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Title page

Letters to the Editor

What medications are Australian children prescribed? Evidence from the Longitudinal Study of Australian Children

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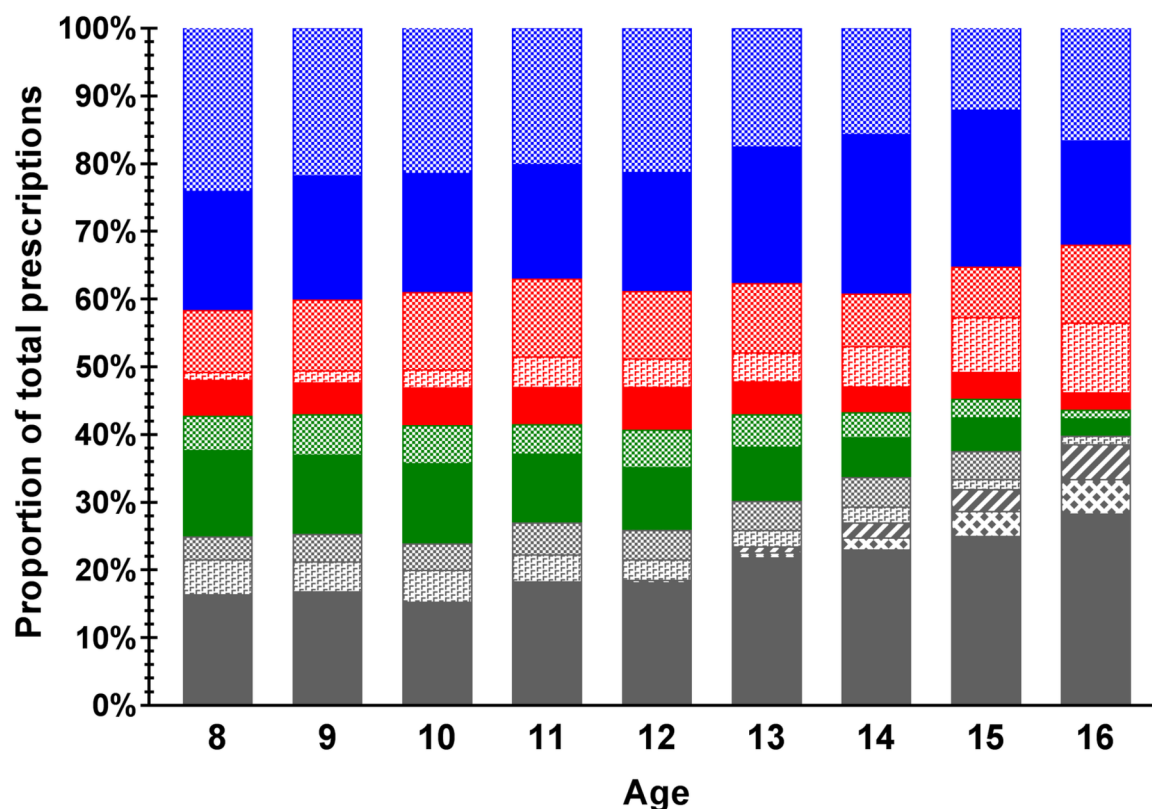
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Figure 1: Distribution of medication groups across children ages 8 to 16¹



¹ Each bar is sorted by medication groups (by colour) and patterned bars represent the most frequently prescribed within each group

Anti-bacterials (Blue)

- Penicillins
- Other anti-bacterials

Psychotropics (Red)

- Stimulants
- Selective serotonin reuptake inhibitors (SSRI)
- All other psychotropics

Asthma (Green)

- Bronchodilators
- All other asthma

Others (Grey)

- Steroid creams
- Prednisolone
- Topical retinoid/ benzyl peroxide
- Synthetic oestrogen
- All Others

Figure 1.tif

Letters to the Editor

Dear Editor,

WHAT MEDICATIONS ARE AUSTRALIAN CHILDREN PRESCRIBED? EVIDENCE FROM THE LONGITUDINAL STUDY OF AUSTRALIAN CHILDREN

A recent study of trends in Australian paediatric practice showed a marked rise in the rate of psychotropic medication prescribing.¹ However, there is little information about prescribing trends by non-paediatricians and for nationally representative populations of Australian children. We analysed prescription-level data from the Longitudinal Study of Australian Children (LSAC)² to identify the most frequently dispensed medication categories and prescribers between April 2012 and March 2015. Medications were categorised into medication groups by the Anatomical Therapeutic Chemical classification. Prescribers were categorised into groups; general practitioners (GPs), paediatricians, psychiatrists, other doctors and medical practitioners.

Across the three years 36,618 prescriptions were dispensed, and 5,569 children ranging from ages 8 to 16 received at least one prescription. The three most frequently dispensed medication groups were anti-bacterials (38.6%), psychotropics (18.7%) and asthma medications (13.8%) (Figure 1). Penicillins (48.9%) were the most common anti-bacterials prescribed. Stimulants (51.9%) such as methylphenidate and dexamphetamine represented the largest proportion of psychotropics. The proportion of asthma prescriptions decreased as children grew into adolescence. Within the 'Others' category, steroid cream (14.4%) was most commonly dispensed. Among children under 12, this included prednisolone and corticosteroid/antibiotic eardrops and in those above 12, topical retinoid/benzoyl peroxide and synthetic oestrogen.

GPs prescribed up to two-thirds of all prescriptions to children, mostly anti-bacterial and asthma medications. While psychotropics were most frequently prescribed by paediatricians (56.3%), we also observe GPs (26.4%) prescribing a considerable proportion of psychotropics such as selective serotonin reuptake inhibitors (SSRIs) (10.8%) and stimulants (6.1%) particularly to older children. Psychiatrists prescribed 10.9% of psychotropic prescriptions. Older children received more prescriptions from a variety of 'other doctors' than younger children.

In summary, our analysis showed that psychotropics were the second most frequently dispensed medication group which has not previously been reported. Our results are consistent with the findings from two national audits of paediatrician practice which reported that developmental and behavioural conditions represent a large and increasing proportion of the caseload of Australian paediatricians.^{1,3} Our findings also contribute to the growing evidence for primary-care SSRI

prescribing in managing mental disorders particularly in older children.⁴ This emphasises the importance of training for all prescribers on best practice care and prescribing for children to ensure outcomes are optimised. Further research is also needed to better understand the key determinants of management provided for Australian children with mental health and behavioural presentations, including pharmacological and non-pharmacological treatment, and the socio-demographic determinants of variation in care.

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Figure legends for Figure 1

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