Sustainability of Financing to Increase Drug Access and Distribution during National Health Insurance (JKN)

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Abstract: Drug access for the public is largely influenced by four main factors, namely rational drug use, affordable

prices, sustainable funding, and a health system and a reliable drug supply system. The study carried out qualitative and quantitative mixed methods with cross-sectional designs. Data collection is done through indepth interviews and secondary data collection. The study was conducted in February-December 2017. The research sites in 11 provinces were selected purposively and divided into five regions were in accordance with the Indonesian Case-Based Groups (INA-CBGs) System. The results of the study show that the costs of purchasing drugs are sourced from the APBN and APBD, as well as capitation in several regions. For medicine, there is generally no problem with the cost of drug distribution. The problem of additional distribution costs occurs for the supply of medical devices. The anticipation of drug vacancies due to a shortage of APBN and DAK funds can be overcome by optimizing JKN capitation funds by imitating existing funding models. The supply of e-catalog drugs needed to be continuously evaluated by taking into

account the certainty of the prices and availability of goods.

SCIENCE AND TECHNOLOGY PUBLICATIONS

1 INTRODUCTION

Since decentralization, there was a shift in the management of Government funds, a significant increase in Regional Government in line with decentralization. Health financing comes from various sources, namely: Central Government, Regional Government, private sector, community organizations, and the community itself. The availability of adequate funding will also support the implementation of subsystems for pharmaceutical preparations, medical devices, and food (Presidential Regulation, 2012).

One of the aimed pharmaceuticals, medical devices, and food subsystems is to ensure the availability, equity, and affordability of medicines, especially essential medicines. Sufficient funding from the Government and Local Governments is needed to guarantee the availability and affordability of drugs, especially drugs and essential medical devices for the poor (Presidential Regulation, 2012).

Drug access for the public is largely influenced by four main factors, namely rational use of drugs, affordable prices, sustainable funding, and a reliable health system and drug supply system. Availability, equity, and affordability of drugs are achieved, among others, through sustainable drug financing system strategies, both the public sector and the private sector (Ministry of Health, 2006).

One of the objectives from Distribution Availability, And Drug and Vaccine Service In Facing The 2019 Universal Health Coverage Research study is to identify and assess the distribution and availability of drugs and vaccines in five regions of Indonesia where one of the specific objectives is to calculate the financing components of drug and vaccine distribution (Yuniar, 2017).

2 METHOD

The study carried out qualitative and quantitative mixed methods with cross-sectional designs. Data collection is done through in-depth interviews and secondary data collection. The study was conducted in February-December 2017.

The research sites in five regions in Indonesia were in accordance with the Minister of Health Regulation No. 27 of 2014 concerning Technical Guidelines for the Indonesian Case-Based Groups (INA-CBGs) System. This provision was made to accommodate differences in the cost of distributing drugs and medical devices in Indonesia.

The selection of provinces is done purposively based on the regionalization system, namely the provinces of Jawa Barat, Jawa Timur, Sumatera Selatan, NTB, Aceh, Sulawesi Utara, Sulawesi Selatan, Kalsel, Kalteng, Maluku Utara, and Papua. The selection of Districts/Cities is done purposively based on urban criteria in provincial capitals, urban/rural rather than provincial capitals and underdeveloped / border districts.

Data triangulation is done through the triangulation of methods and sources of information. Analysis of RTD results from data and interviews conducted using the content analysis method and secondary data analyzed descriptively.

3 RESULT AND DISCUSSION

3.1 Provincial and District/City Funding Sources for Drugs and Vaccines

The results of research in 11 provinces show that 2016 drug expenditure uses Regional budget (APBD) and state budget (APBN) budget sources.

The provinces of Aceh and Kalimantan Tengah only use the APBN, the provinces of Jawa Timur and Sulawesi Selatan mostly come from the APBN. Meanwhile, Kalimantan Selatan, Maluku Utara, Nusa Tenggara Barat (NTB), Sulawesi Utara, and Sumatra Selatan Provinces only use the APBD. Jawa Barat Province has no drug procurement and does not budget for drug expenditure, the provincial buffer is obtained from the central government. Drug financing in provincial and district health offices is sourced from funds including the state budget, namely the DAK from Ministry of Health (Directorate General of Pharmaceutical and Medical Devices), the regional budget and capitation or other funds.

The variety of health financing budget sources in Indonesia must be managed properly so that the funding can complement the needs of each Province. The central government remains responsible for fulfilling drug needs in each province, even though in the JKN system there is a financing model through capitation and the INA CBGs package.

Obermann in 2018 described financing in the Philippines during the universal health insurance period for its citizens. Funding is from a Government full subsidy program that comes from the central government budget and sin tax. (Obermann, 2018).

At the District/City level, spending sources on medicines in the year 0f 2016 vary, from the State Budget (APBN), Regional Budget (APBD), capitation and others. Specifically, in Trenggalek District, there are spending drug sources that originate from Tobacco Tax. The composition of drug expenditure sources in Regencies/Cities can be seen in figure 2.



Figure 1: Provincial funding sources for drugs and vaccines.

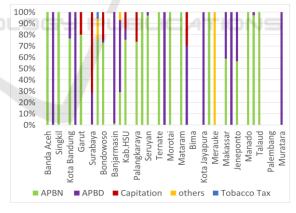


Figure 2: District/City spending sources in the year of 2016.

The health budget through a tobacco tax as has been done in the Tranggalek district actually has been submitted by National Team for the Acceleration of Poverty Reduction (TNP2K) in 2015 and the same thing also happened in other countries such as the Philippines. TNP2K states that this is something that needs to be done as a form of sin tax. Considering smoking and alcohol is a form of activity that damages health and can cause illness

and cause death in the future, it is necessary to do several strategies including increasing taxes and using it for health costs as a consequence as well as efforts to reduce its users, especially among young people. (National Team for the Acceleration of Poverty Reduction, 2015).

Capitation funds use policies in several regions, in general, have already allowed the use of capitation funds with various special provisions in the region.

3.2 District/City Distribution Cost Component

The allocation of non-physical DAK in the health sector in the form of BOK aims to support local governments in ensuring the availability of quality, equitable and affordable medicines, vaccines and medical consumables in government basic health services. One goal, in particular, is to support the District/City Health Office in ensuring availability of drugs, vaccines and medical consumables at puskesmas through the provision of drug and vaccine distribution costs to puskesmas and the operation of electronic drug and vaccine logistics information systems at the District/City Pharmacy Installation. (Ministry of Health, 2016)

The operational policy of the Health Operational cost (BOK) fund is for the distribution costs of drugs, vaccines, and medical consumables to be used to help ensure sufficient quantities of drugs, vaccines, and medical consumables are available at the puskesmas. (Ministry of Health, 2016).

Distribution Cost Components in 11 Provinces of the study locations indicate that most of the distribution costs are located in the vehicle cost component which includes rental costs and/or fuel costs, or auctions for distribution by third parties.

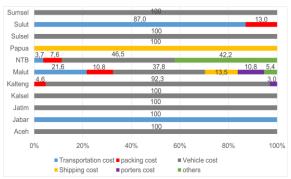


Figure 3: Province distribution cost component.

The provinces of East Java, Aceh, South Sumatra, and South Kalimantan use the tendered system with third parties, including PT POS Indonesia to distribute to Regencies/Cities, auction agreements with third parties including packing of goods (figure 3).

All distribution costs in Papua Province are for the expedition fee, District/City which is close to the provincial capital making their own take to the Provincial pharmaceutical warehouse. Jawa Barat Province does not have a distribution allocation, distribution is done by providing an Official Travel Order (SPPD) for transportation of officers (figure 3).

Since the decentralization system in Indonesia, the most important thing to do is effective coordination from the national to the city/district level. Effective coordination, especially in the effort to manage budget resources from the central government, the government and others will support the achievement of the main objectives of the health system, one of which is ensuring the availability of medicines for the community. (Agustina et al., 2018).

The cost component of the District/City distribution is mainly for the transportation costs of officers. In Bogor Regency, Surabaya City and Morotai Regency, Puskesmas take their medicines themselves to the District/City health office (figure 4).

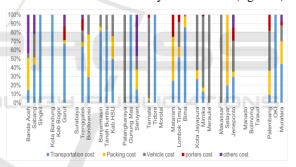


Figure 4: District/City distribution cost component.

Distribution is one of the important efforts to ensure the availability of drugs. The amount of distribution costs required varies greatly, depending on distance, travel time, regional characteristics, facilities and types of transportation availability and transportation to be used. this needs to be taken into account in the distribution budget preparation. In addition, there are other budgets that need to be taken into account, among others, the need for an insurance budget, both for officers and for collateral due to loss of goods due to robbery or hijacking during the trip (Jérôme Dumoulin, Miloud Kaddar & Germán Velásquez, 1998).

The percentage of distribution costs in 11 provinces is mostly less than 10%, except in South Kalimantan Province, distribution costs are up to 51.3% compared to provincial health service

expenditure in 2016. There is no data on the amount of distribution budget in West Java, Papua, and South Sumatra Provinces (figure 5).

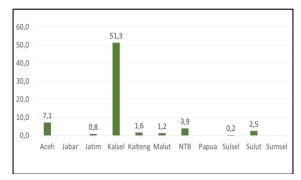


Figure 5: Percentage of drug distribution costs compared to provincial health office expenditure in 2016.

The percentage of distribution costs in the Districts/Cities is also largely less than 10%, except for Mimika Regency, the comparison of distribution costs versus drug expenditure is 14.7% (figure 6).

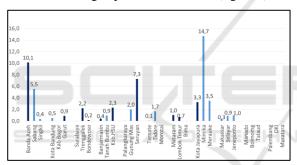


Figure 6: Percentage of distribution costs compared to District/City health office drug expenditure in 2016.

In Bogor Regency and Surabaya City, there is no distribution cost data because puskesmas take their own medicines to the District/City office. The districts of Banda Aceh, Garut, Trenggalek, Bondowoso, Banjarmasin, Hulu Sungai Utara, Seruyan, Mataram, Lombok Timur, and Jayapura City stated that distribution costs were sufficient, even though the percentage was less than 10%. While in Mimika Regency, although more than 10% is still not sufficient (figure 6).

The amount of distribution cost components required by each region, especially in Indonesia, varies greatly and cannot be determined in general, for example, 10% of drug expenditure. It really depends on the geographical conditions, infrastructure and transportation facilities available and the amount of drug expenditure incurred. 14.7% of the distribution costs in Mimika, Papua is not enough to fulfill drug distribution services, while in

other Districts/Cities, they have been able to meet the needs, although they do not meet 10% of drug expenditure. This happens because of differences in the amount of drug expenditure, differences in the area, differences in the number of health facilities and differences in geographical conditions. Geographical conditions, especially in eastern Indonesia, is one of the challenges in the distribution process, plus the lack of infrastructure and facilities, so a good drug distribution system is needed. (Id et al., 2019).

The mechanism of drug procurement, in general, is greater with e-purchasing, the rest is by tendered or direct purchase if the amount is small.

Table 1: Drug purchasing system.

Region	District	
I	Jawa Barat	e-purchasing (80%) tendered (20%)
	Jawa Timur	<i>e-purchasing</i> 80-90%, direct purchasing 10-20%
п	Nusa Tenggara Barat	<i>e-purchasing</i> 60% - 80%, tendered 20% direct purchasing 0-20%
	Sumatera Selatan	<i>e-purchasing</i> direct purchasing < 5% tendered < 10%
-ma	Aceh	e-purchasing 75% -100% tendered and direct purchasing <25%
	Sulawesi Utara	e-purchasing 75-80% tendered $\leq 25\%$
	Sulawesi Selatan	e-purchasing 70% - 80% direct purchasing 20% - 30%
IV	Kalimantan Selatan	<i>e-purchasing</i> 50%-80% tendered and direct purchasing 20% -50%
	Kalimantan Tengah	e-purchasing 50% -100% tendered and direct purchasing $0-50\%$
V	Maluku Utara	<i>e-purchasing</i> 90%-100% tendered and direct purchasing ≤ 10%
	Papua	<i>e-purchasing</i> 75%, direct purchasing 25%

In the era of national health insurance, the cost of drug distribution is included in the cost of drugs in the e-catalog system. This needs to be considered well because if the cost of drug distribution becomes one component with the cost of the drug, it will indirectly affect the quality of the drug, if the distribution costs needed are exceeding the production costs of drugs ordered. To anticipate this,

it is necessary to calculate the price of e-catalog drugs accurately and strengthen the implementation of the good manufacturer practices (GMP) monitoring in the pharmaceutical industry which has won the e-catalog auction. (Id et al., 2019).

The e-purchasing process is an effort to reduce the drug price in Indonesia, the same thing is done in India. With the e-purchasing system, the negotiation process is carried out nationally so it can reduce the effort and negotiation time in health facilities, and provide certainty for the pharmaceutical industry in the production process, as well as large purchases can increase national drug costs efficiency. (Ashigbie, Azameti, and Wirtz, 2016).

The health insurance system will increase the role of pharmaceuticals in the effort to provide quality services that have proven to be cost-effective. At present, the central and regional governments still finance the procurement of drugs for the public sector in first-level health facilities and drug drugs programs, in the future the availability of drugs in health facilities will be the responsibility of BPJS and health facilities in collaboration with BPJS as holders of health insurance programs in Indonesia, while the central and regional governments are responsible for public health programs (National Team for the Acceleration of Poverty Reduction, 2015).

To improve budget efficiency and use of health resources as needed, the health system needs to be implemented policies that support the use of medicines and other health resources that are appropriate and clinically proven that involve various sectors of drug management, ranging from the pharmaceutical industry to patients, for example by providing an incentive or reward and punishment system for the parties involved in it (Wagner, Quick, and Ross-degnan, 2014).

4 CONCLUSIONS

In several provinces still rely on the state budget (APBN) as the main source of funding for drug distribution. Costs for purchasing drugs are sourced from the state budget and regional budget, as well as capitation in several regions. For drugs, because they are included in the price of the e-catalog to the health office, there is generally no problem in the distribution costs of drugs. Most of the costs incurred by the DHO are for repacking and transporting the sending staff as well as increasing endurance costs. The endurance enhancement costs are allocated especially for regions that do not specifically have

distribution costs because they are not allowed in the budget system. Distribution work is considered to be a task so no additional costs can be given.

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REFERENCES

- Agustina, R. et al. (2018) 'Review Universal health coverage in Indonesia: concept, progress, and challenges'. doi: 10.1016/S0140-6736(18)31647-7.
- Ashigbie, P. G., Azameti, D. and Wirtz, V. J. (2016) 'Challenges of medicines management in the public and private sector under Ghana's National Health Insurance Scheme – A qualitative study', Journal of Pharmaceutical Policy and Practice. Journal of Pharmaceutical Policy and Practice, pp. 1–11. doi: 10.1186/s40545-016-0055-9.
- Id, R. W. et al. (2019) 'Use of medicine pricing and reimbursement policies for universal health coverage in Indonesia', pp. 1–20. doi: 10.1371/journal.pone. 0212328.
- Jérôme Dumoulin, Miloud Kaddar & Germán Velásquez (1998) Guide to drug financing mechanisms. World Health Organization, England.
- Ministry of Health (2006) "Ministry of Health of the Republic of Indonesia Regulation No.189 / Menkes / SK / III / 2006 concerning National Medicines Policy"
- Ministry of Health (2016) "Ministry of Health of the Republic of Indonesia Regulation of the No.71 of 2016 concerning Technical Guidelines for the Use of Non-Physical Special Allocation Funds for Health in 2017 Budget Year"
- National Team for the Acceleration of Poverty Reduction (2015) The Road to National Health Insurance (JKN).

 Jakarta: secretariat of the Vice President of the Republic of Indonesia.
- Obermann, K. (2018) 'The role of national health insurance for achieving UHC in the Philippines: a mixed methods analysis', Global Health Action. Taylor & Francis, 11(1). doi: 10.1080/16549716.2018. 1483638.
- Presidential Regulation of Republik Indonesia No. 72 of 2012 concerning the National Health System
- Wagner, A. K., Quick, J. D. and Ross-degnan, D. (2014) 'Quality use of medicines within universal health

coverage : challenges and opportunities', 14(1), pp. 1–6. doi: 10.1186/1472-6963-14-357.

Yuniar, Yuyun (2017). Distribution Availability, And Drug and Vaccine Service In Facing The 2019 Universal Health Coverage Research. Report Study. Centre for Health Resources and Services Research and Development. National Institute of Health Research and Development. Ministry of Health. Jakarta

