

## Case Study: Overview of the Initial Stage of the Implementation of Non-Communicable Diseases Integrated Service Post (POSBINDU PTM) at Glugur Darat Health Center Medan in 2014

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**Abstract** - Diabetes is one of non communicable diseases (NCD) when glucose in blood higher than in usual. According to WHO (2010) more than 220 million people in the world suffer diabetes at 2004, WHO predict that it will increase twice of the death cause diabetes in 2005-2030 and Indonesia becoming the seventh country (IDF, 2013) of the largest diabetes number in the world. Non Communicable Diseases Integrated Service Post (NCDISP) program is a national program for solving NCD, diabetes as one of main focus diseases, by using prevention and promotion approach. This research was qualitative researches that aim to see the implementation of NCDISP program in early detection and complication prevention of diabetes at Glugur Darat Health Center. Informants of this research amounted to 6 informant, consisting of head, staff, leader of citizen, and citizen at Glugur Darat Health Center. The result showed that NCDISP program was supported by the citizen, the equipment that already support the program, the donor and good cooperation among all sector, good participation from citizen and the responsibility of the staff for implementing this program are showed. Innovating and monitoring the program is an important things to save the continuity and quality of the implementation.

**Keywords:** POSBINDU PTM, Glugur Darat Health Center, implementation

### 1. Introduction

Health problems in the world are a shared responsibility in overcoming them for the realization of a healthy society. Non-communicable diseases (PTM) are more diseases caused by human lifestyles or often known as degenerative diseases. Deaths from PTM are expected to continue to increase throughout the world, the biggest increase will occur in middle and poor countries. More than two thirds (70%) of the global population will die from non-communicable diseases such as cancer, heart disease, stroke and diabetes (WHO in the Indonesian Ministry of Health PTM bulletin, 2011). Diabetes is a non-communicable diseases where blood glucose levels are quite high. Diabetes can be caused by an unhealthy lifestyle or derived from parents who have diabetes mellitus (DM). Diabetes needs to be a concern for the world and countries that have high DM morbidity because it can cause various complications, such as coronary heart disease, ischemic wounds in the legs, and strokes that can end in death.

Based on WHO (2010) more than 220 million people in the world suffer from diabetes in 2004, WHO predicts that there will be a doubling of deaths from diabetes between 2005-2030, almost half of diabetics occur under the age of 70 and nearly 80 % of deaths from diabetes occur in middle and low income populations such as Indonesia. Based on data from the International Diabetes Federation (IDF) 2013, Indonesia is the 7th most diabetic country in the world,

with 8.5 million people after China (98.4 million people), India (65.1 million people), USA (24 , 4 million people), Brazil (11.9 million people), Russia (10.9 million people) and Mexico (8.7 million people). This is certainly an important problem for Indonesia to immediately take DM countermeasures so as not to increase in the future.

The number of cases of diabetes mellitus is the second largest case found in the city of Medan during the months of January-September 2013 as many as 23,236 of 70,002 (33%) cases of non-communicable diseases. While the first highest disease is hypertension with a total of 33,098 cases from 70,002 (47%) cases of non-communicable diseases. The number of cases of diabetes mellitus which shows the second highest number indicates that in Medan diabetes is one of the main non communicable diseases that need more attention.(Medan City Health Office, 2013)

Diabetes mellitus is a progressive metabolic disorder. If control of diabetes is done poorly, the onset of complications can take place more quickly. Conversely, good control can slow or prevent diabetes complications. In this case, the world and the Indonesian government have determined actions in response to DM that are increasingly threatening people's lives. The Indonesian Ministry of Health prioritizes control of DM among other metabolic disorders besides comorbidities such as hypertension, coronary heart disease and stroke. In controlling DM risk factors, control is carried out through promotive and preventive efforts by not ruling out curative and rehabilitative efforts. One of the DM control activities carried out is monitoring and early detection of risk factors for DM in Posbindu PTM (Non Communicable Diseases Integrated Services Post) and the implementation of behaviors. Check health conditions regularly; Get rid of cigarette smoke and other air pollution; Stimulate activity with sports and art movements; A healthy diet with balanced calories; Enough rest; Strengthen Faith in dealing with stress (CERDIK).

Ulfah's research results (2013) regarding the implementation of the coordination function in the dengue prevention program at the health center showed that in the control of dengue problems the form of vertical downward communication was carried out by the Medan City Health Office to the health center, the head of the health center to dengue officials, and the head of the sub-district (camat) to the headman (lurah) and then to the head area (kepala lingkungan). This shows that in handling health problems there is a need for good vertical communication and the role of the health center.

Based on preliminary surveys that have been carried out, recapitulation of non-communicable diseases at Glugur Darat Health Center showed in January 2014 that out of 338 PTM cases, there were 83 cases of DM (24%). In April 105 out of 405 (25%) cases; in May 41 of 266 (15%) cases and in June 77 of 265 (29%) cases. Based on these data, DM was the second largest case in the PTM case at the Glugur Darat Health Center, so it became a major concern in its handling efforts, including through the Integrated Service Post (Posbindu). The implementation of Posbindu PTM at the Glugur Darat Health Center involved 3 health center officers as program implementers. The activities carried out in the Posbindu PTM program are education, gymnastics, examination and consultation with the number of participants in 2013 having increased every month, namely 55 people in October, 56 people in November, and 58 people in December. Posbindu PTM consists of prediabetes participants and diabetics who have suffered foot injuries will be given help so that diabetes can be prevented and

complications do not get worse, one of which is through wound care education and dietary regulation of sufferers by Posbindu PTM health workers. In its implementation, Posbindu PTM is still managed by officers of Glugur Darat Health center itself and has not made the community as the implementer of Posbindu PTM. Referring to the background above, the writer will conduct research to analyze the implementation of the Posbindu PTM program in early detection and prevention of DM complications at the Glugur Darat Health Center in 2014.

## **2. Method**

This type of research is qualitative research that aims to explain and describe in order to obtain an understanding of something that is studied, human behavior is the object of research, the meaning and how the process of something experienced by someone is a research topic (Saryono and Mekar, 2010). The location of the study was carried out in the working area of Glugur Darat Health Center, with the consideration of being one of the health centers in the city of Medan that had run Posbindu PTM as an effort to overcome non-communicable diseases, one of which was diabetes mellitus. The research was conducted in June-September 2014 (preliminary survey and research).

The informants in this study were taken using a purposive technique, which is a technique used to select informants who are willing and able to provide information related to the research topic. The informants were selected based on the criteria of involvement in the implementation of the Posbindu PTM program in the early detection and prevention of DM complications in the related health center areas, as many as 6 informants consisting of, 1 head of the health center, 1 informant at the relevant health center, 1 posbindu cadre, 1 community figure informant and 2 informants from the community (DM patients and not DM patients).

Data collection was carried out by the researchers themselves by visiting informants who had expressed their willingness to be interviewed. This study collects information through 2 (two) data sources, namely:

1. Primary data obtained from in-depth interviews (Indepth Interview) and direct observation in the field.
2. Secondary data obtained from Medan City Health Office data, Glugur Darat Health Center data and agencies related to this research and book book references and research results.

Triangulation is done by using source triangulation and data triangulation to obtain results that are in accordance with the conditions at the research location. The ethics are applied by asking the the informan before take an interview and keep the information only for the research need.

## **3. Result and Discussion**

### **3.1. Overview of Glugur Darat Health Center**

The Glugur Darat Health Center is located on Jalan Pendidikan No. 8 Medan Timur District Medan City. The working area of the Glugur Darat Health Center in carrying out its function consists of 18 villages. Population distribution based on Work in the Glugur Darat Community Health Center Work Area, East Medan District, 2014 was private employees as much as 39.05%, traders 3.8%, civil servants 8.2%, pensioners 7.6%, TNI 8.2%, laborers 4.5%, Farmers 0.15%,

etc. 28.3% of the total 53,882 people recorded.

### **3.2. Posbindu PTM at the Health center Glugur Darat**

Informant knows that there is a Posbindu PTM program as one of the programs in the Glugur Darat Health Center and Posbindu PTM Glugur Darat is a new program which was actually an elderly program which had almost the same activities. Based on the informant's statement, Posbindu PTM is one of the preventive efforts carried out for non-communicable diseases, a priority disease at Glugur Darat Health Center, one of which is diabetes mellitus. Although this program is a program promoted by the Minister of Health, the Glugur Darat Health Center has done it before the policy on the Posbindu PTM program is promoted, namely through the elderly posyandu. Therefore, in the success of the Posbindu PTM program, the Glugur Darat health center began with the elderly posyandu as well as preparing Posbindu PTM in other public places such as schools, workplaces or markets. The informant stated that the socialization of the implementation of Posbindu PTM was through patients who came to the health center by socializing the presence of joint gymnastics and free PTM examinations at the health center on Friday. Apart from the health center, the community is also informed through the officers 'and mothers' events in the neighborhood.

### **3.3. Human Resources of Posbindu Program Implementation**

Based on the statement of the informant, the service of the Posbindu PTM executive officer was considered good for the participants. The Posbindu PTM executive officer at the Glugur Darat Health Center was in charge of the Posbindu PTM program itself because there was still no special cadre of PTM while for Posbindu PTM conducted at the elderly posyandu, the elderly posyandu cadres were empowered.

### **3.4. Posbindu PTM Financing at Glugur Darat Health Center**

Based on the statement of finance informants for Posbindu PTM obtained through official assistance for Posbindu PTM kits, BOK for procurement of snacks and BPJS cooperation for organizing gymnastics. It can be concluded that PTM postal financing is obtained from health services assistance, BOK funds, BPJS, and community participation. In addition, the Glugur Darat health center also sought innovations in increasing income as operational costs for implementing Posbindu PTM through collaboration with partners who could support the program.

### **3.5. Posbindu PTM Facilities and Infrastructure at Glugur Darat Health Center.**

Based on the statement of informants of facilities and infrastructure for Posbindu PTM obtained through service assistance for Posbindu PTM kits, BOK for procurement of snacks and BPJS cooperation for organizing gymnastics. In addition, the community also participated. One of the informants who was the community activist provided assistance in the form of generic medicines and Blood Sugar Levels which were given free of charge to the community when the Elderly Posyandu or Posbindu PTM in their area. The existing facilities and infrastructure are sufficient for Posbindu PTM participants and Posbindu PTM executives, especially equipment for controlling blood sugar levels. The existing

facilities and infrastructure are considered adequate for participants and implementers of Posbindu PTM.

Monitoring and Evaluation of Posbindu PTM at Health center Glugur Darat Based on the informant's statement that monitoring is carried out by the health center every month through recording and reporting. In addition, monitoring and evaluation is conducted every six months or once a year by making reports which are then discussed and acted upon. The role of doctors who took to the field also went to help in monitoring the implementation of the Posbindu PTM program at the Glugur Darat Health Center.

### **3.6. Internal and External Challenges of Posbindu PTM at the Glugur Darat Health Center**

Based on the informant's statement there are several obstacles, namely the number of gymnastics participants who are still less representative is caused by the community's perspective that coming to the health center is only when sick. The presence of the community is also sometimes hampered because each of them has other activities so it needs extra work to attract participants. One of the other challenges is the absence of posbindu in various strategic places such as officers, churches and other public places. Glugur Darat Health Center still needs to find and maintain partners in supporting the implementation of Posbindu PTM with complete facilities and infrastructure. The role of all elements of the health center also supports the success of this program, one of the other challenges is that not all health center officers understand the Posbindu PTM program.

### **3.7. Posbindu PTM Implementation Strategy at Glugur Darat Health Center.**

Based on the statement of the informant, the strategy carried out in the success of the Posbindu PTM program at the Glugur Darat Health Center was through direct advice to patients who came to the health center, officers went directly to the posyandu in delivering Posbindu PTM, establishing cross-sector cooperation and good communication to the community.

### **3.8. Implementation of Posbindu PTM Program at Glugur Darat Health Center.**

Through the results of observations made at the Glugur Darat Health Center, the flow of Posbindu PTM implementation at the Glugur Darat health center was maximized by treatment activities at the clinic as an effort to increase participant participation. The process of recording KMS-FR by cadres has not been done optimally, but the officers have their own records for Posbindu participants. The presence of feedbacks from Posbindu participants to make recommendations made by doctors shows that there is an output in the form of prevention of DM disease so that it does not become a complication. The process of recording becomes the process of finding participants with DM risk factors.

#### **A. Input**

Everything needed to be able to carry out the Posbindu PTM program is categorized as input in the implementation of Posbindu PTM.\



### **1) Health Worker**

Glugur Darat Health Center has the person in charge of Posbindu PTM which consists of three people, a doctor, a nurse and a midwife who runs the Posbindu PTM program. In the implementation of the number of officers themselves have not been effective to run the program because each person in charge is the person in charge in another program, the implementation of the training has not been carried out intensively and periodically. The new training was conducted once for doctors. Another thing that causes the ineffectiveness of health workers responsible for the implementation of the program is that there is still no special cadre of Posbindu PTM who are ready and have received special training for the implementation of Posbindu PTM. The success of service depends on the active participation or involvement of the community and related individuals. The health team plays an important role in this service but to achieve success it cannot work alone. To achieve its objectives, a health team must be able to encourage, stimulate, and support the participation of the community, which is helping the community to fully trust all of their own efforts and resources to meet their health needs. One important thing for the community to be responsible for their health is to appoint primary health care workers from the community itself, and then become an obligation for the health team from the health center to train and support these workers (WHO, 1999). Therefore, in addition to the person in charge of the Posbindu PTM program, the role of the community mobilizer itself is very calculated.

The Glugur Darat Health Center has one of the people who is the community activist in their neighborhood, namely through the elderly posyandu program which previously had been run in the Gaharu village. A local community midwife who has now successfully carried out the Posbindu PTM program on a regular basis every Tuesday is done twice every week independently by the community. The importance of training based on the results of Yoga's research (2011) shows that people who have good knowledge have a 4 times risk to succeed in the management of type 2 DM compared to those who have less knowledge and are statistically meaningful. If we look back based on the concept of Posbindu PTM that has been determined that Posbindu PTM is one of the community empowerment programs in preventing non-communicable diseases, one of them is diabetes mellitus. Based on the results of research conducted that the role of health workers still dominates in the implementation of Posbindu PTM in Glugur Darat Health Center compared to community participation in organizing the program. Posbindu PTM is the role of the community in conducting early detection and monitoring of the main PTM risk factors that are carried out in an integrated, routine and periodic manner (Ministry of Health, 2012). Posbindu PTM workers at Glugur Darat Health Center need to be optimized by increasing community participation and implementing training for the community in producing better output.

## **2) Funds**

Funds for the implementation of Posbindu PTM at the Glugur Darat Health Center were obtained through health operational assistance funds (BOK), local community funds and partners. Glugur Darat Health Center has a special way to find funds to support the running of the PTM postal program. The Glugur Darat Health Center plays an active role in finding partners who are willing to provide financial support for the program. The Glugur Darat Health Center also makes regular reporting so partners will become donors for a longer period of time.

In its implementation, BOK funds are used to make consumption during the event, funds from partners, such as BPJS are used to procure instructors and funds from the community, one of which is to support PTM prevention, such as to carry out necessary drugs and equipment. The private sector can organize PTM posts in its own work environment or can participate in PTM posts in the surrounding areas in the form of partnerships through CSR (Corporate Social Responsibility) / Corporate Social Responsibility (Ministry of Health, 2012).

The Glugur Darat Health Center tried to find sources of funds with efforts that were able to attract the trust of work partners also supported the improvement of human resource innovation at the Glugur Darat Health Center. In accordance with the theory that innovative organizations actively train and develop their members to remain creative. The organization offers high job security so that workers are not worried about being laid off if they make mistakes, and this organization encourages each individual to be a champion in change. The first time when an idea is developed, the champion of change actively and enthusiastically promotes his ideas, develops support, overcomes obstacles, and ensures that innovation can be applied (Robbins, 2002).

## **3) Facilities, Infrastructure and Equipment**

In supporting the implementation of Posbindu PTM, the Glugur Darat Health Center has one package of Posbindu PTM kits that can be used by health center officers when PTM posts take place. The available equipment is still limited to the implementation of PTM posts in the Glugur Darat Health Center so that they cannot support the implementation outside the health center.

The facilities, infrastructure, and equipment available are special rooms for examination that are equipped with table and chair equipment, body scales and height gauges, body fat analyzers, recording books, tension meters, blood sugar measuring instruments, leaflets, feedback sheets, IVA tools and other health support. In the implementation of Posbindu PTM, KMS FR-PTM has not been found as a recording tool and still uses health center medical cards. However, the health center officers who implement Posbindu PTM themselves make a record in the recapitulation book of the implementation of Posbindu PTM so that it is known that participants who have risk factors or have been detected with DM.

## **B. Process**

### **1) Implementation of Posbindu PTM in Preventing DM**

Posbindu PTM is carried out with 5 stages of service called the 5 table system, but in certain situations the conditions can be adjusted to the needs and mutual agreement. The activity process of Posbindu PTM was, before the

examination was carried out joint exercises, cycling, religious lectures, healthy food demonstrations, etc. in collaboration with foundations, NGOs, Majelis Ta'lim, local Churches, etc. While waiting for their turn, the cadre conducts group counseling and provides an interview sheet to fill out. Then examination one by one, the patient registers giving the same code / sequence number and re-recording the results of the FR-PTM KMS to the recording book by the cadre. After that interview, measurement of TB, BB, BMI, abdominal circumference, body fat analysis. Examination of blood pressure, blood sugar, total cholesterol and triglycerides, IVA, and others. After completion of the examination, identification of PTM risk factors for counseling / education as well as other follow-up (Ministry of Health RI, 2012).

The process of implementing Posbindu PTM conducted at the Glugur Darat Health Center was based on the result of a joint agreement which was conducted every Friday twice a month. Posbindu PTM which was carried out at Glugur Darat Health Center began with joint gymnastics at 08.00 WIB on the health center yard. Gymnastics is led by an expert instructor and accompanied by music with movements that can be performed by the elderly and adolescents. After exercising, participants fill out attendance and get breakfast. After that, participants were taken to the waiting room of the drug to listen to group counseling before conducting an examination. Then the participants registered in the administration section of the health center, the participants used the health center medical treatment card. Then enter the available check room. Examination and interviews by doctors are conducted, if the participant is a BPJS participant and has a risk factor for PTM disease, the doctor will direct participants to the laboratory room to do blood sugar, cholesterol or other tests for free. However, if you have not registered it will be charged the cost of checking blood sugar, cholesterol etc. After checking the lab, Posbindu PTM participants were given drug prescriptions and education about diet and efforts that needed to be done. After that the patient can take the medicine and go home, the officer records in a special book.

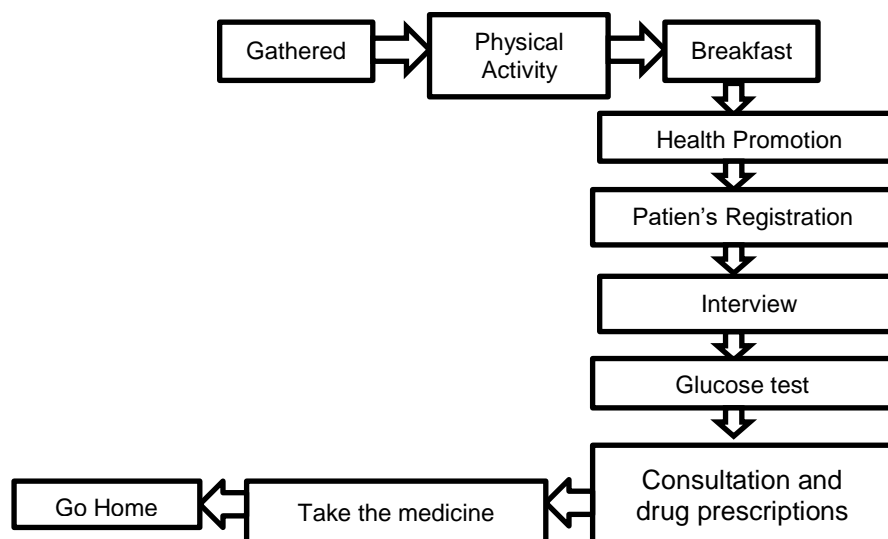


Figure 1. Posbindu Implementation Flow at Glugur Darat Health Center



The implementation of Posbindu PTM is carried out with the same path as the medical treatment patient health center so that in the process of recording and implementing the Posbindu PTM still not maximal. The flow of Posbindu PTM still does not have a special channel so that participants can be followed up optimally. The flow is still not describing community empowerment in the implementation of Posbindu PTM in the Health center Glugur Darat.

## **2) Monitoring and Evaluation**

Monitoring is carried out by health center every month through recording and reporting. In addition, monitoring and evaluation is conducted every six months or once a year by making reports which are then discussed and acted upon. Written reports (written reports) are a responsibility to superiors regarding the work carried out, in accordance with the instructions and tasks assigned to them by the supervisor. The difficulty of providing accountability like this is that it cannot describe all the events of the whole activity. The advantage of a written report is that it can be benefited by many parties, namely by the leadership for supervision and other parties, namely for the preparation of subsequent plans (Manullang, 2009).

The role of doctors who took to the field also helped in monitoring the implementation of the Posbindu PTM program at the Glugur Darat Health Center. In supervision, nothing can replace the visits of supervisors or team leaders to health workers in their workplaces. Visits provide good opportunities for exchanging opinions and training while on duty. This gives supervisors the opportunity to listen to health workers, about their various problems and ideas to advance their own work, and re-evaluate the degree of their awareness of the goals and objectives of the health program (WHO, 1999). The need for regular visits as a means of monitoring and evaluating the implementation of the Posbindu program is important, in addition to maintaining deviations, this also encourages officers to be better at carrying out their duties so that the goals are achieved.

## **C. Output**

Through this research, it was found that Posbindu PTM at Glugur Darat Health Center is one of the health services trusted by the community as a promotive and preventive health service for non-communicable diseases, especially diabetes mellitus. The presence of regular visits to Posbindu and participating in gymnastics activities routinely shows the active role of the community to maintain their health and as a form of awareness will benefit from the implementation of Posbindu PTM. In addition, the education provided in Posbindu PTM is also able to provide a healthy understanding of the lifestyle to the community, then he is able to become an educator to other communities around him so that healthy people can be realized.

In addition to the people who come regularly to join PTM posts, officers are also able to evaluate the number of cases in their work area and take preventive measures against the community so that those who have risk factors for not being DM and those who have DM do not experience complications. In this case, not all participants have received output from this program. There are still many participants who haven't come to visit PTM posts regularly because the implementation time is done in the morning while the majority of people work. Participants who attended were still attended by older people (seniors) because

they started with posyandu for the elderly, whereas Posbindu PTM was not limited to the elderly, but aged 15 years and over. So to obtain maximum output, it is necessary to have PTM posts in various other strategic public places such as schools, workplaces and others.

#### 4. Conclusion

Based on research conducted at the Glugur Darat Health Center, it can be concluded that: The Posbindu PTM program is one of the Indonesian Ministry of Health policies implemented by the Glugur Darat Community Health Center as a preventive and promotive measure against non-communicable diseases, especially the priority is diabetes mellitus. The Posbindu PTM worker at the Glugur Darat Health Center is still not in accordance with the Posbindu PTM concept, because it is still done by the Glugur Darat Health Center health staff and the flow of implementation is still the same as the health center medical treatment patients. Empowerment is still not maximal in involving community participation in preventing DM, namely making the community as a subject in the implementation of Posbindu PTM at the Glugur Darat Health Center. Posbindu PTM Fund Glugur Darat Health Center was obtained from the health office, BPJS and other partners who supported the Posbindu PTM program. The existing facilities and infrastructure have been able to support the implementation of the Posbindu PTM at the Health center Glugur Darat. Monitoring and Evaluation of the implementation of Posbindu PTM Glugur Darat Health Center is carried out through written reports every month.

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