Rational prescribing is important in all settings

Imti Choonara

The importance of rational prescribing in low-income and lower-middle-income countries is highlighted by the paper published by Risk and colleagues.1 The authors evaluated the prescribing practices of health professionals treating children under the age of 5 years in 20 different public health centres in The Gambia. There were over 300 young children seen with diarrhoea, and a similar number seen with an upper respiratory tract infection (cough and cold only). Approximately half with an upper respiratory tract infection under the age of 5 years in 20 different public health centres in The Gambia.

It is not just antibiotics that are prescribed irrationally. For example, medicines for infants with gastro-oesophageal reflux are now prescribed very extensively, both in primary care and in hospital, in the UK. In the vast majority of infants, gastro-oesophageal reflux is a self-limiting condition. For infants who do require treatment, thickeners, such as Carobel, have been shown to be effective. Despite this, medicines that are more expensive and more likely to be associated with toxicity, such as protein pump inhibitors, are increasingly being used. This is despite a systematic review showing that protein pump inhibitors are ineffective in reducing symptoms associated with gastro-oesophageal reflux in infants.4

Legislation has been introduced in both Europe and the USA to facilitate clinical trials in paediatric patients of all ages. The legislation is to be welcomed if it results in increased scientific evidence to enable health professionals to use medicines more effectively and safely. This was certainly the aim of the health professionals who highlighted the extent of off-label prescribing in children. It is important to recognise, however, that health professionals have a responsibility to use the scientific evidence that is generated to prescribe medicines in a rational manner.

The evaluation of whether medicines are prescribed rationally unfortunately is difficult. There has been insufficient research on developing validated tools to assess prescribing, especially in children. Quality indicators for outpatient antibiotic prescribing have been developed by the European Surveillance of Antimicrobial Consumption project.5 The majority of the quality indicators relate to adults, but three relate specifically to children. These three quality indicators suggest that no more than 20% of children seen in a clinic with an acute upper respiratory tract infection, acute tonsillitis or acute otitis media should be prescribed oral (systemic) antibiotics. It is only through the development of drug-specific and disease-specific quality indicators for other medicines that one will be able to ensure children receive the appropriate medicine whenever they see a health professional.

Before prescribing any medicine, doctors should always ask themselves the following questions. First, is there evidence that the medicine is effective in treating the disease that the patient presents with and, additionally, is it effective in the age group of the patient with the disease? Second, do the benefits of treatment outweigh the risks associated with the treatment? We all have a responsibility to our patients to ensure that we use medicines that are both safe and effective, but also that they are used in a rational manner.

Competing interests None.

Provenance and peer review Commissioned; internally peer reviewed.

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To cite Choonara I. Arch Dis Child Published Online First: [please include Day Month Year] doi:10.1136/archdischild-2013-304559

Received 31 May 2013
Accepted 12 June 2013

Arch Dis Child 2013;98:503

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Arch Dis Child published online July 13, 2013

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