Diabetes: supporting people facing homelessness

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Agenda

Links

Local services
Useful links

Types of diabetes

T1, T2, 3C
Pre-diabetes
Gestational
Risk factors

Effects

How is the body affected by diabetes

Management

Monitoring and managing diabetes: medication, lifestyle, diet, blood sugar testing

Complications

Hypos, DKA, poor wound healing

Services in Brighton & Hove for diabetic care + useful links

- **GP surgery** – will coordinate the care a patient receives
- **Diabetes Care for You** – Community Diabetic Team https://www.sussexcommunity.nhs.uk/services/diabetes-care-for-you/108951
- **Podiatry** – Hospital, Conway Court, Moulsecoomb HC https://www.sussexcommunity.nhs.uk/services/podiatry-service/109036
- **Retinopathy** – Abbey Road https://abbeyroadsurgery.org.uk/conditions/diabetic-retinopathy/
- **Endocrinology** – hospital team https://www.bsuh.nhs.uk/services/diabetes-and-endocrinology/
- **Inpatient care** at the hospital
- **Useful guide for shopping and nutrition** for people with diabetes facing homelessness: http://www.eehn.co.uk/diabetes-diet-guides-for-homeless-people.html

What is diabetes?

Food produces sugar in our bodies, which needs to travel to our muscles where it can be stored and used for energy. **Insulin** is created by the pancreas and is the *key* needed to successfully unlock muscle cells to let sugar in from the blood stream, where it can be stored for energy. People who are diabetic, do not naturally produce insulin, or else produce insulin that is not able to unlock the muscle cells in order to let sugar in. Instead sugar gets ‘stuck’ in their bloodstream.

Diabetes develops when glucose can't enter the body's cells to be used as fuel. This happens because either:

In the case of Type 1 diabetes, there is no key (insulin) to unlock the door to the cells

Or, in the case of Type 2 diabetes, the key (insulin) is unable to unlock the door properly

and/or

the key (insulin) is there but the lock doesn't work properly

Types of diabetes

There are many different types of diabetes. Some of the most common are:

Type 1 diabetes: usually first appears in childhood, or early adulthood, potentially caused by a virus. Pancreas has stopped making insulin completely a.k.a. there is no key

Type 2 diabetes: often occurs later in life from mid 30s/40s. The pancreas may make some insulin but not enough for the sugar levels in their bloodstream or else insulin has changed shape and therefore no longer matches the connecting points with the sugar a.k.a. the key has changed shape and now no longer fits the lock

Pre-diabetes: when the amount of sugar in a person's blood is above average but below diabetic. At this stage, the diabetic process is sometimes able to be reversed

Risk factors

- **A high BMI** (above 30)
- **Smoking**
- **Above average drinking** – can cause a condition, chronic pancreatitis, which can lead to diabetes
- Certain **anti-psychotic medications** (e.g. quetiapine) may put a person at a higher risk of developing diabetes. The benefits of the medication must be weighed up against the risk of diabetes.

At the stage of **pre-diabetes**, **lifestyle adjustments** (diet, exercise, alcohol intake, stopping smoking), may be enough to reverse the progression towards diabetes. At this stage, there may be no need for medication

Complications of diabetes on the body

Diabetes can cause long term complications on the body:

- **Eyes** – some people with diabetes develop a disease called diabetic retinopathy that can cause problems with eye sight. A screening test can pick up changes that can be treated and prevent sight loss.
- **Kidneys** – high blood sugar and blood pressure can cause problems for the kidneys filtering.
- **Feet** – high sugar levels can damage nerves and cause problems with circulation to the feet. Foot problems can be very serious and lead to amputation as wounds. Any wounds or sore need to be treated quickly. feet are particularly vulnerable. Poor/wet footwear and no opportunity to change socks and shoes, results in rubbing which can cause wounds and then ulcers at risk of infection - access to good footwear and being able to change socks regularly is important for prevention and recovery.
- **Risk of Stoke and Heart Attack** – raised blood pressure, cholesterol and blood sugars all increase risk of heart disease.
- **Sex** – damage to the blood vessels can reduce sensation for women and increased blood sugars and make things like thrush or urinary tract infections more likely. The amount of blood flow to sexual organs can cause problems with arousal. This may lead to erectile dysfunction or impotence.

Monitoring & managing diabetes: clinics and screening

- **GP will screen for pre-diabetes** as part of the New Patient Health Check, at the point of joining a GP surgery.
    - **HBA1C blood test**: gives a snapshot of a person's **blood sugar levels** over the past 3 months:
        - 2x blood tests of over 48mmol/mol results is a diabetes diagnosis
        - 42-47mmol/mol results in follow up blood tests every 6-12 months
        - under 42mmol/mol no concern/follow up
    - **kidney health blood test**
- checking **blood pressure** regularly: new research suggests that the blood pressure of people who are diabetic should be monitored as closely as their sugar levels
- checking **cholesterol levels** (build-up of fats in arteries) annually
- checking **eye health** (retinopathy) annually. Specialist retinopathy clinic on Abbey Road

Monitoring & managing diabetes: supporting your clients

- **GP practice will coordinate the patient's care**
- You may be attending GP appointments with your clients, additionally you may be booking appointments for, and accompanying your clients to the following:
- **A minimum of an annual check with GP to check blood sugar, blood sugar, cholesterol, kidneys, retinopathy** (eye check). If diabetes well controlled, then annual check up, **If there are signs of diabetes not under control, then check ups may be required monthly or every few months**
- Your clients might be registered with **Diabetes Care for You**, and going to **Conway Court** or **Moulsecoomb** sites for **check ups or treatments by the diabetic community care team, e.g. podiatry, dietician, nurse**, etc.
- They may also be visiting **Abbey Road retinopathy clinic** for eye checks
- **The Endocrinologist Department** at the hospital following a diabetes related admission
- **Specific challenges for people experiencing homelessness** and those that care for them: **accessing appointments and keeping engaged with services.** Hannah is working with Diabetes Care for You on creating an advice & guidance pathway to be used with people struggling to attend appointments

Monitoring & managing diabetes: medication

- **oral tablets** to bring the following into a safe range
  - blood sugar levels
  - blood pressure
  - cholesterol
- if oral tablets don't resolve the issue, or cause harmful side-effects, then:
- **a hormone injection can be self-administered weekly** (relatively new intervention but increasingly being prescribed more widely)
- **an insulin injection** can be self-administered (most commonly for people with Type 1 diabetes once or twice per day but also for people with Type 2. Prescription may range from rapid acting for just a few hours to slower release over 12-24 hours. Different people are prescribed different schedules depending on what they can manage and how their blood sugars respond)

Monitoring & managing diabetes: medication challenges

- Specific challenges for people experiencing homelessness and those that care for them: **no place to safely store medicines, often get lost, no plan in place for when and where to take them. People who are sleeping on the streets, and have Type 1 diabetes, are often admitted into hospital as they can go days without insulin**
- It can be quite daunting for patients on many different medication, they may feel overwhelmed with their **medication schedule**, have issues with safe **storage**, keeping track of where their medication is kept. Support workers might be able to support with strategies to help people **keep their medicines safe & putting in place a plan or schedule for taking medication**.
- Another consideration is that some medicines may not work well, or may produce intolerable **side effects,** in which case then you can support your clients to consult with their GP and get **medication adjusted or changed**.

Considerations for self-management and monitoring of diabetes

- If diabetes is controlled by an **oral medicine, then blood sugar levels are unlikely to drop**.
- Other forms of medication, including **injecting insulin, can result in blood sugar levels fluctuating heavily** so regular **self-monitoring** may be required via:
    - a fingerprick blood test
    - a libra (device containing a needle attached to a person's arm which can be scanned for live blood sugar readings and only needs to be changed every two weeks)
- **Diet and lifestyle adjustments**, alongside medication, can improve wellbeing
    - balanced diet, range of healthy foods, avoiding processed foods where possible
    - not smoking

It can be hard to maintain a healthy diet and get enough exercise when facing homelessness. This website offers meal ideas and shopping tips for people who are living with diabetes and facing homelessness: ***http://www.eehn.co.uk/diabetes-diet-guides-for-homeless-people.html***

Complications & emergencies

- **Complications arising from infected wounds, especially on the feet** (see slide 8), may result in **amputation**. The implications of amputation are far reaching and impact hugely on a person's quality of life, so it's important to **keep an eye out for any wounds that have not been noticed or treated.**
- **Diabetic emergencies** are most commonly caused by one of two reasons:
    - **Hypos:** blood sugar levels are too low. Symptoms: clammy, sweaty, blurred vision, lightheaded/dizzy. ACTION: check blood sugars, if under 4 (normal range is 4-7) then the easiest and quickest way to resolve the situation is to **give them something sweet to eat or drink (jelly babies, orange juice). Within 10-30 minutes their blood sugar levels should reach the normal range again, however, if they remain unwell call an ambulance**
    - **DKA (Diabetic Ketoacidosis):** most commonly affects people with Type 1 diabetes. A severe lack of insulin in the body means the body can't use sugar for energy, so uses fat instead. The body then releases chemicals called ketones which can build up making a person's blood acidic. Blood sugar levels are likely to be too high. Symptoms: similar to a hypo, incl stomach pain, blurred vision. **ACTION: Urgent medical attention – call an ambulance**

NB. People with type 1 diabetes who are sleeping on the streets may go without insulin for days as they are not able to keep it with them. They may then end up in DKA. So a priority when working with someone in this situation, is to support them to access their insulin .

Thank you!
Any questions, contact
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