The treatment rate of erectile dysfunction (ED) in younger men with Type 2 Diabetes is up to 4 times higher than the equivalent non-diabetes population

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## Abstract

Introduction Erectile Dysfunction (ED) is common in older age and in diabetes (DM). Phosphodiesterase type 5-inhibitors (PDE5-is) are the first-line for ED. We investigated how type of diabetes and age of males affects the PDE5-i use in the primary care setting. Methods 2018-19 general practice level quantity of all PDE5-i agents were taken from the GP Prescribing Data set in England. The variation in outcomes across practices was examined across one year, and for the same practice against the previous year. Results We included 5,761 larger practices supporting 25.8million men of whom 4.2million[?]65 years old. Of these, 1.4million had T2DM, with 0.8million of these>65. 137,000 people had T1DM. 28.8million tablets of PDE5-i were prescribed within the 12 months (2018-19) period in 3.7million prescriptions (7.7 tablets/prescription), at total costs of £15.8million (£0.55/tablet). The NHS ED limit of 1 tablet/user/week suggests that 540,000 males are being prescribed a PDE5-i at a cost of £29/year each. With approximately 30,000 GPs practising, this is equivalent to one GP providing 2.5 prescriptions/week to overall 18 males. There was a 3x variation between the highest decile of practices (2.6 tablets/male/year) and lowest decile (0.96 tablets/male/year). The statistical model captured 14% of this variation and showed T1DM males were the largest users, while men age<65 with T2DM were being prescribed 4 times as much as non-DM. Those T2DM>65 were prescribed 80% of the non-DM amount. Conclusion There is wide variation in use of PDE5-is. With only 14% variance capture, other factors including wide variation in patient awareness, prescribing rules of local health providers, and recognition of the importance of male sexual health by GP prescribers might have significant impact.

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