

## HEALTH SECTOR DECENTRALIZATION AND ITS IMPLICATION TO HEALTH SERVICES IN INDONESIA

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### ABSTRACT

**Background:** After more than a decade, in what way decentralization has affected health service and population health status in Indonesia, is still partly known. This paper aims to review to what extent the health sector decentralization has affected health services in Indonesia, especially in access and health systems management.

**Methods:** We conducted systematic search studies using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). We searched for relevant studies using keywords 'decentralization' OR 'decentralisation' AND '(public health)' AND 'effect' OR 'impact' AND 'reform' AND '(health inequalities)' AND 'Indonesia' on electronic sources such as PROQUEST, Science Direct, and EBSCO Host. The articles then filtered using predetermined criteria and duplication removal.

**Results:** Database search resulting in 628 articles in PROQUEST, 0 articles in Science Direct, and 13 articles in EBSCO Host. The screening result was 5 eligible articles. We found fragmented health services jeopardized equality of access in health services and worsen health disparities among districts that occurred after decentralization. The worsen gap between the most developed provinces of Java-Bali and those of other island groupings has affected the community's health status. Low local government's capacity in planning, managing and utilizing health resources was the most reported evidence in the decentralized health system.

**Conclusion:** This study concludes that good capacity of local government, coordination, and monitoring system between central and local government, the partnership with private sectors and community empowerment are essential to achieving better health outcome result in decentralized Indonesia.

**Keywords:** Decentralization, health services, health policy, indonesia.

## DESENTRALISASI SEKTOR KESEHATAN DAN IMPLIKASINYA TERHADAP PELAYANAN KESEHATAN DI INDONESIA

### ABSTRAK

**Latar Belakang:** Selama lebih dua dekade desentralisasi, pengetahuan tentang pengaruh desentralisasi terhadap pelayanan kesehatan dan hasil kesehatan masih sedikit. Studi ini bertujuan untuk meninjau dalam literatur tentang sejauh mana desentralisasi sektor kesehatan telah mempengaruhi layanan kesehatan di Indonesia, terutama dalam akses dan manajemen sistem kesehatan.

**Metode:** Metode penelitian yang digunakan yaitu Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Studi yang relevan ditelusuri menggunakan teknik pencarian kata kunci pada beberapa basis data elektronik yaitu Proquest, Science Direct, dan EBSCO Host. Kata kunci yang digunakan adalah 'decentralization' OR 'decentralisation' AND '(public health)' AND 'effect' OR 'impact' AND 'reform' AND '(health inequalities)' AND 'Indonesia'. Hasil pencarian kata kunci disaring menggunakan kriteria yang telah ditentukan sebelumnya dan menghilangkan duplikasi.

**Hasil Penelitian:** Hasil pencarian database diperoleh 628 artikel dalam Proquest, 0 artikel dalam Science Direct dan 13 artikel dalam EBSCO Host. Hasil penyaringan menghasilkan 5 artikel yang memenuhi syarat. Studi menemukan bahwa kesetaraan akses pelayanan kesehatan terancam oleh layanan kesehatan yang terfragmentasi dan perburukan kesenjangan kesehatan antar kabupaten setelah desentralisasi. Kesenjangan semakin parah terutama antara provinsi yang berada di Jawa-Bali dengan kelompok pulau lain sehingga berpengaruh pada status kesehatan masyarakatnya. Rendahnya kapasitas pemerintah daerah dalam merencanakan, mengelola, dan memanfaatkan sumber daya kesehatan adalah bukti yang paling banyak ditemukan.

**Kesimpulan:** Studi ini menyimpulkan bahwa kapasitas yang baik dari pemerintah daerah, koordinasi dan sistem pemantauan antara pemerintah pusat dan daerah, kemitraan dengan sektor swasta dan pemberdayaan

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masyarakat sangat penting untuk mencapai hasil kesehatan yang lebih baik di Indonesia yang terdesentralisasi.

**Kata Kunci:** Desentralisasi, pelayanan kesehatan, kebijakan kesehatan, indonesia

## INTRODUCTION

Health sector decentralization has been popular yet challenging movement since it was launched in the late 1990s in Southeast Asian Countries. Health sector decentralization has changed the distribution of health resources in some ways.<sup>1</sup> The shift of authority from central to local has raised local autonomy enthusiasm and created opportunities for the citizen to be actively involved in any governmental matters including their health matters.<sup>1,2</sup> Under decentralization, local government accounts greater responsibility for health service delivery and have better opportunities to develop bottom-up health program which suits better the local needs. Decentralization also provides a legal basis for the local government to take a much more active role in social service delivery, and to allocate their budget in complete autonomy.<sup>3</sup> Therefore, the percentage of local government expenditure allocated for healthcare, in general also indicates different levels of concern for the health sector.<sup>4</sup> These concepts leave an expectation that decentralization will improve efficiency, service delivery innovation, quality, and equity in healthcare, which in turn will improve the health status of the population.<sup>4</sup>

A study by Amador et al on low middle income decentralized countries found that decentralization was to generate more resources for health. This study also reported negative effects to health resources management such as constraints in availability of medical supply due to the increase in bureaucracy and lack of management skills in the periphery areas. Another important finding on this study is decentralization has brought positive effects on adult, child and maternal mortality.<sup>4</sup>

Decentralization was the chosen method to address crises in Indonesia after three decades of centralized authoritarian under President Soeharto's New Order. Unlike any other countries, the reason behind decentralization in Indonesia is more to the policy action to address the crises rather than as an attempt to gain efficiency in governance performance.<sup>5</sup> Under the Law 22/1999, the primary responsibilities for a large range of government functions were transferred to the district level. This law also came with the consequences that districts are required to carry out government functions in several areas, including health policy. By this law, local governments were assigned to increase control over managing health facilities and personnel, as well as how to implement health policy and programmes, and how to allocate their budget to meet the health needs of the community.<sup>6</sup>

In 2004, the decentralization law (Law 32/2004) was updated to strengthen provincial government authority by making health care mandatory function not only of the district but also of provincial governments. Under these circumstances, health policy is designated as an area of shared responsibility among the district, provincial, and national authorities.<sup>3</sup> Law 23/2014 even strengthened the position of provincial governors as the central government's representatives in the districts. The law gave the mandate to the central government to set the standards and give a sanction to the regional government that falls short of the standards.<sup>5</sup> This meant more power and control for the central government to intervene in some critical issues such as the population's health. However, the compatibility between the standards set by the central government and local needs is once again a major challenge in the spirit of effectiveness, efficiency, and

equity to be achieved through decentralization.

Decentralization is supposed to increase the autonomy of Indonesia's diverse periphery, thereby allowing local cultural expression to thrive.<sup>5</sup> However, in terms of health equality, Indonesia's geographical and cultural diversity brings more challenges for the decentralized, especially for the farthest and the most remote area. Some studies found that decentralization might have widened health disparities in Indonesia. Disadvantages for underdeveloped areas.<sup>4,7,8</sup> After more than a decade, in what way decentralization has affected health service and population health status in Indonesia, is still partly known.

This paper aims to review evidence in the literature about to what extent the health sector decentralization has affected health services in Indonesia. This is a study about access to health services and health systems management under decentralization policy. The access to health services was studied through access improving-related efforts and health outcomes that occurred in decentralization period of time. While the health systems management is assessed through the findings related to the existing local government practices, roles, strategies, or innovation in decentralized health systems management.

## METHOD

We conducted systematic search studies using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methods based on electronic sources from several online databases. We searched Proquest, Science Direct, and EBSCO for relevant studies. Systematic literature review methods extract and analyze data accordingly to the pre-specified research questions. We only targeted for electronic literature from the internet search. We developed a search strategy using headings

terms and keywords that we already identified a priori. This strategy was adapted for every database's search terminology for consistency or simplified if it is needed to support the depth of research. We also reviewed all of the title and abstract from the articles search result in case of database search engine mechanisms might have missed some relevant articles.

The advanced search was done using the following keywords: 'decentralization' OR 'decentralisation' AND '(public health)' AND 'effect' OR 'impact' AND 'reform' AND '(health inequalities)' AND 'Indonesia'. To narrow down the result, we filtered the articles by publication year, type of article, language, and location categories using database's built-in search engine. We seek for articles that were published in the year of 2010 to 2018, free full text/ open access, written in English, and the studies were taken place in Indonesia. Duplicate articles were removed. Selected articles were assessed for relevance manually by reviewing the title and abstract of full text using prior inclusion criteria. The following inclusion criteria are 1) population of the studies was in Indonesia; 2) highlighted outcomes was the effect/impact of decentralization to health sectors; 3) the study design was an observational study that included cross-sectional, case report or case study. We conducted a quality of studies for every remaining eligible article using Joanna Briggs Institute (JBI) guidelines tools for cross-sectional<sup>9</sup> and qualitative studies.<sup>10</sup> The last step was creating standardized forms for data extraction from 5 full-text articles on the following information: title, first author, year, country, study design and population, study outcomes, and extracted variables.

Extracted data from eligible articles were categorized and analyzed into two variables namely access to health services and local health systems management. Since the number of studies limited, we did not pool the result quantitatively for each variable. This study did not analyze the findings or variables

using statistical correlation. This might reduce the power of the study in identifying the causal effect between variables. However, the findings were substantially significant based on their directness of evidence and consistency in the methodology of selected studies. Ethics approval was not required as no primary research was carried out.

## RESULTS

The keyword search described in the methods identified 587,954 articles from all databases. The result then filtered by the publication year 2010-2018, type of articles, free full text, written in English and study location in Indonesia resulting on 628 articles in PROQUEST, 0 articles in Science Direct, and 13 articles in EBSCO Host. We screened all articles list resulting on 37 articles

excluded for duplication and 181 articles excluded because of relevantly. The next step is to select studies manually from the remaining 423 abstracts using predetermined inclusion criteria. This step resulting in 36 articles were excluded because of the population was not in Indonesia only, 362 articles were excluded because of outcomes were not related to the impact of health sector decentralization, and 20 articles were excluded because of the study design were not an observational study. Finally, 5 eligible articles were selected for data extraction and the critical appraisal was shown in Figure 1. From the articles, we conducted journal critical appraisal using the Joanna Briggs Institute (JBI) guidelines tools for cross-sectional<sup>9</sup> and qualitative study.<sup>10</sup>

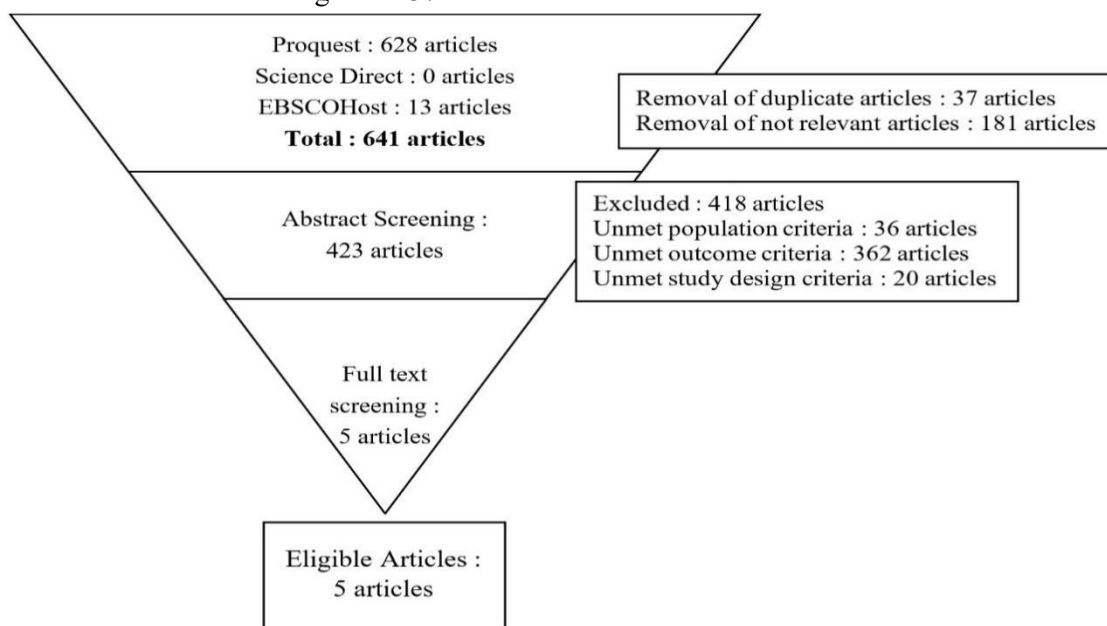


Figure 1. PRISMA flow diagram of the number search yielded, excluded, and reviewed

In access to health services, one study pointed out evidence that decentralization has offered greater access to health services since there were shared responsibilities between the local and central government in the provision of care.<sup>3</sup> While other studies confirmed that decentralization did nothing significant differences.<sup>4,7,8,11</sup> The evidence showed that decentralization has affected the provision of

health care by the increasing numbers of hospital and health centers,<sup>4</sup> pro-poor health policy (free health services schemes),<sup>3</sup> and community's health efforts.<sup>11</sup> The 3 out of 5 studies measured the effects of decentralization to health services through child and maternal health indicators such as immunization status among children, facility-based childbirth, antenatal care received, and

neonatal mortality rates.<sup>4,7,8,11</sup> These indicators were globally used to the represented level of access to essential health services.<sup>12,13</sup> However, 3 out of 5 studies found that decentralization has no significant result to improve performance on the maternal and child health services and low productivity in public service has resulted to population tend to move to private health provider.<sup>4,7,8</sup>

In the local health systems management, evidence showed problems on health systems management that arose from the shared responsibilities between central and local government. There were responsibility confusions at the different hierarchy of government and furthermore it starts to impact the health sector's performance accountability.<sup>7,8</sup> The 4 out of 5 studies showed evidence that local government's good capacity and capability were necessary to achieve well-performed successful health decentralization.<sup>4,7,8,11</sup> Theoretically, the allocation and utilization of local health expenditure were the important parameters that indicated the local government's degree of concern to health sectors. However, evidence from several studies showed a large amount of local health expenditure not always followed by expected outcomes since the most proportion of money spent on salaries and other operational expenditures.<sup>4,7,8</sup> Besides that, decentralization has made financing health services even more complex with the involvement of local parliament approval on the allocation of local resources. The allocation of resources in the health decentralization has become a political rather than a technical decision.<sup>7</sup> The studies suggested that local's discretion in how they manage their health resources were crucial since they are accountable to make the best decisions for local's health population with limited resources.<sup>7,11</sup> The evidence from all of 5 selected studies proved the general premise that decentralization has affected equality of health services across districts in Indonesia. The equality of access to health services was

jeopardized by fragmented health services and worsening health disparities among districts due to decentralization reform.<sup>4,7,8</sup> Even though not all of the evidence about worsening health disparities statistically significant due to incomplete or missing data constraints, some evidence reported were strengthened by theories and related literature.

## DISCUSSIONS

### Access to Health Services

Access to health services referred to the ease of gaining needed health services. Access to health services includes various dimensions of geographical access, availability, affordability and acceptability.<sup>12</sup> According to the World Health Organization, accessibility included 3 dimensions which are physical, economic (affordability), and information. Availability of good health services means reasonable reach of those who need them which includes opening hours, appointment systems and other aspects of service organization and delivery that allow people to obtain the services when they need them. Affordability is a measure of people's ability to pay for services without financial hardship, this includes not only the price but also indirect and opportunity costs. Affordability is influenced by the wider health financing system and by household income. While information accessibility includes the right to seek, receive and important information and ideas concerning health issues.<sup>13</sup> Access to health services is an essential driver of population health outcomes. Thus, health care reforms should be able to improve population outcomes by improving better access as well as addressing services gaps.

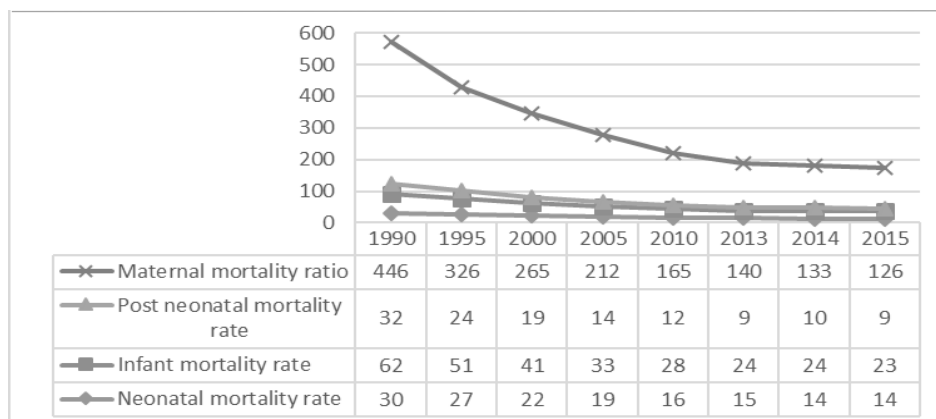
Health sector decentralization aims to make health services more accessible to people by catalyzing the input components as such as health resources management.<sup>14</sup> Health resources management authority were delegated from central to local government.

With this scheme, health resources were managed by an authority that knows what is best for their people. Local government must be able to provide public services that suit the needs of local communities and targeting benefit recipient more accurately. It was widely expected that services would improve as local governments now had both more adequate funds and the responsibility for services.<sup>3,14</sup>

A study found that decentralization has increased access through a growing number of health care facilities (hospitals and health centers).<sup>4</sup> One of the plausible explanation for these findings were found in the study by Hendarti et al which local governments are more interested in physical development, rather than the non-physical program.<sup>14</sup> The significant increase in the number of hospitals and health centers in recent years showed that Indonesia's health development direction is still oriented towards physical development. The growing numbers were not followed by even distribution among districts. Health services have proven to be different between regions which are also influenced by social, economic and regional factors.<sup>15</sup> The health infrastructure development that was massive after decentralization may increase the physical access but not always followed by the health outcomes. As result, worsen gap on the community's health status as well as widening inequities occurred between the most developed provinces of Java-Bali and those of

other island groupings.<sup>4,7,16</sup>

As mentioned earlier, child and maternal health were the most highlighted indicators that were measured as the outcomes of health sector decentralization. Child immunization coverage, neonatal and maternal mortality ratio were indicators that are globally used to represent the level of access to essential health services.<sup>12,13</sup> From Figure 2 we can see that from 1990 to 2000 Indonesia showed an impressive result in reducing maternal mortality ratio by 40,58% and postneonatal mortality rate by 40,63%. At the same time, the infant mortality rate and neonatal mortality rate also reduced by 33,87% and 26,66% respectively. However, after decentralization in 2001, the rate reduction of child and mother mortality were slowing down.<sup>7,8</sup> Another evidence from a study by Maharani and Tampubolon highlighted decentralization not necessarily improves child immunization coverage in Indonesia. Free immunization services program that was offered in some districts did not guarantee a better outcome in immunization coverage. The increasing number of village health posts (posyandu) per 1,000 population was the way which could significantly improve the probability of children getting full immunization.<sup>4</sup> Evidence from a study by Pardosi et al shown that community efforts were the strategies has been proven to be effective ways of promoting behavioral change and reducing child mortality even with limited resources.<sup>11</sup>



**Figure 2 Indonesia Child and Maternal Health Indicator in selected years**  
 Source: World Health Organization. (2017). The Republic of Indonesia Health

To overcome barriers in access, focus on addressing the key supply side is essential. The direction of the development of access to health services is still oriented to the curative effort, where a big amount of money goes. Access to health promotion and preventive efforts is still being ruled out. The focus of increased spending on health through the health insurance scheme is on curative care services. Thus, the allocation for public health and prevention is relatively low, and the allocation for curative services is high.<sup>17</sup> Health decentralization exacerbates the existing situation by making policy differences between regions increasingly surface. Not all of the policies addressing barriers in promotive and preventive health access.<sup>18,19</sup>

### Health Systems Management

Under the decentralization, the health of the population depends heavily on the policies, capacities, and capabilities of the local authorities. However, local government with a high degree of autonomy tend to be rare in developing countries.<sup>20</sup> Even though the local government was delegated with the authority to provide local public services, health remains a national responsibility. The key actors in the organization of the health service are the Ministry of Health and the Ministry of Home Affairs. Government Regulation No. 38 of 2007 delineated three shared functions which are legislation and regulation, financing, and service delivery that carried out by central, provincial, and district/municipality level of governments.<sup>17</sup> They share responsibilities over the organization of the health system.

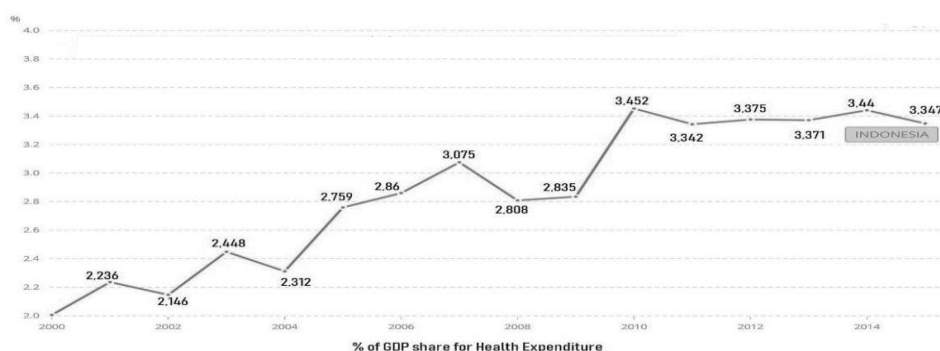
In the health policy context, local government has the authority to regulate and manage the region according to the aspirations and interests of the community as long as it does not conflict with the national legal order and the public interest.<sup>21</sup> The law 23/2014 gives the mandate to the central government

to run the equalizer role in maintaining health services equality. Because of the condition, the ability of the local government throughout Indonesia varies, some health services standards were set by the central government to prevent worsening disparities in services among Indonesia's regions. The implementation of basic health services guided by the Health Minister Decree Number 43/ 2016 about Standards Minimum of Health Services/*Standard Pelayanan Minimum Bidang Kesehatan (SPM)*. The law comes with the sanction to Head District that falls short of the standards and in the future. The allocation of central's fund transfer to the regions also will be based on the ability of the regions to achieve SPM targets. Therefore regions with less resource capacity will be a priority in the allocation of fund transfers.<sup>5</sup> As in outcome context, SPM aims to strengthen the promotive - preventive efforts so that it is expected to impact on the decline in the number of curative cases.<sup>22</sup> The local government prepares the SPM achievement plan by setting annual targets and the deadline for achieving the SPM per ministerial regulations. SPM also aimed to provide guidance for local governments in planning and costing health program. Thus, SPM regulation is facilitating the local government to carry out appropriate public services for the community and as an instrument for the public to control over the government's performance of public health services in decentralized Indonesia.<sup>23,24</sup>

The effectiveness of SPM implementation is very dependent on the capability and capacity of each regional government. Some obstacles in the implementation of SPM were the low financial capacity of regions to maintain basic service delivery, low commitment, and concern of regional actors, limited resources as a result of mismanagement in the administration of regional governance. low effectiveness of monitoring, as well as evaluation from the Ministry.<sup>23</sup> From the

studies, low local government's capacity in planning, managing and utilizing health

resources was the most reported evidence in the decentralized health system.<sup>4,7,8,11,25</sup>



**Figure 3 Health Expenditure as a share (%) of GDP in Indonesia, 2000-2015**

Source: <https://data.worldbank.org>, accessed on Sept 18<sup>th</sup>, 2018

In health funding, Indonesia's health expenditure has been significantly increased over the last decade as shown in Figure 3. This indicates an increasing trend in the focus of government attention to health. The key issue is how to manage and use the existing funds appropriately on strategic health programs for better health outcomes. Studies found that there has been little improvement in the performance of Indonesia's health system since decentralization occurred in 2001 even though there have also been significant increases in public funding for health.<sup>6,8</sup> One of the plausible reasons behind this is the low percentage of the health budget in many regions in Indonesia (range of 2.5-7%). A low rate of absorption of the health budget comes along with the allocation of resources has become a political rather than a technical decision and more proportion money of their health budget is spent on salaries and other operational expenditure.<sup>4,7,14,26</sup> Yet, several problems were identified due to the low rate of absorption of health budget among districts. The parameters for allocation of funding for the central level are not based on a formula that considers fiscal capacity and complicated funding mechanism and delays in disbursement of central funds.<sup>27</sup>

The public and private sectors deliver health services. In the past, the provision of public health was mostly undertaken by the

public sector.<sup>17</sup> But as demand for health services in Indonesia is increasing, coupled with a window of opportunity created through decentralization, there is a need for government to open the health sector for investment, resulting in a growing number of for-profit private providers. Government partnership with the growing private sector is one of the innovative financing for health strategies that can be considered to address health services funding issues at the local level.<sup>(8,28)</sup> This also means more open competition for services between the public and private sectors. As the population tended to move to the private sector providers,<sup>8</sup> it is important for local government to improve public's sector service performance, as well as strengthen the quality of private sector services through adequate monitoring.

Health human resources management is one important yet challenging issue in the era of decentralization. This is not only related to the transfer of personnel, but also competence, administration, and all aspects related to human resource management. Decentralization provides opportunities to carry out human resources management functions at the provincial or district/ city level such as recruitment, placement, empowerment, awarding and release. Also, in the condition where most of the districts are still reliant on central-district transfers,<sup>26</sup> local



government personnel's capacity and discretion become very crucial. Local government with weaker capacity but with greater needs often failed to present and defend their proposal in getting funding resources.<sup>7</sup> Changes to management must be done in responding to decentralization. These include the redefinition of organizational structure, functions, and responsibilities of health services between central and regional, and reallocation of health human resources.<sup>25</sup>

## CONCLUSION

Indonesia's health decentralization still keeps some strategic centralized features. The public system is administered with central, provincial and district government responsibilities. There is an almost equal division between spending at the central/provincial level and spending at the district/municipality level in total health spending. Besides, it also has a mixture of public and private providers and public and private financing. The success of the implementation of health decentralization is very dependent on the practices, abilities, and strategies of each region in organizing and mobilizing all available resources to achieve the goals. It is important for local government to acknowledge the important roles of the private sector to improve health sector performance. Good capacity and capability of local governments in planning,

organizing and utilizing health resources are vital to achieving successful decentralization.

Local governments need to develop collaboration with local community leaders and show a greater appreciation of community efforts as these strategies have been proven effective in promoting health outcomes with limited resources. Besides, strengthen the promotive and preventive health services requires the active involvement of the community in making themselves, their families and their environment healthy. As such, the community can do their part in creating access to their health.

This study concludes that the good capacity of local government, coordination, and monitoring system between central and local government, the partnership with private sectors and community empowerment are essential to achieving better health outcomes in decentralized Indonesia. We suggest that local government need to have more active roles in generating and implementing innovative health policy, mitigate market failures, improve equity and quality, and to enhance health performance. In the other hand, the central government should play the equalizer roles for public health outcomes, especially for people in the remote and disadvantaged area. Addressing the key supply-side barriers to accessing health care is crucial to improve health performance in remote and disadvantaged regions. Coordination and monitoring system between central and local government are some areas that need immediate improvement.

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## Annexes 1. Evidence on effect of decentralization to health services in Indonesia extracted from eligible studies

No	Study	Evidence	
		Access to Health Services	Health Systems Management
1	Has Decentralisation affected child immunisation status in Indonesia?, (Maharani and Tampubolon, 2014) <sup>(4)</sup>	<ul style="list-style-type: none"> <li>a) Decentralized health system does not guarantee improvement in a country's immunization coverage even might cause a wider gap in immunization coverage across districts in the decentralization era.</li> <li>b) An increasing number of village health centers (<i>Posyandu</i>) per 1,000 population gives a more significant probability for children getting full immunization rather than an increasing number of hospital and health centers (Puskesmas).</li> <li>c) Free immunization services program that offered in some districts did not guarantee a better outcome in immunization coverage.</li> <li>d) Determinant factors of better access to immunization were living in urban areas, the presence of birth attendant, higher mothers' education level, and household's income.</li> </ul>	<ul style="list-style-type: none"> <li>a) Only five districts prioritize health and allocate more than one-fifth of their expenditure for health, while some districts allocate less than 5%.</li> <li>b) In utilization, only less than half of all districts used all of their health budgets. More proportion money is spent on salaries and other operational expenditure (52.38 and 24.89%, respectively), while the expenditure for investment (facilities and infrastructure) comprises only less than 25% of total local government expenditure.</li> <li>c) Local health expenditure has no statistically significant effect on immunization coverage.</li> <li>d) Good capacity and capability of local governments are necessary for better planning, organizing and utilizing health budget to achieve successful decentralization.</li> </ul>
2	Is Indonesian Local Government Accountable to the Poor? Evidence from Health Policy Implementation, (Fossati, 2016) <sup>(3)</sup>	<ul style="list-style-type: none"> <li>a) Decentralization give more autonomy in targeting benefit recipients more accurately</li> <li>b) Shared responsibility between Central and Local Government has broadened the coverage of health service</li> <li>c) Politics environment in direct local elections creates more opportunity for better health services access (pro-poor policies such as free health care schemes)</li> </ul>	<ul style="list-style-type: none"> <li>a) Local government has more active roles in generating and implementing innovative health policy</li> <li>b) Local health insurance scheme become a standard practice in local government</li> <li>c) Subnational variation was extensive and significant. Especially in how Local governments ensuring low-income citizens.</li> </ul>
3	Health system performance at the district level in Indonesia after decentralization, (Heywood and Choi, 2010) <sup>(8)</sup>	<ul style="list-style-type: none"> <li>a) The population tended to move to the private sector providers such as doctors, nurse, midwife, village midwife for maternal and child health services.</li> <li>b) Performance on the maternal and child health services has shown no significant changes except decreased proportion of mother who delivered at home and increased the proportion of fully vaccination children.</li> </ul>	<ul style="list-style-type: none"> <li>a) Capacity, capability, and flexibility of local government are limited to the response to changing circumstances and needs.</li> <li>b) The local government failed to acknowledge the important role of the private sector in improving sector performance. This was shown by the inadequate staff at the district level to oversee and monitor the quality of private sector services.</li> <li>c) Lack of accountability for the health sector's performance,</li> </ul>

No	Study	Evidence	
		Access to Health Services	Health Systems Management
			<p>the district blames the center and the central ministries (and their ministers) are not accountable to district populations</p> <p>d) Failure of leadership, political as well as bureaucratic, in the health sector</p> <p>e) The significant amount of substantial public subsidy still used for wages cost of civil servants, instead of being used in creative ways to stimulate innovation, mitigate market failures, improve equity and quality, and to enhance the performance.</p>
4	<p>Linkages between Decentralisation and Inequalities in Neonatal Health: Evidence from Indonesia Linkages between Decentralisation and Inequalities in Neonatal Health: Evidence from Indonesia, (Hodge et al, 2015)<sup>(7)</sup></p>	<p>a) Determinant factors for mother having facility-based delivery were the firstborn child, the age of mother was above 18 years old when she had first birth and mother with higher education.</p> <p>b) The interaction of decentralization exposures to each island groups revealed statistically significant disparity in facility-based childbirth between Java and Bali. Also, all the other island groups have worsened in the era of decentralization.</p> <p>c) There were existing substantial gaps in neonatal mortality across different geographical locations (especially between western and eastern Indonesia).</p>	<p>a) Poor governance and technical capacity at a local level</p> <p>b) Confusion of responsibilities at different levels of government</p> <p>c) Complicated funding mechanism, with delays in disbursement of central funds</p> <p>d) Heavy demands on health managers of disadvantaged areas to compete locally with other sectors</p> <p>e) Limited discretion over resource allocation at the local level</p> <p>f) Centralized control over human resources and a reliance on top-down health programmes</p> <p>g) Parameters for allocation of funding for the central level are not based on a formula that considers fiscal capacity (which would provide an equalizing mechanism).</p> <p>h) Weaker capacity local government but with greater needs often failed to present and defend their proposal in getting funding resources.</p> <p>i) Political complexity in financing health services (Under decentralization the allocation of local resources to and within the health sector needs to be approved by the local parliament, which introduces an additional level of political complexity to financing health services. In many cases, the allocation of resources has become a political rather than a technical decision)</p>
5	<p>Local Government and Community Leaders' Perspectives on Child</p>	<p>a) Successful experience in reducing the number of child deaths in the village was by involving community members in helping pregnant women to deliver at the</p>	<p>a) Indonesia's decentralized model of child health service delivery could facilitate the development of the tailor-made health promotion model that address locally-specific</p>

No	Study	Evidence	
		Access to Health Services	Health Systems Management
	Health and Mortality and Inequity Issues in Rural Eastern Indonesia (Pardosi, Parr and Muhidin, 2016) <sup>(11)</sup>	<p>closest health facility and setting up a database</p> <p>b) Community engagement and empowerment in getting the best solution for local problems (Community had managed to fund and build a waiting house (<i>rumah tunggu</i>) near to a Community Health Center for pregnant women to stay a few days before full-term)</p> <p>c) Local government needs to improve their partnerships with local Traditional Birth Assistant (TBAs) and also improve the quality of health services provided by midwives to provide greater access.</p> <p>d) Collaboration between local governments and provincial and national governments were essential to expand access to rural primary care services</p>	<p>traditions issues</p> <p>b) Local governments need to tackle gender inequity issues by implementing gender-responsive planning and budgeting, by allocating more resources for maternal and child health in rural communities</p> <p>c) Inadequate district budgets for child health and an unequal distribution of health insurance has shown a need for local government to increase their political commitment to, and budgets for, child health</p> <p>d) There was a need for local government to involve more the local community leaders in planning health budgets and local budget transparency as well as government accountability.</p> <p>e) Local governments need to develop collaboration with local community leaders and show a greater appreciation of community efforts as these strategies have been proven to be effective ways of promoting behavioral change and reducing child mortality even with limited resources.</p>