or nationally by policy-makers and planners together with other stakeholders (individual level).
- Intervention to retain health worker in underserved area focusing on the two intervention, recruitment-selection and incentives.

3 THE CASES OF INDONESIA

This paper will present experiences from three provinces i.e. East Kalimantan, East Nusa Tenggara and Papua in health development for the country border areas. These three provinces represent specific different problems in the country border areas that may contribute to health. The table below illustrates the health situation in the three provinces.

East Kalimantan

This province is administratively divided into 9 districts and 4 cities. The number of population in year 2004 is 2,7 million lives with the density rate about 14,13 lives per km square. The population growth rate is 3,35%, higher than the national average at 1,50%. The natural growth is 1,22%. The migration rate is quite high at 2,13% per year (MoH, 2006)[a]. This province share country border with Eastern Malaysia (Serawak and Sabah) in 3 districts i.e. West Kutai, Malinau and Nunukan. The most common issues between the two countries are Indonesian Migrant Workers (IMWs) and illegal logging.

The cross border activity is quite frequent particularly in Nunukan and tend to increase from year to year. Data year 2004 showed that the number of illegal IMWs deported from Malaysia was 102.129 persons, but approximately 174.562 persons left to Malaysia through this border (MoH, 2007)[b]. Most of them worked in informal sector (about 50%). The Ministry of Manpower and Transmigration reported that in March 2008 only, there were 12.690 migrant workers heading to Malaysia from Nunukan. This city has become the most favourite transit of IMWs in the province. Usually the IMWs stayed in temporary housing for days, weeks or months waiting for jobs from their employers or the worker distributor companies (Depnakertrans, 2008). Some of temporary housings are in poor sanitation and over crowded that affect health condition of IMWs.

The economic prosperity with more job opportunities in Malaysia have attracted more people to come even without legal document. The economic gap and more complete public facilities have also attracted the community in the country border to see more opportunity in Malaysia including in health and education. According to the East Kalimantan Provincial Health Office, the main problems in health sector in this province are (MoH, 2006)[a]:

Health Service Indicators	National Standard	East Nusa Tenggara
The coverage of pregnant mother visits (fourth visit)	95%	65%
The coverage of birth delivery by health personnel	90%	60%
The coverage of Neonatal visit	90%	78%
Villages achieve UCI	100%	84%
The coverage of children under 5 years receive Vitamin A twice a year	90%	77%
The coverage of pregnant mothers receive 90 Fe tablets	90%	60%

Source: (MoH, 2006)[b]

1. Most areas are surrounded by water that difficult to reach in certain seasons
2. Ineffective bilateral cooperation especially in health service for the country border community
3. Low health budget that contribute to the poor quality of health service
4. Lack of basic infrastructure that can support the health programs

In Nunukan District, the available health facilities include 10 health centers with 4 of them equipped with in-patient facilities (total 32 beds), 44 auxiliary health centers and village Birth Delivery Posts, 11 mobile health clinics, and 1 district hospital. The 10 health centers are supported by 7 doctors, 4 dentists, 3 nutritionists, 28 midwives and nurses (MoH, 2006)[a].

The health programs conducted by the District Health Office are as follow (MoH, 2006)[a]:

- Optimize compulsory service of health centres such as health promotion, maternal and child health, family planning, health environment, communicable disease control, nutrition improvement, and curative program.
- Health service for the poor families.
- Bilateral cooperation with Malaysia (Sosec Malindo) in communicable disease control.

Supervised by the District Health Office, health workers in health centres must be able to conduct the compulsory health service program. Some constraints faced by health workers are limited resources in health centres and lack of technical competency in dealing specific cases. For example, Nyamuk health centre which is located close to Tawau (Sabah Malaysia) often have problem in referring critical patients. The community prefer Tawau Hospital to Nunukan hospital, due to easier access (closer) and more complete facilities. In year 2005, Nyamuk health centre refer 21 cases to Tawau hospital and 45 cases to Nunukan hospital. Some strategies proposed by Nunukan districts are 1) increase the health budget for provision of equipment for operational of health centre, 2) improve bilateral cooperation in health sector particularly for referral cases, 3) improve technical competency of health workers specifically for the border areas (MoH, 2006)[a].

East Nusa Tenggara

Geographically East Nusa Tenggara province is a dry land and classified as less developed and remote province. This province shared border with Timor Leste in District Belu, District Kupang and District North Central Timor after the referendum in year 1999 that established Timor Leste as a new independent country. Common issues in these country border areas are poverty, food scarcity and settlement of ex Timor refugee post conflicts as new citizens. These districts still have potential conflicts as there are several ethnic groups ex Timor refugees that share lives with the local community. Since year 2006, those ex Timor refugees have been provided housing and acknowledged to have the same right as the other citizen. They no longer received regular material support from the central government of Indonesia. However some groups still demanded the Indonesia government to continue the support. The local government refused to provide this privilege to avoid social jealousy as the local community is also as poor as the ex refugees.

The health problems in this province include low community health status, low coverage of health services, inadequate number of qualified health workers and high percentage of poor families (65,45% of total population) (Bappenas, 2005). The table below presents that all health service indicators are still below the national standard.

In Kupang District, the border areas is located in 5 villages with total population 6.229 lives. The available health facilities are 4 auxiliary health centres, served by 1 doctors, 4 nurses and 2 midwives. Due to geographical condition, this area is inaccessible during rainy season. Most of the community (86%) are poor people. Health funding mainly depend on the Community Health Insurance Program from the central government designed for poor families (MoH, 2006)[b]. Belu District also has

border areas with most frequent cross border activities. The district have 1 general hospital with 120 beds, and 1 private hospital owned by a religion based organization. The two hospitals are supported by 13 doctors, 101 nurses, 9 pharmacists, 2 nutritionists, 15 medical technicians and many other workers. There are 18 health centres with 3 of them without doctors (MoH, 2006)[b]. Most of doctors served in this district are on contractual basis assigned by the MoH.

Beside serving the local community, health workers in the border areas accept many villagers from Timor Leste border who came to health centres in the border of Belu district to seek health care services. Some pregnant mothers and children from Timor Leste also use health care services in health centres or the closest village polyclinic.

Kupang district and Belu district have similar problems regarding the very limited number of health workers particularly doctors to serve the remote border areas, where communities from both Indonesia and Timor Leste need to have better access to health service. The availability of doctors and midwives is often hampered by discontinuity of contract doctors due to no replacement or late replacement after the previous doctors finished their contracts. Many doctors are reluctant to serve those areas because they fear of the conflicts that sometimes occur involving some community groups.

To deal with those issues, East Nusa Tenggara province proposed some actions (MoH, 2006)[b]:

1. Upgrading auxiliary health centres to the in-patient health centres specific to health problems in the border areas (completed with emergency service facility).
2. Provision of equipment for health centres and mobile clinics.
3. Health problems in the border areas must be tackled by the national level and not only by the local government.
4. Establishment of integrated cross border post (health and other sectors) with adequate facilities, operational cost and personnel.
5. Provision of scholarships for the native people to attend medical schools and other health schools and to retain them in certain places and certain period after finishing their education.

The availability of many local, national and international donors that financially and technically support this province should provide significant benefit in the future.

Papua

Papua province is located in the most eastern part of Indonesia. There are 5 districts/cities in this province that share border with Papua New Guinea (PNG). Most of community in these areas live separately in smaller groups. Nationally 1 health centre in average can serve within radius 320 km^2, but in Papua 1 health centre serve approximately within radius 2.300 km^2 with tropical jungle, swamp and mountainous areas that difficult to go through. To serve the community, health services were provided through flying doctor program, water doctor and doctor on foot programs (MoH, 2006)[c].

People from both Indonesia and PNG have been travelling in and out for social, culture and economic purposes through legal and illegal border gates that may contribute to health problems especially transmission of HIV/AIDS. The cumulative rate AIDS case in Papua is the highest in Indonesia with 49,6 or 18,51 times national rate (year 2005) (MoH, 2007)[d]. The main cause of HIV/AIDS transmission in this province is through sexual intercourse.

Merauke district share borders with 3 countries i.e. PNG (land and sea borders), Timor Leste and Australia (sea borders). The number of total population is 172.373 lives. The health facilities available in this district include 2 general hospitals, 11 health centres, 92 auxiliary health centres, 17 mobile clinic, 12 village birth delivery post, and 182 integrated health service posts. Those facilities are supported by 7 specialist doctors, 63 doctors, 5 dentist, 204 midwives, 308 nurses, 20 nutritionist, 21 laboratory analysts and 22 sanitarians (MoH, 2006)[c]. This number is considered as still limited as the area of coverage is very vast while the community live scattered in the remote inland.

The main problems of health services can be highlighted as follow:

1. Lack of health personnel in term of type, quantity and quality. The percentage of health centres without doctors is approximately 52% (year 2006).
2. Maldistribution of health workers, severe shortages particularly occur in the country border health centres.
3. Limited coverage of health services
4. Inadequate supporting facilities such as housing for health workers in the remote areas
5. No electricity and water in health centres (70%)
6. High risk of communicable diseases i.e. Malaria, HIV/AIDS and worm diseases. The danger of HIV/AIDS transmission particularly occurs in the country border areas.

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7. Lack of awareness of the community on clean and healthy behavior
8. High malnutrition prevalence of infants/children under 5, anaemia of pregnant mothers and
9. Lack of awareness of the local government in providing adequate health budget especially for health services. The Special Autonomy Act for Papua year 2001 clearly mentioned that at least 15% of the development local budget must be allocated for health and improvement of nutrition (MoH, 2007)[a].

Other external problem that often affect health situation is potential conflict among ethnic groups that often occur in Papua region.

MoH (2007)[a] stated that to reach the community in villages in order to find malaria, HIV/AIDS and TB cases, health workers from health centres and its networks often have to walk for hours even days without safety and security guarantee. The health workers have to do tough jobs such as persuading the villagers in the remote and isolated areas between Indonesia and PNG to conduct blood test HIV/AIDS. If they are willing to do so, the health workers must take them travelling far to the laboratory in the district city, sometimes more than 100 km.

4 DISCUSSION

Retention Strategies: Recruitment and Incentive Scheme

4.1 Recruitment of Contracted Doctor Scheme (PTT)

Since year 1999, Indonesia has implemented decentralization policy that give more authority to the local level in providing public service in accordance with the principles of good governance. Furthermore according to the government regulation number 38 year 2007, the roles in government affair have been divided for central, provincial and district/city government. There are 31 compulsory subjects including health that become the responsibility of the provincial and district/city government especially related to the provision of basic health care.

The policy has become an opportunity for some districts but on the other side become a threat for others. The districts have more autonomy to optimize the use of their resources for innovative approach in every sectors including health. Before decentralization, most health workers in the public sector were managed by the central government. With implementation of this policy, their status of employment was transferred to the local government. The mobility of health workers among other provinces/districts become more difficult as it needs approval and clearance from both local governments. This can be a positive way in retaining health workers particularly in the districts that are still lacking. On the other hand, this also become a constraint in improving distribution of health workers from over supply to under supply provinces/districts.

Another example, recruitment of contract doctors mostly depend on the central MoH, but districts still have full authority in deciding the working location, providing other supporting facilities, to monitor the doctor performance and even to provide other benefit package to attract the health workers, while the province level hold the coordination and supervision functions. So the districts that can provide better resources, access and programs will be likely to have more adequate number of qualified health workers. The district with many remote, potential conflict and country border areas will still suffer shortage of certain health workers. From the above cases, Papua with many most difficult geographical areas certainly much more suffer shortage of health workers compare to the other two provinces.

The MoH also have experience when negotiating contracts with the medical faculties from 13 universities on provision and distribution of senior residents to 60 remote district hospitals in order to provide medical services. Many senior residents refused to be posted in remote districts far from their origins. Other reasons mentioned are no clear security guarantee for working in conflict areas, inappropriate working condition, lack of other supporting facilities, and no additional financial incentive from the local government. Some senior residents are willing to work in remote district hospitals but for shorter period (1 or 2 month only). Therefore those districts are still unable to obtain medical specialists for their hospitals or difficult to sustain the availability of medical specialists.

In Indonesia the public sector still dominates the provision of health services. Majority of health personnel were recruited as civil servant. The shortage number of certain health workers was fulfilled through individual contract signed by the director of the working unit or by the head of district/city. However since year 2005, the government have restricted employing new contract workers except for health workers (doctors, dentist, midwives). As the annual new formation of civil servants is always very limited, it is difficult for some provinces/districts to accelerate the realization of adequate number, type and qualification of other

health workers. To address this issue, the MoH have a policy on special assignment for specific areas including remote and country border areas. In relation to this policy, the MoH currently assess the legal aspects of conducting cooperation with other parties to provide health services or to provide and manage health workers in remote health services through contracting out mechanism. This model has been piloted by the MoH in Papua province for posting senior residents by establishment of contract with a medical faculty. Other district with more resources also start to pilot this mechanism through collaboration with religious based organization or other civil society organizations.

4.2 Incentive Scheme for PTT

After the decentralization policy being implemented, the local level has more authority in managing human resources including provision of incentive for personnel. It is expected that by providing financial incentive out of salary, the motivation of personnel will improve. The amount of incentive varies depending on the financial ability of the local government. The incentive for specialist doctors, as an example, range from Rp. 3,5 million to Rp. 12 million (approximately USD 385 to USD 1319) per month. Some local governments even provide meal allowance, housing and vehicles or means of transportation. But, not all local governments are able to provide those incentives (Kurniati A, 2007). Many of them, especially newly developed districts, are still financially depending on the central government. As a result, there are favorable/less favorable remote and very remote areas for health personnel.

To attract more health workers serving the remote and very remote areas, since May 2006 the MoH RI have introduced new policies i.e. shortening service period and higher financial incentive for the PTT medical specialist, doctors, dentists and midwives. The minimum service for PTT doctors and dentists in very remote areas is 6 months while in remote areas is 1 year. The financial incentive is only given to those working in very remote areas and arranged as follow (7,5% income tax included) (MoH, 2007)[c]:

- Medical Specialist :Rp 7. 500.000,00/month (USD 824)
- Doctor/dentist: Rp 5. 000.000,00/month (USD 549)
- Midwife :Rp 2. 500.000,00/month (USD 275)

These policies are applied evenly to all PTT workers in very remote areas regardless various geographic barriers, availability of supporting facilities and other factors. The MoH RI provide a general definition that a remote/very remote area is an area that is difficult/very difficult to reach due to several causes such as geographical conditions (islands, mountainous, land, forest and swamp), transportation and social culture. The remoteness of certain location is not determined by the MoH RI but by the local government which result in different interpretation upon the same characteristic of areas. For example, a similar characteristic of areas is considered differently as remote or very remote areas by different local governments. Due to this issue, the regulation for shortening service period in very remote areas is then slightly changed. The service period for the favorite locations is back to one year while the non favorite's remains the same.

5 CONCLUSION

The strategy of recruitment of contracted doctor scheme (PTT) and incentive scheme for PTT can be useful in terms of making health worker available in the country border area, although it should not be a stand-alone strategy. Further research focusing in these variable with multifaceted intervention could be considered based on local situation.

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