**Forskningsservice**

Projekt nr.

**Indstilling om godkendelse af projekt**

**Autoriseret institution**

Steno Diabetes Center Aarhus (inst. nr. 574)

**Projekttitel**

Family relations and type 2 diabetes through the life span.

**Projektbeskrivelse**

The overall aim of this project is to identify the contribution of family characteristics in terms of chronic disease history, socio demographic characteristics and risk factors for the development of type 2 diabetes under a life course perspective using a three-generation family pedigree.

Type 2 diabetes is a multifactorial disease that can develop at any stage of life course trajectory; yet it is most commonly diagnosed during middle-age adulthood. In addition to the strong genetic risk component, behavioral risk factors and socio economic conditions clusters in families and their influence depends on the timing and exposure accumulation (length). For example, poor childhood socio economic status (SES) 🡪 poor educational attainment 🡪 poor adult SES or poor childhood SES 🡪 poor quality diet 🡪 lower pancreatic potential?

This project will contribute with new and strong evidence on the role that family relations plays for type 2 diabetes development and progression under an aetiological, predictive and a causal perspective using advanced epidemiological, demographic, and statistical methods.

**Population**

In order to identify familial risk factors through individuals’ life course trajectory, the population understudy covers all individuals alive and living in Denmark from 1 January 1970 to 31 December 2020 (~8.5 million people). It consist of a two or three-generation (even four) pedigree in which index individuals have linkage to their parents and spouses. Index individuals are defined as those individuals that serve as a reference to identify family relations and which will follow with regards to the outcome. With the purpose to identify potential pathways, drivers and mechanisms linking family relations to type 2 diabetes development and progression, this project will further use cohort and cross-sectional survey data to extract more detailed information on individuals’ and family members risk exposures.

**Variabelindhold**

* Befolkning vs. Demografi, familie og husstandsforhold (BEF)
* BEF\_ADRESSELABEL, BEF\_PERSONNUMMER, Byopgørelsen, Familier og husstande
* Fertilitetsdatabasen
* Personindkomst vs. Indkomster (INDH/INDK)
* Familieindskomst (FAIK)
* Kvalifikationsregistret vs. Uddannelsesoplysninger (UDDA)
* Vandringer (VNDS)
* Arbejdsklassifikationsmodulet (AKM)
* Sygesikringsregisteret (SYSI, SSSY)
* Lægemiddelregisteret (LMDB)
* Arbejdsplads(er)

**Særligt vedr. Lægemiddelsdata**

Der ønskes adgang til lægemidler, da oplysninger om medicin bidrager til at identificere personer med diabetes og derudover bidrager til at belyse sygelighed i populationen.

**Eksterne data eller egne data**

Eksterne data/egne data til dette projekt er:

Fra Sundhedsdatastyrelsen vil vi desuden søge om adgang til følgende register for data om diabetes

samt relaterede sygdomme og risikofaktorer:

* *Kroniske sygdomsdiagnoser:*

Det Nationale Diabetesregister? (LPR, RMPS, DADD, Diabase)

Landspatientregistret (LPR\_ADM, LPR\_BES, LPR\_DIAG, LPR\_OPR, LPR\_SKSOP, LPR\_SKSOPR, UAF\_ADM, UAF\_BES, UAF\_DIAG, UAF\_OPR, UAF\_SKSOPR)

Cancerregisteret

The laboratory data set/ Danish National Biobank?

* *Dødsårsag:*

Dødsårsagsregisteret ([DOD](file:///G:\K13\FSE%20grunddata\Registeroversigter\C.%20Variabellister\DOD%20-%20Døde%20i%20Danmark.html), DODSAARS, [DODSAASG](file:///G:\K13\FSE%20grunddata\Registeroversigter\C.%20Variabellister\DODSAASG%20-%20Dødsårsagsregister.html))

* *Medicinering kronisk sygdom:*

Lægemiddelstatistikdatabasen

* Exposures and risk factors:

*Overvægt:*Sessionsregisteret?

EPIC-Interact cohort study. Next Generation Study

ADDITION, ADDITION-PRO cohort studies

Inter99

CORE Trial (Check your health study)

The Danish National Health survey (2010, 2013 and 2017)

**Projekts slutdato**

Data access is requested until December 2030?