

attitudes of families, children and young people (CYP) have not previously been sought.

Methods A questionnaire was designed to assess the attitudes of CYP and their parents towards polypharmacy and deprescribing based on a previously validated adult questionnaire (rPATD). Initial review and modification took place following input from a young person patient and public involvement group and a content evaluation panel of experts. Ethics approval was obtained, and a maximum of 22 participants (10% of the total study population) were to be recruited for the pilot. Inclusion criteria were CYP taking >2 for 28 days or more. The questionnaire was completed online using Microsoft Forms. Descriptive analysis was undertaken.

Results Twenty participants completed the piloting process (12 parents, 5 CYP aged 10–15 years and 3 CYP aged 16–17 years), as saturation was achieved. The mean number of medicines taken was six. Most parents (67%) thought their children were taking many medicines, whereas only 38% of CYP agreed with this. Only one CYP in the 10–15yrs stated they wanted to be involved in decisions about their medicines, whereas all of the CYP in the 16–17yrs cohort, and 92% of parents, said they liked to be involved. Overall, 83% of parents and 63% of CYP stated they would like to try stopping one of their medicines if it was advised by a doctor.

Conclusions The pilot data would suggest that CYP and their parents would be happy to consider stopping one of their medicines if advised to do so but data from the full study, which is currently recruiting, and statistically powered is awaited.

35 WHAT IS KNOWN ABOUT THE PHARMACOLOGY OF INTRAMUSCULAR THERAPEUTICS IN DUCHENNE MUSCULAR DYSTROPHY? A SYSTEMATIC REVIEW

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Introduction In 2018 the Centers for Disease Control published updated Standards of Care for Duchenne Muscular Dystrophy – newly included was the recommendation for all patients with DMD who received steroids to receive prescriptions for intramuscular (IM) hydrocortisone for emergency administration at home.

The aim of this systematic review was to assess the current understanding of the pharmacodynamics and kinetics of intramuscular therapies in patients affected by DMD.

Methods A systematic review was conducted according to Cochrane methodology. Medline, EMBASE and PubMed databases were searched. Two independent reviewers reviewed the abstract of each identified paper. Where there was any discrepancy in the decision to include or exclude a paper, a third reviewer arbitrated.

Results The search returned a total of 98 papers. 96 papers were excluded: 61 described animal or in-vitro studies, whilst the remaining studies did not study an intramuscular pharmacological intervention or were review articles.

Of the two included articles, one compared the immunogenicity of intramuscular and subcutaneous administration of influenza vaccination, and the other studied ten patients with DMD who were injected with two different doses of

plasmidic DNA. Neither study reported on the pharmacodynamics or kinetics of the interventions.

Conclusions There is very limited evidence into the pharmacokinetics and -dynamics of IM therapies for children affected by muscular dystrophy. Given the recognised changes in the muscle structure and function, studies to explore if this causes clinically significant changes in boys with DMD are required.

36 MAPPING VARIATION BETWEEN NATIONAL AND LOCAL CLINICAL PRACTICE GUIDELINES FOR ACUTE PAEDIATRIC ASTHMA FROM THE UNITED KINGDOM AND THE NETHERLANDS

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Introduction Increasingly, hospitals rely on local clinical practice guidelines (CPGs) alongside national guidance to standardise clinical care. This study examines variation between national and local CPGs, using the example of acute paediatric asthma (APA) CPGs from the United Kingdom and the Netherlands.

Methods Fifteen British and Dutch local CPGs were collected with the matching national guidance for the management of APA. The drug sequences, routes and methods of administration recommended for patients with severe APA were represented. Deviations from national guidance were measured. Variation in recommended doses of intravenous salbutamol was examined. CPG quality was assessed using the AGREE II instrument.

Results British and Dutch national CPGs differed in the recommended drug choices, sequences, routes and methods of administration for severe APA. Local British CPGs diverged from national guidance for 23% of their recommended interventions compared to 8% for Dutch local CPGs. Variation in second-line recommendations was greater than for first-line recommendations across local CPGs from both countries. Recommended starting doses for salbutamol infusions varied by more than tenfold. The quality of the sampled local CPGs was low across five out of six AGREE domains (<60%).

Conclusions Local CPGs for the management of severe APA featured substantial variation and frequently diverged from national guidance. Their methodological quality was low. Although limited to one condition, this study suggests that unmeasured variation across local CPGs may contribute to variation of care more broadly, potentially undermining health-care quality.

37 DEPRESCRIBING LONG ACTING BETA2 AGONISTS IN CHILDREN AND ADOLESCENTS WITH STABLE ASTHMA: A SYSTEMATIC REVIEW

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