Work disability before & after diabetes diagnosis: A population-based Swedish register study
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The burden of diabetes ranks in the top 10 as measured by disability-adjusted life-years. In addition to individual burden, diabetes has a vast societal and economic significance.
Moreover, although people have been shown to be heterogeneous in terms of disease prognosis, only a few previous studies have focused on such differences and on possible high-risk subgroups. To address the gaps in previous research, we evaluated the risk of work disability (sick leave and disability pension) before and after diabetes diagnosis relative to individuals without diabetes during the same time period, as well as the trajectory of work disability around the diagnosis.

**Methods**

This Swedish population-based cohort study with register data included 14,428 individuals with incident diabetes in 2006 and 39,702 individuals without diabetes during an observation window of 7 years (2003-2009) around the diabetes diagnosis. To examine the risk of work disability and the trajectories of work disability, we applied a repeated-measures Poisson regression analysis using the generalized estimating equations method with exchangeable correlation structure.

**Results**

Work disability was substantially higher among people with diabetes (overall mean = 95 days per year over the 7 years, SD = 143) than among those without diabetes (mean = 35 days, SD = 95). The risk of work disability was slightly higher after diabetes diagnosis than before and compared with the risk of those without diabetes. The trajectory of work disability was already increasing before diagnosis, increased even more at the time of diagnosis, and leveled off after diagnosis. Individual sociodemographic characteristics and comorbid conditions contributed both to the risk and to the trajectory of work disability.

**Conclusions**

Although diabetes has an independent effect on work disability, gender, age, education, and comorbid conditions play a significant role.