Primary care antibiotic prescribing practice for children under the age of five years and mothers’ attitudes to managing their child’s illness

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Aim of the project:
To explore primary care antibiotic prescribing practice for children under the age of five years, and mother’s attitudes to managing their child’s illness, using General Practitioner (GP) prescribing data and focus groups with mothers

Background:
Overuse of antibiotics and inappropriate prescribing has resulted in rapid development of antimicrobial resistance (World Health Organisation (WHO) 2018). Most childhood illnesses caused by viruses rather than bacteria (Murphy et al 2012), and often spontaneously resolve without medical intervention, Clinicians report parents apply pressure for antibiotics to be prescribed, mostly on behalf of their children (Horwood et al 2016).

Mixed Methods (quantitative and qualitative phases)

Phase One: Quantitative
• GP practices within a defined geographical location contacted via email and phone
• Antibiotic prescribing data sought regarding antibiotic prescripions in identified population and conditions commonly treated

Results: Phase One Quantitative- GP prescribing data
• Most consultations took place on Fridays (table 1)
• Under one's received the least number of antibiotic prescriptions (table 2)
• Chest infections were most common illness treated with antibiotics (table 3)

Phase Two: Qualitative
• Participants for the focus groups identified via attendance at local play groups (identified using internet searches)
• Six focus groups held with a total of nineteen participants

Results: Phase Two Qualitative- Focus Groups
• Mother’s felt anxious and less confident if their child was unwell
• 31.9% of mothers felt that the doctor was making the right decision to hold back antibiotics

Discussion:
The lack of detail recorded on the GP database systems does not allow for detailed and accurate rationale of prescribing choices and provides limited information. Using mixed methods it is possible to gain some insights into possible influences on mothers’ experiences and attitudes regarding antibiotics use for their children. Both sets of data when analysed provide a context for maternal attitudes towards antibiotics and the age of the children who are most likely to receive antibiotics following a consultation.

Conclusion:
Children under one year of age received the least number of antibiotic prescriptions and were more likely to be prescribed and seen on a Friday. Antibiotics were commonly prescribed for chest infections followed by ear infections. Mothers benefit from support, reassurance and information from trusted healthcare professionals to inform their decision making. Further research is required into antibiotic prescribing for young children in order to gain a more accurate view of practice.

References
• Accessed 13041
• Murphy, M., Bradley, C. and Byrne, S. (2012). Antibiotic prescribing in primary care, adherence to guidelines and unnecessary prescribing - an Irish perspective. BMC Family Practice, 13(1) p. 47