Diabetes Handlers by the DKI Jakarta Government

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Abstract. This study aims to describe how the Diabetes Handling Efforts by the DKI Jakarta Government in 2018-2021. The type of research used is descriptive. The data used are the types of primary and secondary data obtained by the author through the results of internet access which contains relevant data and information related to the research discussed by the author. The results of the study showed that diabetes management by the DKI Jakarta Government was carried out internally and externally. Internally by forming POSBINDU PTM and GERMAS, and Externally Through Cooperation with Denmark.

Keywords: Denmark; DKI Jakarta; Novo Nordisk; Diabetes

INTRODUCTION
Diabetes is a serious chronic disease that occurs because the pancreas cannot produce enough insulin (the hormone that regulates blood sugar or glucose). Some of the factors that cause this disease are heredity, race or ethnicity, obesity, metabolic syndrome, lack of movement, other diseases, age, history of diabetes in pregnancy, infections, stress, and the use of drugs. Diabetes is one of the four priority non-communicable diseases (NCDs) targeted for follow-up by world leaders.

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source: processed data

Based on data from Basic Health Research, community-based national-scale research conducted every 5-6 years, it is explained that in 2007 the prevalence of diabetes in Indonesia was 5.7%. In 2013 it was 6.9% and in 2018 it was 8.5%
RESULTS
Internal Efforts through Community Empowerment

a. Revitalization of Public Infrastructure

In an effort to prevent diabetes, the DKI Jakarta Provincial Government has carried out several revitalizations of public facilities such as sidewalks, parks and sports facilities, this is intended so that people feel comfortable in walking activities, not passive at home, so that it becomes the choice of the community in activities compared to using vehicles. This activity will help the burning of calories in the body. (Ade Indra, 2019)

b. Collaboration of Integrated Coaching Post (POSBINDU) with the Business World

DKI Jakarta as a province with a level of debit exceeding national standards in 2018, is one of the most crucial problems. Therefore, the DKI Jakarta government then issued a Governor's regulation to overcome non-communicable diseases and one of them was diabetes. The DKI Governor's Regulation number 25 of 2021 contains preventive and promotional efforts with community empowerment to monitor and detect early through the Integrated Development Post (POSBINDU). (Pergub 2021)

The government through POSBINDU not only involves medical personnel but also trains elements of the community, community institutions...
and organizations, government partner institutions and the business world, one of which is Alfamart, Nutrifood and Alfamidi.

Through promotional and preventive efforts, this program is focused on controlling risk factors that can be changed such as smoking, lack of activity, unhealthy diet, alcohol, stress and an unhealthy environment. Also conduct early detection of risk factors by means of interviews, measurements and examinations and can also be done through health screening at health service facilities in DKI Jakarta. The target of early detection is any individual aged 15 -59 years.

Early detection is carried out at the level of households, education units, office, and public places, by checking virgin sugar, pigeon pressure, interviews and at the same time educating the public.

POSBINDU is then activated to early detect risk factors at the community level, especially households by POSBINDU cadres. In other words, the existence of POSBINDU in each region has received approval by the local government through the decision of the Lurah, where the position of the Lurah carries out institutional development of POSBINDU. Meanwhile, Puskesmas functions to provide technical guidance to POSBINDU.

In institutional development, the Lurah determines decisions for POSBINDU, facilitates the location of implementation, coordinates the results of activities and provides guidance to the community to support POSBINDU activities.

As a technical supervisor, Puskesmas provides training and or debriefing to POSBINDU cadres. In this case, it provides education related to the problem of risk factors. In addition, Puskesmas also conducts analysis of Posbindu activities, handles and provides feedback on referral cases from POSBINDU, and coordinates with various relevant stakeholders.

The role of POSBINDU cadres is to conduct surveys of targets with officers, encourage community groups to come to POSBINDU, visit community homes and report on the results of activities. All early detection activities will be reported regularly to the Puskesmas by POSBINDU cadres, then the Puskesmas will report to the Health Department.

Through community involvement as government cadres in dealing with the problems faced by DKI Jakarta, it is hoped that it can help prevent the number of non-communicable diseases, one of which is diabetes.

2. External Efforts through Cooperation with Novo Nordisk Judging from the number of diabetes prevalence in Indonesia, among other provinces DKI Jakarta occupies as the first province with the largest number of prevalence based on data from Riskesdas in 2018, which is 3.4%. Previously, the DKI Jakarta Provincial Government had handled diabetes through POSBINDU PTM. In additional to internal efforts, the DKI Government is also trying to find other solution to overcome the diabetes problem by cooperating with another country, namely Denmark, though the Novo Nordisk Company. In this chapter, the author will explain how the effort made by the DKI Jakarta Provincial Government and Novo Nordisk in helping diabetes handlers in Jakarta.

(Chart 1)

Map (Mapping Stage)

On August 24, 2018, Novo Nordisk and the DKI Jakarta Provincial Government signed an MoU on CCD cooperation at City Hall, Central Jakarta. Vice President and General Manager of Novo Nordisk Indonesia explained that in this program Novo Nordisk assisted the DKI Jakarta Provincial Government in mapping and identifying the main causes of the increasing number of diabetes prevalence rates in DKI Jakarta. In the process of mapping diabetes problems, there are several parties that will be involved, such as the Indonesian Medical Education and Research Institute, Faculty of Medicine, University of Indonesia (IMERI FKUI) as a researcher, the Indonesian Endocrinology Association who provides advice and information on diabetes issues and the DKI Jakarta Provincial Health Office collects diabetes surveillance data.

The results of diabetes surveillance data state that the number of diabetes prevalence rates registered in health facilities in DKI Jakarta is only 12,775 out of 250 thousand people who have diabetes with an age of more than 15 years. This shows that only 30% of diabetic patients receive services according to standards and there are also 70% of the 12,775 patients who are registered as diabetes patients with regular treatment, then 9% who participate in chronic disease management programs. In addition, there are around 154 thousand cases of diabetes that have not been found, because some of the people of DKI Jakarta do not realize that they have been exposed to diabetes. This mapping was carried out for one year using a quantitative approach to survey methods to 10 community health center spreads across administrative cities in DKI Jakarta. The persistence of the survey
carried out in this mapping is a guide to increasing the capacity of medical personnel in community health center in providing education on diabetes and blood sugar control. The ten-community health center are community health center Menteng, community health center Tanah Abang, community health center Kelapa Gading, community health center Penjaringan, community health center Tebet, community health center Kebayoran Baru, community health center Cipayung, community health center Matraman, community health center Kebon Jeruk, and community health center Cengkareng.

Five problems were found that caused the increasing prevalence in DKI Jakarta, namely Jakarta is the city with the highest prevalence of diabetes in Indonesia with an increasing number but still not optimally diagnosed; obesity is one of the factors in the high rate of diabetes in DKI Jakarta; the large number of undiagnosed patients is due to the low knowledge and awareness of the public about diabetes; the function of community health center as a basic health service to screen diabetics is still not optimal; and the management that is still not optimal, only about 30% of diabetic patients have reached the target of the glycemic index k. Novo Nordisk, which is supported by the DKI Jakarta Provincial Government, issued a Briefing Book in the form of a bulletin containing information about diabetes in DKI Jakarta and the results of the mapping stage that has been carried out in the CCD Program in DKI Jakarta.

Through this Briefing Book, it can provide information about diabetes as well as direction in carrying out actions or policies in reducing the number of diabetes prevalence rates through the CCD Program. In the Briefing Book that has been issued, there are two focus pillars of action, namely:

1. Early Diagnosis. Through POSBINDU PTM and GERMAS that already exist in Indonesia, this CCD Program is expected to increase the level of diabetes diagnosis in DKI Jakarta by adopting the previous POSBINDU PTM and GERMAS. The aim is to increase POSBINDU PTM activities in university campuses, offices, schools, shopping centers and places of worship.

2. Optimal Control. To improve the expertise of community health center, Novo Nordic will develop a diabetes management briefing at the community health center and provide training for health workers to increase their competition related to diabetes diagnosis and management. Novo Nordisk hopes that this initiative will improve treatment outcomes in patients. The focus is not only on health workers but the program will also ensure support systems such as referrals, treatment availability and pharmaceutical supplies at key care levels work well to support diabetes management.

**Act**

Furthermore, on August 27, 2019, the DKI Jakarta Provincial Government and Novo Nordisk Indonesia signed the second phase of an agreement, namely the Action Plan in handling diabetes in DKI Jakarta after completing the mapping stage. The collaboration was held at Balairung, Jakarta City Hall which was attended by the Governor of DKI Jakarta Province Anies Baswedan and his staff, Vice President of Novo Nordisk Indonesia Morten Vaupel, and Danish Ambassador to Indonesia H. E. Rasmus Abildgaard Kristensen. This stage of action is carried out as a process of following up on the mapping stage that has been carried out previously.

There are three action plans carried out in this stage, namely:

1. Increase prevention efforts by increasing the diagnosis rate by activating PTM POSBINDU in institutions such as schools, campuses, and offices. It is known that the DKI Jakarta Provincial Health Office held a Gymnastics and Talk Show with the theme "Prevent, Find and Manage Diabetes Early" as well as a free blood sugar test aimed at early detection of diabetes to the academic community of YARSI University on November 14, 2019 through the activity "POSBINDU Goes to Campus " which was carried out at the Yarsi University Futsal Field, Cempaka Putih, Central Jakarta. This activity is part of the Early Diagnosis of the CCD Program between the DKI Jakarta Provincial Government and Novo Nordisk Indonesia.

2. Improving the primary care system. Novo Nordisk collaborated with Perkeni and Steno Diabetes Center in forming INSPIRE to improve prevention, vigilance, diagnosis, and treatment to internal medicine specialists, general practitioners, nurses, pharmacists, physiotherapists and management teams. This training has been started since 2012 in Indonesia. However, the training only ran until 2015 for the DKI Jakarta area.

   Strengthening the referral system, in DKI Jakarta is by building type D Regional General Hospitals in several areas of DKI Jakarta with the aim of facilitating the process of referral services from community health center that are closer and faster, before patients are referred to type C or B hospitals.

**Share Stage**

Share the results of the CCD program that is being carried out to inspire other cities in tackling diabetes. Through this CCD Program collaboration, it is hoped that DKI Jakarta can become a model or example for other provinces in Indonesia in overcoming diabetes. The results of the CCD Program in overcoming diabetes in DKI Jakarta were not carried out optimally. However, the number of diabetics who received services according to these standards increased by 63.4% in 2019 and 100% in 2020 based on data from the DKI Jakarta Health
Profile in 2019 and 2020. This is due to efforts to activate POSBINDU in each RW and optimize the referral program to BPJS through coordination of community health center, hospitals, pharmacies, referrals and BPJS in DKI Jakarta.

Novo Nordisk also offers prices that can be reached by the middle and upper-level people and has good quality so that this makes Novo Nordisk a supplier of insulin needs in DKI Jakarta.

CONCLUSION

The cooperation in diabetes management carried out by the DKI Jakarta Provincial government has not been carried out optimally. However, though this effort, the DKI government was able to find the main factors causing the high rate of diabetes in Jakarta. Among them are obesity problems, patients who are not diagnosed, low knowledge and awareness of diabetes, health service and management that are not optimal. This finding then becomes the next reference for DKI Jakarta in making regulations and determining future preventive actions.

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