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### LITERATURE REVIEW ARTICLE

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## Availability and Diversity of Health Human Resources at Public Health Center (PHC) In Indonesia

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### ABSTRACT

Health human resource is a strategic issue in the implementation of government's primary health services in Indonesia. The problem of distribution of both the number and diversity of health human resources in Indonesia is still a problem, making it more difficult to achieve the national health development goals equally. This was a descriptive research with literature review approach. Study literature was conducted by reviewing the regulation in Indonesia, journal and other articles related to health human resource problem. Distribution of health human resources at Public Health Center (PHC) in Indonesia was not evenly distributed. Some of PHC have health workers exceed the standards, while others were shortage of health personnel. In addition, the problem of synchronization of health human resources data derived from documents issued by the central and local governments was still a problem in Indonesia. It is necessary to formulate the planning of health human resource needs in each primary health care, this is due to differences in characteristics and needs. Central and local government work together to solve health human resource problems in Indonesia both on availability, diversity and quality of health human resources.

**Keywords:** Availability, Diversity of types, Health human resources.

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### INTRODUCTION

#### Background

Public Health Center (PHC) is a government-owned health service facility that organizes public and individual health efforts of the first level, which taking promotive and preventive efforts as priority to achieve public health status. Health development in Indonesia is also concerned with the development and empowerment of health human resources, to ensure the availability, diversity and distribution of health human resources throughout Indonesia.

Health human resources at PHC are a strategic issue in the National Health System. Quality health human resources in sufficient quantities need to be distributed equally and benefit optimally in an effort to ensure the implementation of health services. The problem of distribution of both the number and diversity of health human resources in Indonesia is still a problem, making it more difficult to achieve the national health development goals equally. Whereas the availability and diversity of health human resources at first-rate health facilities is the spearhead of health services in Indonesia to achieve better health development goals. Availability of personnel and facilities influences the performance of PHC<sup>(1)</sup>.

Based on the above explanation the author wants to know how the government overcome the problem of distribution of both the number and diversity of human health resources in Indonesia.

### METHODS

The type of this study was descriptive with literature review approach. Literature review was a study that examines or critically reviews knowledge, ideas or findings, and formulates theoretical and methodological contributions to a particular topic. This study was "literature review" with descriptive analysis characteristic by

studying regulation in Indonesia, journal and other articles related to health human resource problem. The data obtained then became material analysis of the discussion in this study.

## RESULTS

### Public Health Center Overview in Indonesia

Table 1. The number of PHC in Indonesia

Year	The Number of PHC		
	Inpatient	Outpatient	Total
2015	3,396	6,358	9,754
2016	3,411	6,356	9,767

The number of PHC in Indonesia up to December 2016 is 9,767 units, consisting of 3,411 units of inpatient health centre and 6,356 units of outpatient health centre. This number increased compared to the year 2015 as many as 9,754 units, with the number of inpatient health centres as many as 3906 units and outpatient health centres as many as 6,358 units.

Increasing the number of PHC does not directly describe the needs of primary health care in a region. The fulfillment of PHC needs can be seen in general from the ratio of the number of PHC to the sub-district. The PHC to sub-district ratio in 2016 was 1.36. This shows that the ideal ratio of PHC to sub-district is at least 1 PHC in 1 sub-district, nationally has been fulfilled, but it should be noted that PHC distribution in all sub-districts in Indonesia is uneven<sup>(2)</sup>.

### Health Human Resources at Public Health Center (PHC) in Indonesia

Table 2. Health human resources at Public Health Center in Indonesia

Health Human Resources	n	%
Midwives	120,091	35.16
Nurses	98,864	28.95
General Practitioners	16,527	4.84
Pharmacist	10,171	2.98
Nutritionist	9,331	2.73
Sanitarian	9,246	2.71
Dentist	6,618	1.94
Public health Personnel	12,136	3.55
Clinical Laboratory Technologist	6,481	1.90
Health Supporters	52,071	15.25

Table 2 showed that in 2016 health manpower at PHC in Indonesia is 341,536, consisting of 289,465 health workers (84.75%) and 52,071 health supporters (15.25%). The proportion of health workers in most health centres is midwives as much as 35.2%, and the least are clinical laboratory technology experts of 1.9%<sup>(3)</sup>.

In addition, the insufficient number and type of health personnel at PHC such as doctors, dentists, nurses, midwives, environmental health workers, pharmaceutical personnel, nutrition workers, public health workers and health analysts in some regions of Indonesia. Nusa Tenggara-Maluku-Papua province has the largest proportion of health centres that are short of health personnel, doctors (50.86%), dentists (68.5%) and midwives (43.9%).

## DISCUSSION

The availability of health human resources in the implementation of health services plays an important role, especially in the current era of National Health Insurance. According to the Regulation of the Minister of Health of Indonesia, human resources of health in PHC consists of health workers and non-health workers. The type and number of health personnel and non-health personnel is calculated based on the workload analysis, taking into account the number of services held, the number of people and their distribution, the characteristics of the work area, the area of work, the availability of other first-level health care facilities in the work area.

Problems health human resources data in Indonesia is also an important issue<sup>(4)</sup>. The problem of health human resources data is the synchronization of health human resources data derived from documents issued by

central and local government. Data is a tool for measuring or evaluating programs to address problems. According Werni<sup>(1)</sup> that If the data used as a measuring tool is invalid or not in accordance with the facts of the field then the data is not feasible used to overcome the problem. Another opinion revealed that availability of personnel and facilities affect the performance of primary health care.

Health human resource requirement planning which covers health management human resources aspect as a whole is needed. Planning of health human resources needs is one of the main focuses on the development of health human resources to ensure the availability, distribution and improvement of the quality of health human resources. This planning should be formulated as a reference in determining the procurement of health human resources. Local governments are also expected to have the authority to recruit health human resources in their respective regions as local government employees, in order to meet the needs of health services in their regions. The local government must also make the planning of health human resources needs in each PHC owned<sup>(5)</sup>.

Ministry of Health through the Head of PPSDMK Agency in his presentation entitled "Strengthening Health Human Resource Management in the Division of Central and Regional Authorities" has formulated a resolution for health human resources issues, among others:

Table 3. The role of central government and local governments in addressing health human resources issues

Health Human Resources Problems	The role of the Central Government	The Role of Regional Government
The number and distribution of health personnel is uneven	<ul style="list-style-type: none"> <li>a. Advocating to allocate employee formation as required;</li> <li>b. Advocate with regard to the proposal of the Regional Health Office;</li> <li>c. Develop budgeting mechanism for health personnel salary fulfillment in areas that are not desirable.</li> </ul>	<ul style="list-style-type: none"> <li>a. Prepare the Health HR plan required;</li> <li>b. Addressing the maldistribution in its area with Local Regulations, and strengthening coordination in the placement of health workers;</li> <li>c. Local governments with low fiscal capacity propose the need for staff formation and allocation supported by the budget of Non-Physical Special Allocation Fund.</li> </ul>
Availability of health human resources	<ul style="list-style-type: none"> <li>a. Assign specialist doctors with priority in areas not desirable;</li> <li>b. support the efforts of specialist doctors assignments to areas not desirable;</li> <li>c. Allocation of "Nusantara Sehat" assignment at PHC in underdeveloped areas, borders and islands.</li> </ul>	<ul style="list-style-type: none"> <li>a. Develop a plan of specialist needs and location of hospitals as well as prepare support in the form of regional incentives and the availability of health equipment in health service infrastructure in the area;</li> <li>b. Recruiting health promotion contractors at every PHC such as Environmental Health, Nutrition, Nurse, Midwife and Laboratory Analyst.</li> </ul>
Health human resources data	Allocation of health human resources information system online	Data collection, mapping, guidance and supervision of health human resources in the region

## CONCLUSION

The problem of utilizing the availability and diversity of health human resources in PHC needs cooperation between the central and local government. Resolves the health human resources problem must be handled immediately because health human resource problem is a strategic issue in achieving health development goals in Indonesia.

Further research needs to be done to explore the achievement of problem solving health human resources in Indonesia. This is important because without the existence of qualified human health resources, other health programs cannot be implemented. The results of this research evaluation can be material for the development of innovations and future strategies for increasing the quantity and quality of human health resources in Indonesia.

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