

COMPLICATIONS AND COMORBIDITIES IN PEOPLE LIVING WITH DIABETES (PWD)

Diabetes can affect every organ system in the human body. The extent of potential organ damage depends largely on its duration and successful management.



MENTAL HEALTH

- PwD are **2-3X** more likely to experience **DEPRESSION** than people without diabetes

EYES

- **1/3 of PwD** develop **DIABETIC RETINOPATHY (DR)**
- DR can develop into **DIABETIC MACULAR EDEMA**, leading to **vision impairment and blindness**

BRAIN

- PwD are **1.5-2X** more likely to have a **STROKE** than people without diabetes
- T2D has been associated with **neuropsychological dysfunctions, dementia, Alzheimer's disease and Parkinson's disease**

OTHER CONDITIONS

- **1/5 of people living with cancer have diabetes**
- PwD are at **heightened risk of developing serious and more deadly forms of infections**, including COVID-19
- Diabetes is also associated to **hearing loss, lung diseases, non-alcoholic fatty liver disease, sexual dysfunctions, infections and obesity**

PERIPHERAL NERVES

- **About 1/3 of PwD** develop **foot ulcers**, of whom approximately **50%** will become **infected** and **20%** **amputated**
- **Up to 1/2 of PwD** develop **PERIPHERAL NEUROPATHY**

HEART

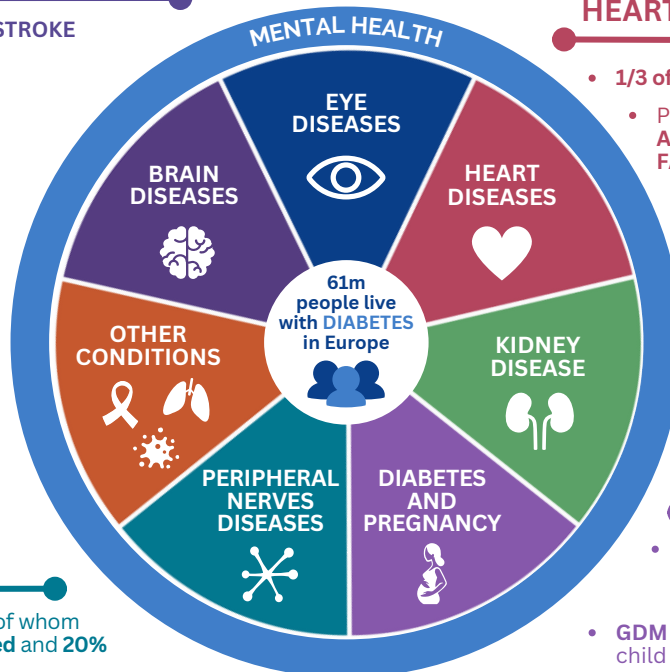
- **1/3 of PwD** develop **CARDIOVASCULAR DISEASES**
- PwD are at **increased risk** of having a **HEART ATTACK** and **>2X** more likely to develop **HEART FAILURE** than people without diabetes
- **HYPERTENSION** is **twice as frequent** in PwD than in people without diabetes

KIDNEYS

- More than **1/3 of PwD** develop **KIDNEY DISEASE**
- **Diabetes/+ hypertension** cause **80%** of **END-STAGE RENAL DISEASE**

DIABETES AND PREGNANCY

- **GESTATIONAL DIABETES (GDM)** is associated with multiple **adverse pregnancy outcomes**
- **GDM** increases the risk for the mother and the child to develop **T2D** in later life



SOURCES

Mental health:

1. [The association between Diabetes mellitus and Depression](#)

Brain:

2. [Prevalence of diabetes and its effects on stroke outcomes: A meta-analysis and literature review](#)
3. [The link between type 2 diabetes and dementia: from biomarkers to treatment](#)
4. [Regional Brain Gray Matter Changes in Patients with Type 2 Diabetes Mellitus](#)
5. [The Impact of Type 2 Diabetes in Parkinson's Disease](#)

Eyes:

6. [Screening for diabetic retinopathy: new perspectives and challenges](#)
7. [Diabetic retinopathy and diabetic macular oedema pathways and management: UK Consensus Working Group](#)
8. [Diabetic macular edema](#)

Heart:

9. [Prevalence of cardiovascular disease in type 2 diabetes: a systematic literature review of scientific evidence from across the world in 2007–2017](#)
10. [Heart Failure in Type 2 Diabetes Mellitus](#)
11. [Heart Failure in Patients with Diabetes Mellitus](#)
12. [Diabetes, Hypertension, and Cardiovascular Disease: Clinical Insights and Vascular Mechanisms](#)

Kidneys:

13. [Diabetic Kidney Disease Challenges, Progress, and Possibilities](#)
14. [The Global Epidemiology of Diabetes and Kidney Disease](#)
15. [IDF Europe: Factsheet on Diabetes and Chronic Kidney Disease](#)

Peripheral nerves:

16. [Epidemiology of Peripheral Neuropathy and Lower Extremity Disease in Diabetes](#)
17. [Global Disability Burdens of Diabetes-Related Lower-Extremity Complications in 1990 and 2016](#)

Diabetes and pregnancy:

18. [Gestational Diabetes Mellitus in Europe: A Systematic Review and Meta Analysis of Prevalence Studies](#)
19. [Gestational Diabetes Mellitus](#)

Other conditions:

20. [Diabetes Mellitus in People with Cancer](#)
21. [Diabetes UK: Diabetes and Cancer](#)
22. [Latest insights into the risk of cancer in diabetes](#)
23. [Diabetes and Cancer](#)
24. [Diabetes in COVID-19: Prevalence, pathophysiology, prognosis and practical considerations](#)
25. [Diabetes mellitus and hearing loss: A review](#)
26. [Increased risk of respiratory diseases in adults with Type 1 and Type 2 diabetes](#)
27. [Type 2 diabetes is associated with an increased prevalence of respiratory symptoms as compared to the general population](#)
28. [Non-alcoholic fatty liver disease and diabetes](#)
29. [Diabetes and sexual dysfunction: current perspectives](#)
30. [The association between diabetes mellitus and incident infections: a systematic review and meta-analysis of observational studies](#)
31. [Mechanism linking diabetes mellitus and obesity](#)