Diabetes type 2

Module name: Public Health Policy(BMHP_5013)

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Group 2

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Introduction

- Diabetes mellitus definition and background
- Different types of the diabetes

- **Focusing on:**
- UK strategies and policies to prevent type 2 diabetes

encouraging healthy eating by working with manufacturers and retailers

- Encouraging people to be more physically active and Promoting

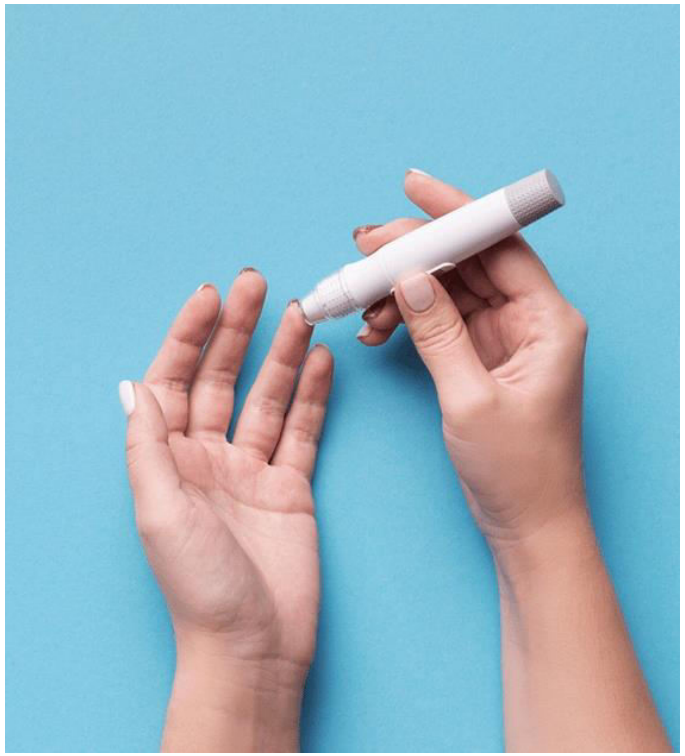
healthy lifestyle messages for the population

- Strategy linked to diet , physical activity and obesity in type 2 diabetes

- Role of agencies
- Key issues and effects of type 2 diabetes
- Incidence Rates and Trends
- Globally Geographical Distribution, Vulnerable Groups
- Conclusion and recommendations

Krisztina

Key issues and background



- **Diabetes**, is a lifelong condition that causes a person's blood sugar level to become too high. This kind of health condition that can affect your everyday life. It is caused by problems with a chemical in the body called insulin(NHS, 2017).
- **Types**: Type 1 and type 2, gestational diabetes
- **Risk**: obesity, family history, inactivity, age, ethnicity, race, over -weight, hearth disease, Asian and African-Caribbean or black African origin, alcohol, smoking, high blood pressure, depression(NHS, 2017).
- **Symptoms**: hunger, weight loss, blurred vision, itchy skin, feeling thirsty, tired, long heal cut and wounds, peeing more than usual, patches of dark skin, dry mouth, infections(NHS, 2017).
- **Impact of type 2 diabetes:**
- Nerve damage :caused by diabetes cannot be reversed. This is because the body is unable to repair damaged nerve tissue naturally. May affect hands, feet, arms. This is called diabetic neuropathy(Diabetes UK, n.d.).
- Kidney damage: It is not uncommon for kidney problems to occur, for early diagnosis to be stopped and for damage to be repaired. However, if not noticed in time it cannot be stopped(Diabetes UK, n.d.).

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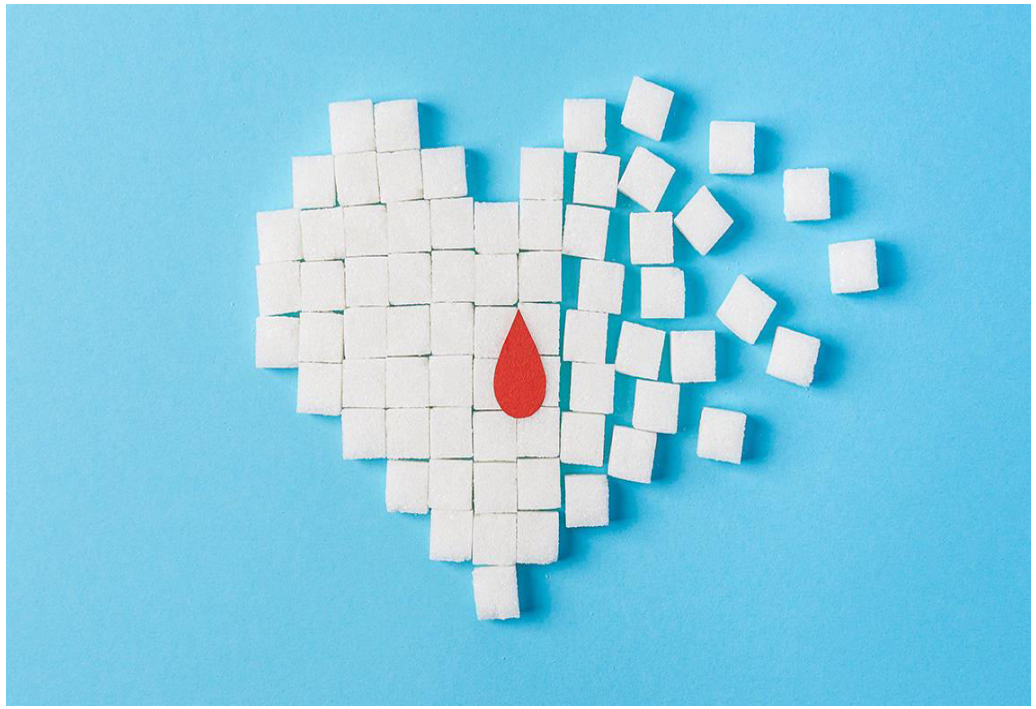
Effects of type 2 diabetes

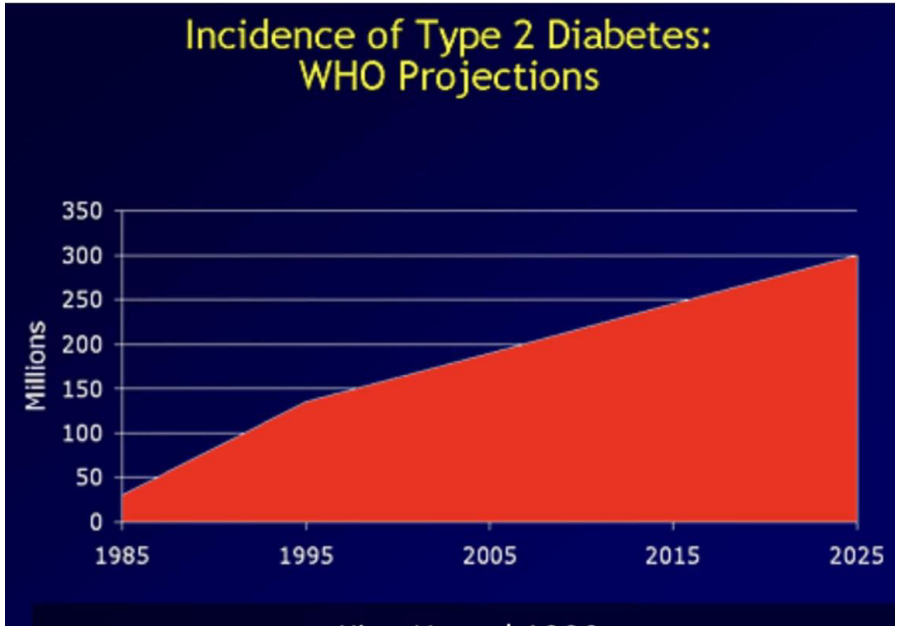


- **Foot damage**: Reduce blood supply to the foot and lost of feeling. Left untreated, the blisters cut can get seriously infection which could lead to leg amputation (Mayo Clinic, 2018.a)
- **Chronic skin condition** : People with this disease turn to have skin problems including hot ,painful swollen , itchy, rash including bacteria and fungi infection (Mayo Clinic , 2018a).
- **Hearing impairment** : This is more common in type 2 Diabetes and no one know why (Mayo Clinic , 2018a) .
- **Cardiovascular disease** : It can increase the risk of various Cardiovascular problem such angina, coronary artery with chest pain, heart attack and Stroke (Mayo Clinic, 2018.a)
- **Neuropathy**. : Excess sugar can damage the tiny blood vessels, nerve especially in your leg (Mayo Clinic , 2018a)
- **Alzheimer's diseases**: This can increase the risk of dementia such Alzheimer's disease (NHS, 2017).
- **Eye damage**: It can damage the blood vessels of the retina potential leading to blindness (Diabetic Retinopathy) (Mayo Clinic, 2018a).

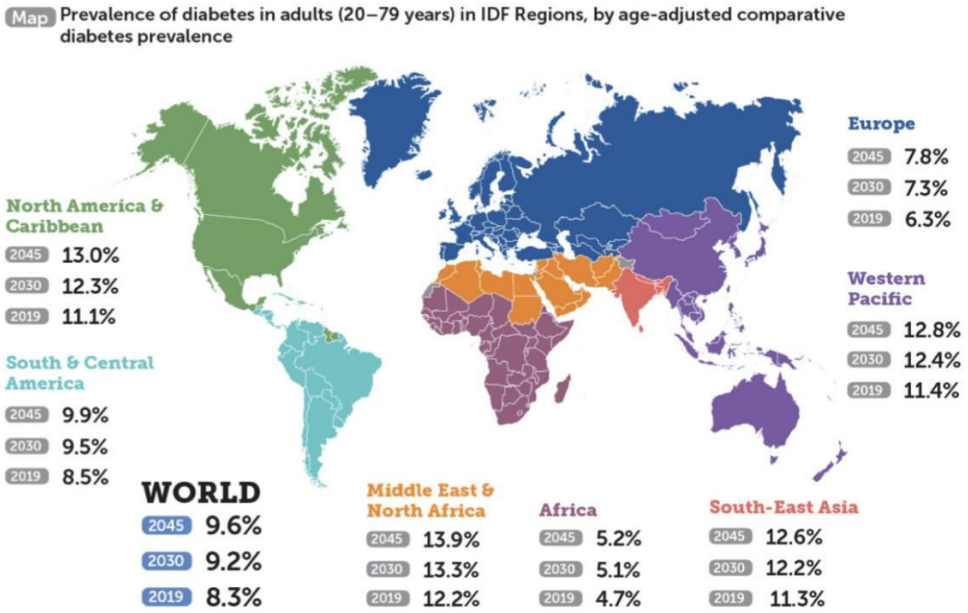
Helen

Type 2 Diabetes Incidence Rates and Trends, Globally Geographical Distribution

- Over 4 million in the UK;(Diabetes.co.uk, 2019).
- Diabetes prevalence in the UK is estimated to rise to 5 million by 2025;(Diabetes.co.uk, 2019).
- 90% of Diabetes cases in the world represent Type 2 Diabetes
- 85-90 % represent of all cases of type 2 Diabetes that usually developing in adults over the age of 40;
- Type 2 Diabetes has increased over the past 50 years.
- 415 million people were diagnosed globally, and this figure is predicted to rise to over 642 million by 2040(Diabetes.co.uk, 2019).
- In 2010, about 285 million people were diagnosed globally, compared to 30 million in 1985.
- In Europe, 58 million people have Type 2 Diabetes ;



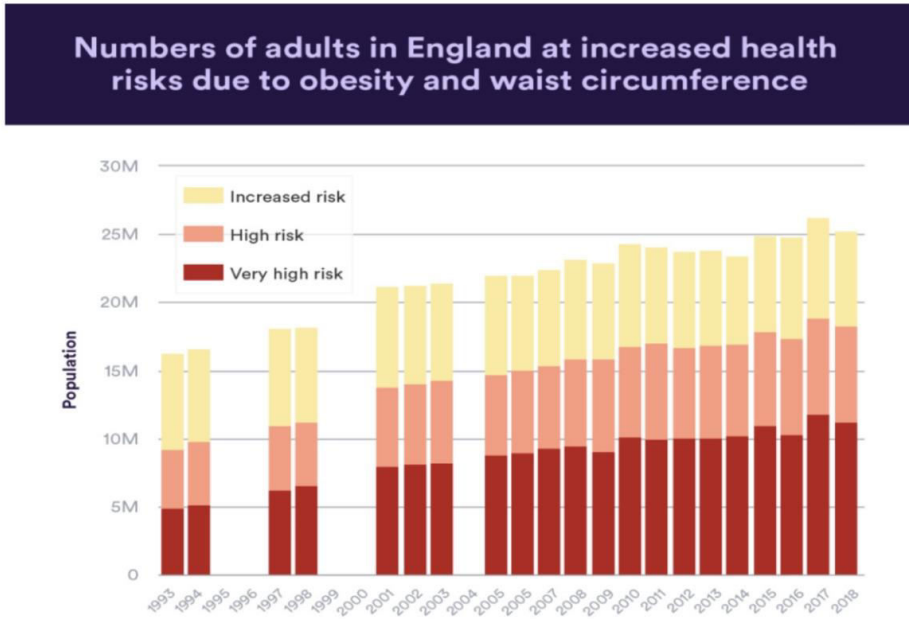
King H et al,1998

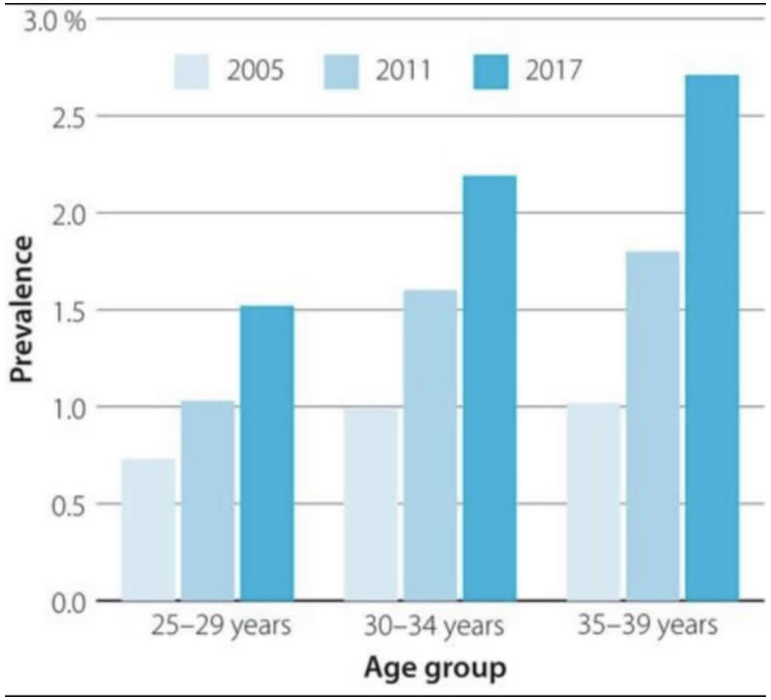


IDF DIABETES ATLAS,2019

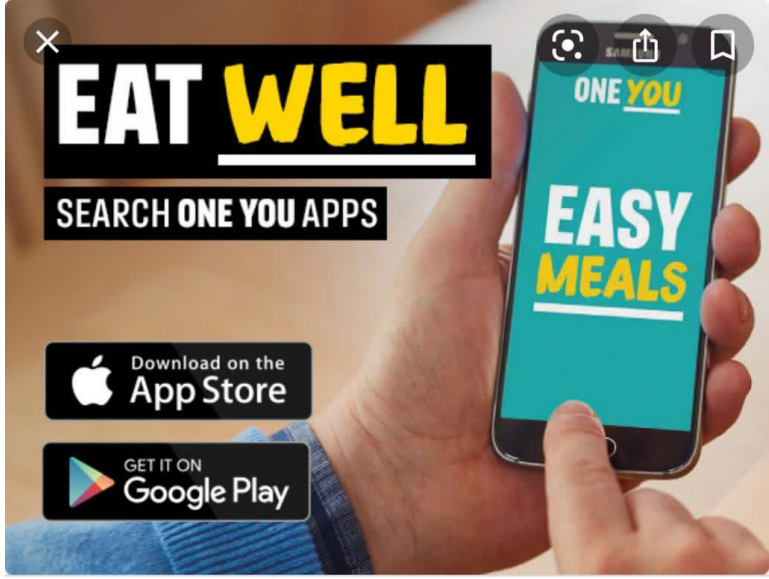
Causes and Vulnerable Groups

- The causes are: Lifestyle, Obesity, Age, Environmental factors, Ethnic backgrounds;
- In UK, Obesity raised to about 13 million (NHS,2019);
- People over 40 are more likely to develop Type 2 Diabetes
- The vulnerable groups are: People from South Asia and Africa, socio-economically class disadvantaged (people with low income), Obese people;
- People from South Asia, African Caribbean and Black African, are more likely to develop Type 2 Diabetes than white people (Public Health, 2011);
- Type 2 Diabetes is more common among the social class v(socio economically disadvantaged) than the class I (socio-economically favored) (NHS, 2010);
- In 2004, 18% of men from the social class I were obese, while men from the social class v had a rate of 28% and 10% of women in the social class I were obese, compared to 25% of women in the social class v (Public Health,2011).
- Diabetes Type 2 cannot be transmitted;





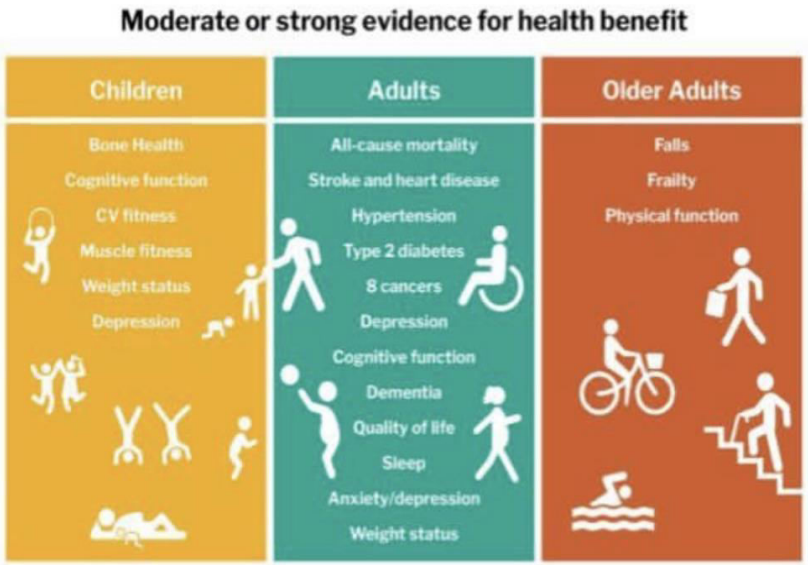
UK Policy to prevent type 2 diabetes



- **1. Encouraging healthy eating by working with food manufacturers and retailers.**
- The UK Government has developed policies through the obesogenic environment which includes;
- Sugar Reduction Programme (April, 2016) , Calorie Reduction Programme (March, 2017) etc.
- Announced in childhood obesity plan which was published in 2016
- Overall 5% sugar reduction programme in 2017 as there are initial plan compared to sugar level in food 2015.
- It's also covers breakfast cereals, yogurts, biscuits, cakes, puddings etc.
- **Calories Reduction Programme**
- Aim to reduce 20% calories intake by 2024 for children up to 18 years old
- Why calories reduction . 1/3 of children come out of primary school being obese making them obsessed and lowering their self esteem
- **Ways to tackle calorie intake includes**
- An app called Easy Meal and Change4Life food scanner, helping families to choose the right balance meal and remind them to eat the 5 A Day, Food Scanner app helps to know what is in the meal they are eating (Public Health England, 2018a).

UK Policy to prevent type 2 diabetes

- **2. Encouraging people to be physically active.**
- UK Chief Medical Officers' Physical Activity Guidelines published in September, 2019 for under 5, Children and infants, 19- 64 years and adults over 64 has specific type of exercises to do to keep them fit (Department of Health and Social Care, 2019).
- The population are supported to be more active even if it is little moves.
- Digital approach launch in 2017. It includes use of technology of wearable and app (Public Health England, 2018a).
- The benefits of being physically active (eg. Increases breathing rate, makes heart and muscles work harder etc) are emphasized and made clear to the population.
- **3. Promoting healthy lifestyle messages for the whole population**
- Ensure that national media messages are conveyed and communicated to appropriate target audience.
- Increase awareness of healthy food calorie content and portion, meal size and drinks .
- Discourage people from living a sedentary lifestyle.
- Addressing misconceptions relating to the risk of diabetes that can act at various change barriers (pathways.nice.org.uk, 2021).



Josephine

UK Policy to prevent type 2 diabetes

- **Strategy linked to diet , physical activity and obesity in type 2 diabetes:**
- This was established to address the risk factors for example being obese, a sedentary lifestyle and unhealthy eating linking to non – communicable disease like types 2 diabetes etc (pathways.nice.org.uk, 2021).
- Encourage local, regional and national monitoring of the risk factors for diabetes and other non-communicable diseases. Also encourage monitoring of age-specific incidence rates for type 2 diabetes and other non-communicable diseases.
- The Government outlined plans for a soft drinks industry levy across the UK, which was

brought into law in April 2018.

- **Healthier You: NHS Diabetes Prevention Programme**:
- Reduce the incidence of Type 2 diabetes
- Reduce the incidence of complications associated with Type 2 diabetes – heart, stroke, kidney, eye and foot problems related to diabetes
- Reduce health inequalities associated with incidence of Type 2 diabetes, over the longer term (Public Health England)
- Achieving a healthy weight
- Achievement of dietary recommendations

Jennifer

Role of agencies

- Parents, teachers and school playing very important role of prevention of type 2 diabetes by providing education and healthy living programs (Clayton Velicer, 2016).
- General practitioners promoting healthy lifestyle and monitor the patients (R Williams et al, 2004).
- The lifestyle programs promoted by Public Health of England (Rössner, S., 2001)
- Diabetes Prevention Week launched by NHS , Public Health England and Diabetes UK in April 2018.(Public Health England, 2018)
- The World Health Organization (WHO), "Global strategy on diet, physical activity and health" (WHO, 2020).
- International insulin foundation study the problems faced by the diabetic people all over the world and providing access to insulin (Editor, 2015).
- Charity Organisations providing significant support in terms of collecting donations and distributing them correctly. (Al Yahya, K. and Fustier, N., 2011).

Conclusion

- 85% diabetes in United Kingdom.
- Is preventable.
- Obesity is the most important changeable risk factors.
- More common in people over 40 years, Pakistani, Bangladeshi, Indian and African Caribbean populations.
- Women and poorer socioeconomic groups more at risk of diabetes complications and death from diabetes.
- 20% with type 2 diabetes remain undiagnosed.
- If you are worried about any aspect of your own health, talk to your doctor.
- We all need to eat health and get plenty of physical exercise.

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