

## **Safe disposal of insulin needles and unused medication**

### **Tembisa Provincial Tertiary Hospital- South Africa**

#### **GGHH Agenda Goals**

- **Waste**
- **Pharmaceuticals**

#### **Hospital Goal**

- To educate patients on safe disposal of insulin needles and unused medications to prevent environmental pollution and harm to human health.
- To promote the use of 1.5 diabetic containers issued by the healthcare facility for use by patients on insulin medication.
- To educate patients about proper disposal of unused medication which may be returned to the healthcare facility at allocated drop-off zones.

#### **Progress Achieved**

- Environmental benefit: Eliminated improper disposal of used needles in general/domestic waste bins.
- Human health benefit: prevented needle stick injuries due to improper disposal of used needles.

#### **The Issue**

Tembisa Provincial Tertiary Hospital is the only hospital in North Ekurhuleni which services a population of 1.2 million. There are approximately 500+ number of patients on insulin treatment. In 2018 there were 2 reported cases seen at the facility whereby children had consumed diabetic medication and died due to improper storage and disposal at home.

Most community members are not aware of proper disposal procedures of insulin needles and unused medication. Patients are still returning used needles in plastic bags and bottles for safe disposal at the hospital.

Tembisa Provincial Tertiary Hospital has initiated an awareness campaign on safe disposal of insulin needles and unused medication based on the knowledge gap identified and risk of environmental pollution, fatalities and occurrence of diseases.

#### **Sustainability Strategy Implemented**

The project was initiated in collaboration with a professional nurse in charge of diabetic management and pharmacy department. Diabetic containers were ordered on a weekly basis and stock level was monitored daily. Schedule was set for health education at outpatient's departments and creation of stalls as part of the campaign. Posters and pamphlets were designed in four different languages such as English, Isizulu, Sepedi and Tsonga to enable better communication and understanding by the community.

Control sheet was designed and used for recording of patients issued with the insulin sharps containers and will be monitored to ensure that the containers are returned to the hospital. Health education on the use of the container was done prior issuing of the container. Pharmacy department has created a drop off zone for safe disposal of unused medication from home.

**DO NOT**

PUT/THROW NEEDLES IN THE  
FOLLOWING ITEMS:



SAFE DISPOSAL OF INSULIN NEEDLES AT HOME



INDAWO EPHEPHILE YOKULAHLELA UMJOVO OSEBENZILE EKHAYA

NCINA ABANTWANA NOMPHEKATHI UPHEPHILE  
ABANGANI ABASEBENZISA I.S UMJOVO OCULILE ,AMAKHONTENA AYATHOLA-  
KALA ETEMBISA WOKUNCINA UMJOVO OSEBENZILE EKHAYA.

NGINGAWATHOLAPHI AMAKHONTENA?

BUZISA KUBONESI LABO ABASEBENZA LAKUPHUMELA KHONA IZIGU-  
LIZILINDELA UKUTHOLA AMAFAYELA AZO.

UBANI ONELUNGOLO LOKUTHOLA AMAKHONTENA?

ISIGULI ESINYE NESINYE ESSEBENZISA UMJOVOEKHAYA.

NGENZANI UMA ISIGCWELE?

UYIBUYISELA ESIBHEDELELA NGELANGA LAKHO LOKUBUYELA UNIKA ABONESI  
LAPHO UYITHATHE KHONA NOMAI IKLINIKI OSEDUZE NAYO LAPHO  
ESIBHEDELELA.



KEEP OUT OF REACH  
OF CHILDREN

UMA UFUNA ULWAZI SHAYELA KULENOMBOLO ELANDELAYO:011 923 2285

## Implementation process

Insulin containers are now available and issued at medical outpatient centers for patients collecting their treatment. Stalls are carried out bi-weekly at the main outpatients, medical outpatients and pharmacy. Morning sessions are held prior to the stall to inform patients about diabetes, insulin sharps containers and medication drop off zone.

The containers are also issued at the stalls and patients are informed about how to store the containers at home and what to do when the containers are full. Control sheet is also kept at all the stalls for recording of patients who are issued with the containers.



### **Tracking Progress**

In order to ensure that we do not lose track of the project, the control sheet with patient’s details is monitored to ensure that the containers are returned before the period of two months. Patients’ contact details were taken and will be used to remind them to return the containers when full or if the period of two months lapses.

Positive feedback was received during the stall and patients highlighted that they were not aware of the insulin containers. Some patients wanted to collect the containers for their relatives on insulin treatment from other provinces.

### **Challenges and lessons learned**

The drop off zone was created before the bi-weekly stalls. Challenges encountered was that patients and staff were using the allocated medication bins for disposal of general waste. As part of corrective measure, the drop off zone posters were designed and circulated to outpatient departments and patients are encouraged daily to return unused medication to the pharmacy.

### **Next Steps**

A slide show video is currently being compiled for display at outpatient’s screens. Insulin awareness t-shirts will be designed and worn by the task team as part of awareness creation around the hospital.

Future plans include broadcasting of the campaign through the local newspapers and radio station. Tracking process will be done twice a month to monitor if the containers are returned to the facility. A request will be made with the district environmental health office to extend the campaign to the local clinics as it has been observed during the hospital campaign that most of the community members are not aware of the existence of the insulin sharps containers. The plan will include monthly awareness campaign at different local clinics in Ekurhuleni.

### **Demographic information**

Tembisa Provincial Tertiary Hospital is a level three tertiary hospital situated in the North of Ekurhuleni Metropolitan Municipality. Established in 1972 the hospital services an estimated number of 1.2 million people, with a bed capacity of 840 and 2,050 staff. The hospital provides generalized and non-specialized services. The hospital is mostly surrounded by informal settlement and is supported by 1 Community health center, 1 MOU and 22 clinics around Tembisa.

### **Contacts**

Lebogang Mwale

Email: [lebogangmwale1@gmail.com](mailto:lebogangmwale1@gmail.com)