**The cumulative effect of perceived discrimination on the risk of Diabetes Type 2 in multiple minority groups.**

**Introduction:** It is theorised that ongoing perceived discrimination as any chronic psychological stress can result in dysregulated physiological reactivity resulting from stress response and therefore increase susceptibility to disease. Studies examining exposure to discrimination at one point only are suggested to underestimate the contribution of discrimination to poor health. Numerous studies link the onset of Type 2 Diabetes Mellitus (T2DM) to stress response. We examined the prospective association between cumulative exposure to discrimination in older multiple minority groups in the USA (>50 years old) and the likelihood of T2DM onset.

**Methods:** Survey data from a 10-year Health and Retirement Study of Ageing (N ~ 18000) conducted in the USA was used. Exposure was measured at six 2-year intervals (2008-2018). The effect of the time-varying cumulative exposure to perceived discrimination assessed at six equal 2-year intervals during 2008-2018 on T2DM onset was assessed assuming a 2-year lag to account for reverse causality. The Cox proportional hazards model with baseline (i.e., wealth) and time-dependent covariates (i.e., age) was used. The analysis was performed using WCE package in R.

**Results:** In older women (HR = 2.52, 95%CI: [2.23; 3.01], p<0.001), individuals born outside US (HR = 4.05 95% CI: [3.01; 5.70], p<0.001), and obese individuals (HR = 2.04, 95%CI: [1.52; 2.82], p<0.001) everyday cumulative discrimination in a form of being treated with less respect due to their gender, national origin and weight, respectively, increased the risk of T2DM onset. Everyday cumulative discrimination in medical settings attributed to race and gender increased the risk of T2DM onset in black (HR = 1.67, 95% CI: [0.73; 3.64], p<0.001) and female individuals (HR = 3.39, 95%CI: [2.65; 3.76], p<0.001), respectively.

ADD on intersectionality

* Gender and race
* Gender and national origin
* Gender and weight
* National origin and race
* National origin and weight
* Race and weight

**Conclusion:** Everyday discrimination attributed to several characteristics (e.g., sex and race) increases the risk of T2DM. Such effects are particularly pronounced in those experiencing discrimination that can be attributed to more than one characteristic (intersectional discrimination).