Human Resource Development for Health in Indonesia: Challenges of

Achieving the Millennium Development Goals

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Abstract

Background

The development of Human Resources for Health (HRH) is one of the keys to achieving The Millennium Development Goals (MDG). Providing and ensuring the best health care service in every region of Indonesia has long been a major concern. Several challenges faced by HRH development are a shortage of professionals, uneven distribution of professionals between regions, a variety of settings (urban and rural), and management of the health workforce under a decentralization system.

Aim

This paper aims to assess the HRH progress made toward achieving the health-related MDGs.

Methods

A desk study was performed from relevant published materials. Literature was reviewed from databases of the Ministry of Health. A clear understanding of the progress and challenges is critical to accelerating the achievement of MDGs.

Results

The health policy of Indonesia has been adjusted to achieve MDGs. A significant scale-up in the HRH can contribute to significant number to meet the MDGs. HRH dimensions that must be addressed include comprehensive HRH strategies and strengthening management under decentralization system.

Conclusion

Human resources are one of supporting unit in achieving Millennium Development Goals. Therefore, it is important to identify where we stand and mobilize more resources to meet the off track in MDGs.

Keywords: Human Resources for Health development, Millennium Development Goals

Introduction

Health systems and services depend critically on the size, skills and commitment of the health workforce. It is now evident that in many low- and middle-income countries, meeting key Millennium Development Goal targets, specifically those relating to health, requires a significant increase in the numbers of health workers (Anand & Bärnighausen, 2012; Speybroeck, Kinfu, Dal Poz, & Evans, 2006). According to the World Health Organization (2006), "at the heart of each and every health system, the workforce is central in advancing health". Producing, recruiting and retaining health professionals are still the key challenges faced all over the world.

The global shortage is estimated at around 2.3 million physicians, nurses and midwives, and over 4 million health workers overall (WHO, 2009).

Health workforce is recognized as one of the six interrelated and interacting building blocks of health systems as a framework for action to strengthen health systems (WHO, 2007). Therefore, improving and maintaining the performance of the health workforce will lead to a better impact in the health systems and a better outcome of care. According to WHO, these building blocks for good health are especially lacking in Indonesia, one of the countries with a critical shortage of health service providers (doctors, nurses and midwives) in 2006 (World Health Organization, 2006).

Quality health care depends on policies to ensure that health workers who are capable of delivering such care are available in sufficient numbers (World Health Organization, 2006). Challenges related to human resources for health are particularly acute in countries with low and middle incomes. These challenges include an absolute shortage of qualified staff, an inequitable distribution of health workers, with too few in remote rural areas, and staff absenteeism and poor motivation, probably caused by low pay, poor supervision and support, and unsatisfactory working conditions (Dieleman M, 2006).

The Government of Indonesia through the Centre of Planning and Management of Human Resources for Health (CPMHRH) has made a total commitment toward the MDGs, advocating the importance of putting human resource issues on the national health agenda, and supporting regular HRH assessment and situational analysis within Indonesia. Moreover, the CPMHRH is committed to the improvement of health workforce plans and management. If we are to meet the Millennium Development Goals (MDGs) and ensure essential health care for all, current national efforts must be enhanced to better realize the opportunities available for supporting human resources for health.

Current situation

Health and Health Services: Health problems in Indonesia are dominated by non-communicable diseases, followed by communicable diseases. The epidemiological transition has presented the health care delivery system with a double burden (MoH, 2013). According to Riskesdas in 2007, 59.5% of Indonesian deaths resulted from communicable disease and 28.1% died from non-communicable diseases (Balitbangkes, 2007). As a national average, a majority of households (94%) can access a health facility within less than 5 km, and 97.4% of households can access a health facility in less than 60 minutes. In 2004, 7.550 Community Health Centers (CHC) were in operation, increasing to 8.015 CHCs in 2006. Health utilization can be judged from the proportion of people who sought treatment at health facilities. The utilization rate of health facilities has increased substantially from 15.1% (1996) to 33.7% (2006), an increase of 18.6% over 10 years (Indonesia, 2007).

Indonesia has made sustainable progress in health development as shown in Table 1. The health status of the population can be seen from the trend of increasing life expectancy at birth. In general, this indicator shows steady progress toward the National Medium Term Development Plan (RPJMN) target life expectancy of 70.2 years in 2009 (MoH, 2013).

Table 1: The progress of health development (MoH, 2013)

No	Indicator	1997	2004	2007
1	Infant Mortality Rate (per 1.000 live births)	46		34
2	Maternal Mortality Rate (per 100.000 live births)	334		228

3	Malnutrition of Children Under Five Years	29.5	22.5
	(%)		

4 Life Expectancy (year) 68.4 70.5

Although these health indicators show good progress, the performance of the current health system needs further improvement to achieve the Millennium Development Goals (MDGs) targets. Acceleration of health development toward MDGs will require an adequate number of qualified health workers equally distributed to support a functioning health system. However, lack of an adequate health workforce and uneven distribution of services have been noted as common problems in Indonesia's health care system .

Policy, Strategy and Human Resources Management

The health policy of Indonesia emphasizes producing, recruiting, and retaining human resources of various cadres. A new strategy supported by the Ministry of Education is to open a public university that provides a health sciences department. Meanwhile, in an effort to increase the number of health professionals, a partnership with the private university has been created. Furthermore, 33 health polytechnics belonging to the Ministry of Health (MoH) produce nursing, midwifery, electro medic technician, health sanitation, health nutrition and other cadres at diploma 3 and 4 levels. Since 2008, the MoH has provided a scholarship for certain cadres considered critical to supporting health development (BPPSDMK, 2008). The updated data shows 52 medical schools graduating an average of 5,500 new medical professionals each year. However, although the current production of specialist doctors is low at only around 1,200 per year, only 14 of these 52 medical schools offer a specialist training program (Affandi, 2007). On the other hand, 465 schools offer midwifery education and 682 schools offer nursing education in Indonesia, the majority offering Diploma education (3 years) (World Bank, 2009). The quality

of graduates is ensured by licensing and certification as part of MoH commitment to deliver quality health care.

Recruitment and selection function to increase the number of personnel or to compensate for the loss of personnel (as part of the zero growth formation policy). The following methods are employed in recruitment and selection of health personnel (Kurniati & Efendi, 2010):

a) Permanent Civil Servant (PNS)

Various actors participate in recruitment and selection of PNS: The vacancy quota for PNS is determined by the State Ministry for State Apparatus based on the availability of state budget funds allocated by the Ministry of Finance. The overall process of recruitment and selection is conducted at each central unit (for central PNS) and at each local government level coordinated by District Civil Servant Agency. The result of selection will be then finalized for administration purpose by the National Civil Servant Agency.

b) Local contract

Local governments (province and district level) could use their own resources to contract more local personnel. However, since 2005, the central government has prohibited local governments contracting new personnel. All contract personnel who were recruited before 2005 and met the criteria are gradually employed as PNS.

c) Central Contract

Central Contract is Pegawai tidak Tetap (PTT) in the Indonesian language. Under the PTT plan, an exception was given to contract medical staffs and midwives. Recruitment and selection are conducted centrally by the MoH. The vacancy quota is also determined by the MoH based on the proposal from province health offices.

d) Special assignment

Recently MoH introduced another contract mechanism to obtain another category of strategic health personnel who cannot be recruited under the PTT plan, such as senior residents (medical doctors who are in the final stage of specialist training), nurses, sanitarians, nutritionists and other urgently required health professionals. The duration of the contract ranges from 3 to 6 months. Priority placement was located in very remote, borderline areas and the outer small islands that are considered severely underserved. This contract mechanism is intended to help districts with less financial capacity, or districts which do not produce certain types of health professionals, and to fill vacant posts of health personnel in the underserved areas.

Because MoH recognizes that retention of health workers is vital, particularly in underserved rural and remote areas, the MoH issued a decree to keep health workers in these areas. The decree offers special assignments and financial incentives as well as non-financial incentives (Pusgunakes, 2010). To improve distribution in rural remote regions, the central government has encouraged local governments to prioritize the deployment policy for remote and very remote areas and to provide additional financial and non-financial incentives for health workers. Variation in provision of incentives among districts depends on several factors such as fiscal capacity, attention to the health sector, and the availability of local resources (Kurniati & Efendi, 2010).

Overall, a supportive environment exists in health policy and strategy, capacity building policy and a growing recognition of the problem at policy level, supporting the regions which lack health personnel. To achieve both adequate availability and an equitable distribution of health service providers, the government has set the following targets which have been translated into need for additional health personnel by 2010 (Table 2). The data in Table 2 suggest that private sector providers are included but underreported.

No	Types	Indicator /100,000 population (2010)	Need of Health Personnel (2010)	Number of Health Personnel up to 2006	Ratio /100,000 population (2006)
A	Medics		117,969	68,227	
1	Specialist	9	21,234	12,374	5.53
2	General Practitioner	30	70,782	44,564	19.93
3	Dentist	11	25,953	11,289	5.05
В	Nursing		587,487	395,688	
4	Nurse	158	372,783	308,306	137.87
5	Midwife	75	176,954	79,152	35.40
6	Dental Nurse	16	37,750	8,230	3.68
С	Pharmaceutical		63,703	49,313	
7	Pharmacist	9	21,234	10,207	4.56
8	Assistant Pharmacist	18	42,469	39,106	17.49
D	Public Health		42,469	27,833	
9	Graduate of Public Health	8	18,875	9,739	4.36
10	Sanitarian	10	23,594	18,094	8.09
E.11	Nutrition	18	42,469	15,342	6.86
F.12	Physical Therapy	4	9,438	5,290	2.37
13	Medical Technique	6	14,156	10,318	4.61

Table 2: Health personnel, 2006 (BPPSDMK, 2008)

Even though there are no absolute norms on the optimum ratio of health workers to population, WHO has identified 2.28 per 1,000 population as the "threshold" density of doctors, and allowing for uncertainty, nurses and midwives at 2.02 to 2.54. Countries that fall below that threshold are very unlikely to achieve 80% coverage of measles immunization, skilled attendance at birth, and reducing maternal, infant and under-5 mortality rates and to meet the health related Millennium Development Goals (MDGs) (World Health Organization, 2006).

Challenges

Shortage and Inequitable Distribution of Health Personnel

There are few sources of publicly available survey data that can be used to estimate the current stock of health workers in Indonesia. The most recent health workforce review conducted by the World Bank found that in Java-Bali, the most populous region in Indonesia, the doctor/populace

ratio is 1 doctor for every 3,000 people in urban areas, while in rural areas it is only 1 doctor for every 22,000. The number of doctors per population outside Java-Bali is higher, but still only 1 doctor for every 12,000 people in rural areas, and 1 for every 15,000 people in remote areas, while urban areas have 1 doctor for every 2,430 people in urban area (World Bank, 2009). Midwives are more equally distributed, possibly due to the nationwide Desa Siaga (Alert Village) program. This program requires at least one health worker to be deployed in a village, so that more contract midwives are recruited and assigned to work in the village health post (Poskesdes) or village maternity ward (Polindes) (Kurniati & Efendi, 2010). The data on nurses is unreliable due to voluntary registration. In rural and remote areas, health services rely heavily on nurses, as was found in the recent cases of East Kalimantan, where only nurses practice in underserved areas, carrying out medical treatments they are not allowed to perform under the Medical Practice law (Kompas, 2010).

Potensi Desa (PODES) survey provides the most up-to-date information, the latest round having been conducted in 2006. With PODES data it is possible to know the number and distribution of the health workforce inside the country. Figure 1 shows the imbalance in distribution across the provinces among 3 cadres. The highest number of health workforces remain in Java/Bali. The situation is worse outside Java/Bali.

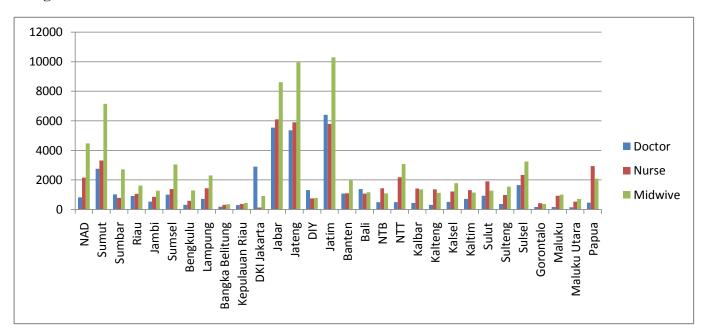


Figure 1. Distribution and Number of Health Workforces

The table 3 shows that the distribution of midwives in Java-Bali is higher than outside Java-Bali, per 100,000 populations. These data show that midwives are equitably distributed in Indonesia.

	1996		2	006
	Number	Per 100,000 populations	Number	Per 100,000 populations
Java/Bali	33.436	27.5	33.755	26.1
Urban	9.874	23.8	15.388	25.1
Rural	23.562	29.5	18.367	27.1
Outside Java/Bali	37.579	46.8	45.906	52.8
Urban	8.084	45.1	12.906	45.4
Rural	23.487	46.0	20.957	55.1

Table 3. Number of Midwives in Indonesia

Bappenas' 2005 study in 32 districts in 7 provinces found that the District Health Office and Community Health Center also suffered from an insufficient number of health workers (Bappenas, 2011). The Government Decentralization Survey-2 also reported that 50% of District Health Offices indicated insufficient numbers of health cadres at the district level, either in Java/Bali or outside Java/Bali (World Bank, 2009).

HRH situation in decentralization system

Enactment of the law on local autonomy in 1999 marked the beginning of the decentralization system in Indonesia, but implementation of this system was interpreted differently by each level of government. Districts perceived that transferring autonomy gave them more independence in regulating and managing their own affairs, including the health sector. Therefore, they ignored the line coordination to the upper level, no longer considering it a command line. But the central level still wanted to control the local level.

An effort to clearly define the roles and responsibilities of national and sub-national levels was supported by Law number 32/2004 on Regional Governance which was further regulated by Government Regulation (PP) number 38/2007. However, further clarification of the PP is still needed. Implementation of the decentralization has affected health workforce issues:

- a) *Transferring the employment status of civil servant from the central to the local level.* Approximately 70% of central PNS who worked in the local facilities were administratively transferred to the management of the local government. Up to the year 2007, the proportion of civil servants is 71% at the district level, 8% at the province level and 21% at the central level (Menpan, 2008).
- b) The local government has more autonomy in providing and managing public facilities. The rapid formation of new provinces and districts/municipalities has been followed by an increased number of health facilities, particularly district hospitals and community health centers. The number of community health centers has increased within the last five

years by 3% annually. However, this development is not adequately followed by deploying sufficient health personnel in accordance with the national standard (DSP or Daftar Susunan Pegawai).

- c) *The central level still maintains the power in contracting strategic health workers.* Under the PTT scheme, recruitment and deployment of medical staffs and midwives are controlled by the MoH, but the districts are responsible for proposing the required number of personnel. The districts still have the authority to contract health workers using local budget, but many districts lack the fiscal capacity to do so.
- d) Breakdown of the information system, including health workforce information. The districts do not feel obligated to send their health workforce data to the upper level. Thus, health workforce planning is not supported by adequate and accurate data.
- e) *Rotation of health workers among the administration regions*. Although the central level controls the system, mobility of health personnel among different regions is more restricted during the decentralization process. The process of staff transfer from one region to another requires approval from both regions' local governments before agreement from the central level, involving complicated bureaucracy on administration and financing.
- f) Problems of excess vs shortage of health workers. Restriction on mobility of civil servants and the abolition of Wajib Kerja Sarjana (a compulsory service for new university graduates) have adversely affected transfer of health personnel from health facilities which have an excess number of health workers to health facilities with a shortage. Such shortages are usually addressed by proposing recruitment of new civil servants to the central level, although the vacancy quota is quite limited. Paradoxically,

districts or health facilities with an excess number of health workers must struggle to find innovations to increase utilization of their staffs.

g) The growing number of health workforce education institutions (pre service training). To improve recruitment and retention, many local governments open new health workforce education institutions. Two new medical schools will be opened in two provinces in eastern Indonesia. The private sector also plays a significant role, as 84% of the midwifery schools and 52% of the nursing schools privately managed. However distribution also remains the issue, as more than 50% of these schools are concentrated in Java. Another issue is quality, as most of the schools also use resources (lecturers, clinical instructors and practical field work) from public institutions (World Bank, 2009).

Decentralization has been seen as a challenge in the development of human resources for health. Improvements are still needed in dividing tasks and functioning between central and local government. The implementation of decentralization should be viewed as an opportunity to improve the human resources situation in Indonesia.

On Track and Off Track

Human resources are one of supporting unit in achieving Millennium Development Goals. Therefore, it is important to identify where we stand and mobilize more resources to meet the off track in MDGs. Three of the eight MDGs address health issues and aim at reducing child mortality (Goal 4), improving maternal health (Goal 4), and combating HIV/AIDS, malaria and other diseases (Goal 6) (Bappenas, 2012). The achievement of each goal has been documented and identified by Government of Indonesia. As stated by Bappenas, Indonesia has significance

achievement of particular target, since it represents the half-way point towards the 2015 targets

(Bappenas, 2011).

Table 4. MDGs Indicator of Indonesia

Indicator	1990	2007	Target	Remarks	Status
Under-five mortality rate	81	44	32	Decreasing	Likely to
(per 1,000 live births)					achieve
Infant mortality rate	57	34	19	Decreasing	Likely to
(per 1,000 live births)					achieve
Maternal mortality ratio	390	228	110	Decreasing	Need
(per 100,000 live births)				-	improvement
HIV/AIDS prevalence		5.6	Reverse		Need
(per 100.000)					improvement

According to the data in table 4, child mortality based on the infant mortality rate has shown a great deal of progress and is likely to be achieved. Similar improvements have also been made in the terms of reducing mortality rates for children under five. Maternal mortality rate and HIV/AIDS prevalence however shows a less then encouraging trend. Because some of the targets showing that the goals are on the track or decreasing, a lot of effort can be put to push the progress. At the same time, competent and committed health workforce can be deployed to expand and improve HIV and AIDS services.

Conclusion

Both the causes and the solutions to human resource problems in the health sector are complex. The problems are rooted in political, economic, cultural, and health systems. The solutions depend on numerous inputs – funds, education and training programs, data and working conditions – over which HRH policy makers often lack direct control. A number of documents indicate that many resources have been mobilized, yet the MDGs still need a great effort and innovative strategy to be fully implemented. A few suggestions may be considered to accelerate MDGs:

- a) Improve collaboration in research policy on health human resources, education, and training, and build a strong network for the development of a health human resources plan that is based on evidence. This is necessary to support the efforts of advocacy or coordination between relevant departments in local government and for the provision of health human resources as needed.
- b) Develop a country specific health workforce policy framework and planning method.
- c) Encourage coordination with all relevant professional organizations to approve the authority that can be given to health personnel who served in rural and remote areas.
- d) Conduct a study to explore any possibility of enhancing the performance of the health workers in rural and remote areas through task shifting with additional training appropriate to the needs and characteristics of the local area.
- e) Develop guidelines for effective and supportive supervision to underserved areas which have limited support resources.
- f) Conduct a study of human resources for the health situation, based on evidence or research.
- g) Develop a fair incentive system.

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