outdoor allergens (short ragweed, perennial rye, *Alternaria alternata*, Bermuda grass, Russian thistle and white oak), and a food allergen (peanut) and a negative control. Positive allergen response was defined as maximal weal diameter ≥3 mm for allergen and <3 mm for negative control.

**Results** Serum levels of 25(OH)D were positively associated with FVC in adolescents (0.075 (0.025–0.121) SD) and adults (0.041 (0.013–0.078) SD) and with FEV1 in adults (0.050 (0.018–0.087)) after adjusting for health status, previously diagnosed respiratory/allergic diseases, supplement use, household pets and demographic and socioeconomic characteristics. These associations were independent of circulating calcium levels. Calcium levels were not associated with lung function in either age group. In adults, modest positive associations of ionised calcium with sensitisation to allergens of grass origin were observed (OR per SD, 1.12(1.00–1.26) for white oak and 1.15(1.01–1.26) for Bermuda grass in fully adjusted model). These associations were independent of 25(OH)D levels. All associations remained after further adjustment for smoking and alcohol use.

**Conclusion** We found a cross-sectional association between serum 25(OH)D levels and lung function, which does not appear to be driven by increased allergen sensitisation. By contrast we report a novel positive association between serum levels of ionised calcium and grass allergen sensitisation in adults, which is independent of vitamin D.

**P69 HOW TO STOP DRUG USERS DYING FROM AN OVERDOSE: A SYSTEMATIC REVIEW OF TREATMENT AND PREVENTION INTERVENTIONS IN THE COMMUNITY**

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**Introduction** Visual impairment is an important preventable cause of disability in the UK. Cataract, glaucoma, diabetic retinopathy and age related macular degeneration are the common causes of visual impairment in the blind register, but little is known about the prevalence of eye disease in the community. This study aims to estimate the community prevalence of eye disease.

**Methods** Twenty-five general practices in Norfolk and Waveney were invited, and seven practices from rural, urban and inner city areas agreed to participate. Anonymised data about age, sex, Read codes, ophthalmic prescription, and post codes were extracted from electronic records using MIQUEST data extraction programme. Patients with an ophthalmic diagnosis between 1st May 2008 and 30th April 2009 were identified. The prevalence of both minor eye conditions such as conjunctivitis and eyelid conditions, and major conditions leading to visual impairment (cataract, glaucoma, diabetic retinopathy and age related macular degeneration) was estimated.

**Results** 3089 (5.1%) people with ages ranging from 0 to 104 years (mean 49.9 years) had an eye condition, out of a total practice population of 60,759 had at least one eye condition. Of these 3089 people, 1707 (55.5%) were female, 1382 (44.7%) were male. 150 (4.9%) of these had age related macular degeneration, 200 (6.5%) had glaucoma, 223 (7.2%) had cataract, 371 (12%) had diabetic retinopathy, 560 (18.1%) had eyelid conditions, 1211 (39.2%) had conjunctivitis and benign conjunctival conditions. Some patients had more than one eye condition. The overall prevalence of eye conditions was 5.1%. Prevalence for individual eye conditions were as follows: Age related macular degeneration was 0.2%, Cataract was 0.4%, Diabetic retinopathy was 0.6%, glaucoma was 0.3%, conjunctivitis including benign conjunctival conditions was 2% and eyelid conditions was 0.9%. A limitation of the study is that we relied on Read codes for identification of eye conditions. Eye conditions may not have been coded at all, and any errors in coding could have introduced misclassification bias.

**Conclusions** The four eye conditions that are the major causes of preventable visual impairment are frequently encountered in general practice. Further research is needed into the management of these conditions in primary care, so that ways to further reduce avoidable visual impairment can be identified.